

111TH CONGRESS
1ST SESSION

S. _____

To create clean energy jobs, promote energy independence, reduce global warming pollution, and transition to a clean energy economy.

IN THE SENATE OF THE UNITED STATES

Mr. KERRY (for himself and Mrs. BOXER) introduced the following bill; which was read twice and referred to the Committee on _____

A BILL

To create clean energy jobs, promote energy independence, reduce global warming pollution, and transition to a clean energy economy.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

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

4 (a) SHORT TITLE.—This Act may be cited as the
5 “Clean Energy Jobs and American Power Act”.

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

- Sec. 1. Short title; table of contents.
- Sec. 2. Findings.
- Sec. 3. Economywide emission reduction goals.
- Sec. 4. Definitions.

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DIVISION A—AUTHORIZATIONS FOR POLLUTION REDUCTION,
TRANSITION, AND ADAPTATION

Sec. 101. Structure of Act.

TITLE I—GREENHOUSE GAS REDUCTION PROGRAMS

Subtitle A—Clean Transportation

Sec. 111. Emission standards.

“PART B—MOBILE SOURCES

“Sec. 821. Greenhouse gas emission standards for mobile sources.

Sec. 112. Greenhouse gas emission reductions through transportation efficiency.

“PART C—TRANSPORTATION EMISSIONS

“Sec. 831. Greenhouse gas emission reductions through transportation efficiency.

Sec. 113. Transportation greenhouse gas emission reduction program grants.

“Sec. 832. Transportation greenhouse gas emission reduction program grants.

Sec. 114. Smartway transportation efficiency program.

“Sec. 822. SmartWay transportation efficiency program.

Subtitle B—Carbon Capture and Sequestration

Sec. 121. National strategy.

Sec. 122. Regulations for geological sequestration sites.

“Sec. 813. Geological storage sites.

Sec. 123. Studies and reports.

Sec. 124. Performance standards for coal-fueled power plants.

“Sec. 812. Performance standards for new coal-fired power plants.

Sec. 125. Carbon capture and sequestration demonstration and early deployment program.

Subtitle C—Nuclear and Advanced Technologies

Sec. 131. Findings and policy.

Sec. 132. Nuclear worker training.

Sec. 133. Nuclear safety and waste management programs.

Subtitle D—Water Efficiency

Sec. 141. WaterSense.

Sec. 142. Federal procurement of water-efficient products.

Sec. 143. State residential water efficiency and conservation incentives program.

Subtitle E—Miscellaneous

Sec. 151. Office of Consumer Advocacy.

Sec. 152. Clean technology business competition grant program.

Sec. 153. Product carbon disclosure program.

Sec. 154. State recycling programs.

Sec. 155. Supplemental agriculture and forestry greenhouse gas reduction and renewable energy program.

Sec. 156. Economic Development Climate Change Fund.

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“Sec. 219. Economic Development Climate Change Fund.

Sec. 157. Study of risk-based programs addressing vulnerable areas.

Subtitle F—Energy Efficiency and Renewable Energy

Sec. 161. Renewable energy.

Sec. 162. Advanced biofuels.

Sec. 163. Energy efficiency in building codes.

Sec. 164. Retrofit for energy and environmental performance.

Subtitle G—Emission Reductions From Public Transportation Vehicles

Sec. 171. Short title.

Sec. 172. State fuel economy regulation for taxicabs.

Sec. 173. State regulation of motor vehicle emissions for taxicabs.

Subtitle H—Clean Energy and Natural Gas

Sec. 181. Clean Energy and Accelerated Emission Reduction Program.

Sec. 182. Advanced natural gas technologies.

TITLE II—RESEARCH

Subtitle A—Energy Research

Sec. 201. Advanced energy research.

Subtitle B—Drinking Water Adaptation, Technology, Education, and Research

Sec. 211. Effects of climate change on drinking water utilities.

TITLE III—TRANSITION AND ADAPTATION

Subtitle A—Green Jobs and Worker Transition

PART 1—GREEN JOBS

Sec. 301. Clean energy curriculum development grants.

Sec. 302. Development of Information and Resources clearinghouse for vocational education and job training in renewable energy sectors.

Sec. 303. Green construction careers demonstration project.

PART 2—CLIMATE CHANGE WORKER ADJUSTMENT ASSISTANCE

Sec. 311. Petitions, eligibility requirements, and determinations.

Sec. 312. Program benefits.

Sec. 313. General provisions.

Subtitle B—International Climate Change Programs

Sec. 321. Strategic Interagency Board on International Climate Investment.

Sec. 322. Emission reductions from reduced deforestation.

“PART E—SUPPLEMENTAL EMISSION REDUCTIONS

“Sec. 751. Definitions.

“Sec. 752. Purposes.

“Sec. 753. Emission reductions from reduced deforestation.

Sec. 323. International Clean Energy Deployment Program.

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- Sec. 324. International climate change adaptation and global security program.
- Sec. 325. Evaluation and reports.
- Sec. 326. Report on climate actions of major economies.

Subtitle C—Adapting to Climate Change

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- Sec. 367. Natural resources adaptation science and information.
- Sec. 368. Federal natural resource agency adaptation plans.
- Sec. 369. State natural resources adaptation plans.
- Sec. 370. Natural Resources Climate Change Adaptation Account.
- Sec. 371. National Fish and Wildlife Habitat and Corridors Information Program.
- Sec. 372. Additional provisions regarding Indian tribes.

SUBPART D—ADDITIONAL CLIMATE CHANGE ADAPTATION PROGRAMS

- Sec. 381. Water system mitigation and adaption partnerships.
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DIVISION B—POLLUTION REDUCTION AND INVESTMENT

TITLE I—REDUCING GLOBAL WARMING POLLUTION

Subtitle A—Reducing Global Warming Pollution

- Sec. 101. Reducing global warming pollution.

“TITLE VII—GLOBAL WARMING POLLUTION REDUCTION AND
INVESTMENT PROGRAM

“PART A—GLOBAL WARMING POLLUTION REDUCTION GOALS AND TARGETS

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- “Sec. 701. Findings.
- “Sec. 702. Economywide reduction goals.
- “Sec. 703. Reduction targets for specified sources.
- “Sec. 704. Supplemental pollution reductions.
- “Sec. 705. Review and program recommendations.
- “Sec. 706. National Academy review.
- “Sec. 707. Presidential response and recommendations.

“PART B—DESIGNATION AND REGISTRATION OF GREENHOUSE GASES

- “Sec. 711. Designation of greenhouse gases.
- “Sec. 712. Carbon dioxide equivalent value of greenhouse gases.
- “Sec. 713. Greenhouse gas registry.
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“PART C—PROGRAM RULES

- “Sec. 721. Emission allowances.
- “Sec. 722. Prohibition of excess emissions.
- “Sec. 723. Penalty for noncompliance.
- “Sec. 724. Trading.
- “Sec. 725. Banking and borrowing.
- “Sec. 726. Market Stability Reserve.
- “Sec. 727. Permits.
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“PART D—OFFSETS

- “Sec. 731. Offsets Integrity Advisory Board.
 - “Sec. 732. Establishment of offsets program.
 - “Sec. 733. Eligible project types.
 - “Sec. 734. Requirements for offset projects.
 - “Sec. 735. Approval of offset projects.
 - “Sec. 736. Verification of offset projects.
 - “Sec. 737. Issuance of offset credits.
 - “Sec. 738. Audits.
 - “Sec. 739. Program review and revision.
 - “Sec. 740. Early offset supply.
 - “Sec. 741. Environmental considerations.
 - “Sec. 742. Trading.
 - “Sec. 743. Office of Offsets Integrity.
 - “Sec. 744. International offset credits.
- Sec. 102. Definitions.
- “Sec. 700. Definitions.
- Sec. 103. Offset reporting requirements.

Subtitle B—Disposition of Allowances

- Sec. 111. Disposition of allowances for global warming pollution reduction program.

“PART H—DISPOSITION OF ALLOWANCES

- “Sec. 771. Allocation of emission allowances.
- “Sec. 772. Electricity consumers.
- “Sec. 773. Natural gas consumers.
- “Sec. 774. Home heating oil and propane consumers.

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- “Sec. 775. Domestic fuel production.
- “Sec. 776. Consumer protection.
- “Sec. 777. Exchange for State-issued allowances.
- “Sec. 778. Auction procedures.
- “Sec. 779. Auctioning allowances for other entities.
- “Sec. 780. Commercial deployment of carbon capture and sequestration technologies.
- “Sec. 781. Oversight of allocations.
- “Sec. 782. Early action recognition.
- “Sec. 783. Establishment of Deficit Reduction Fund.

Subtitle C—Additional Greenhouse Gas Standards

- Sec. 121. Greenhouse gas standards.

“TITLE VIII—ADDITIONAL GREENHOUSE GAS STANDARDS

- “Sec. 801. Definitions.

“PART A—STATIONARY SOURCE STANDARDS

- “Sec. 811. Standards of performance.
- Sec. 122. HFC regulation.
- “Sec. 619. Hydrofluorocarbons (HFCs).
- Sec. 123. Black carbon.

“PART E—BLACK CARBON

- “Sec. 851. Black carbon.
- Sec. 124. States.
- Sec. 125. State programs.

“PART F—MISCELLANEOUS

- “Sec. 861. State programs.
- “Sec. 862. Grants for support of air pollution control programs.
- Sec. 126. Enforcement.
- Sec. 127. Conforming amendments.
- Sec. 128. Davis-Bacon compliance.

Subtitle D—Carbon Market Assurance

- Sec. 131. Carbon market assurance.

Subtitle E—Ensuring Real Reductions in Industrial Emissions

- Sec. 141. Ensuring real reductions in industrial emissions.

“PART F—ENSURING REAL REDUCTIONS IN INDUSTRIAL EMISSIONS

- “Sec. 761. Purposes.
- “Sec. 762. Definitions.
- “Sec. 763. Eligible industrial sectors.
- “Sec. 764. Distribution of emission allowance rebates.
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TITLE II—PROGRAM ALLOCATIONS

- Sec. 201. Investment in clean vehicle technology.

Sec. 202. State and local investment in energy efficiency and renewable energy.
Sec. 203. Energy efficiency in building codes.
Sec. 204. Building retrofit program.
Sec. 205. Energy Innovation Hubs.
Sec. 206. ARPA-E research.
Sec. 207. International clean energy deployment program.
Sec. 208. International climate change adaptation and global security.
Sec. 209. Energy efficiency and renewable energy worker training.
Sec. 210. Worker transition.
Sec. 211. State programs for greenhouse gas reduction and climate adaptation.
Sec. 212. Climate Change Health Protection and Promotion Fund.
Sec. 213. Climate change safeguards for natural resources conservation.
Sec. 214. Nuclear worker training.
Sec. 215. Supplemental agriculture, renewable energy, and forestry.

1 **SEC. 2. FINDINGS.**

2 Congress finds that—

3 (1) the United States can take back control of
4 the energy future of the United States, strengthen
5 economic competitiveness, safeguard the health of
6 families and the environment, and ensure the na-
7 tional security, of the United States by increasing
8 energy independence;

9 (2) creating a clean energy future requires a
10 comprehensive approach that includes support for
11 the improvement of all energy sources, including
12 coal, natural gas, nuclear power, and renewable gen-
13 eration;

14 (3) efficiency in the energy sector also rep-
15 resents a critical avenue to reduce energy consump-
16 tion and carbon pollution, and those benefits can be
17 captured while generating additional savings for con-
18 sumers;

1 (4) substantially increasing the investment in
2 the clean energy future of the United States will
3 provide economic opportunities to millions of people
4 in the United States and drive future economic
5 growth in this country;

6 (5) the United States is responsible for many of
7 the initial scientific advances in clean energy tech-
8 nology, but, as of September 2009, the United
9 States has only 5 of the top 30 leading companies
10 in solar, wind, and advanced battery technology;

11 (6) investment in the clean energy sector will
12 allow companies in the United States to retake a
13 leadership position, and the jobs created by those in-
14 vestments will significantly accelerate growth in do-
15 mestic manufacturing;

16 (7) those opportunities also will result in sub-
17 stantial employment gains in construction, a sector
18 in which the median hourly wage is 17 percent high-
19 er than the national median;

20 (8) those jobs are distributed throughout the
21 United States, and the highest clean energy economy
22 employment growth rates in the last 10 years were
23 in the States of Idaho, Nebraska, South Dakota, Or-
24 egon, and New Mexico;

1 (9) focusing on clean energy will dramatically
2 reduce pollution and significantly improve the health
3 of families in and the environment of the United
4 States;

5 (10) moving to a low-carbon economy must pro-
6 tect the most vulnerable populations in the United
7 States, including low-income families that are par-
8 ticularly affected by volatility in energy prices;

9 (11) if unchecked, the impact of climate change
10 will include widespread effects on health and welfare,
11 including—

12 (A) increased outbreaks from waterborne
13 diseases;

14 (B) more droughts;

15 (C) diminished agricultural production;

16 (D) severe storms and floods;

17 (E) heat waves;

18 (F) wildfires; and

19 (G) a substantial rise in sea levels, due in
20 part to—

21 (i) melting mountain glaciers;

22 (ii) shrinking sea ice; and

23 (iii) thawing permafrost;

1 (12) the most recent science indicates that the
2 changes described in paragraph (11)(G) are occur-
3 ring faster and with greater intensity than expected;

4 (13) military officials, including retired admiral-
5 s and generals, concur with the intelligence com-
6 munity that climate change acts as a threat multi-
7 plier for instability and presents significant national
8 security challenges for the United States;

9 (14) massive portions of the infrastructure of
10 the United States, including critical military infra-
11 structure, are at risk from the effects of climate
12 change;

13 (15) impacts are already being felt in local com-
14 munities within the United States as well as by at-
15 risk populations abroad;

16 (16) the Declaration of the Leaders from the
17 Major Economies Forum on Energy and Climate,
18 representing 17 of the largest economies in the
19 world, recognizes the need to limit the increase in
20 global average temperatures to within 2 degrees
21 Centigrade, as a necessary step to prevent the cata-
22 strophic consequences of climate change; and

23 (17) the United States should lead the global
24 community in combating the threat of global climate
25 change and reaching a robust international agree-

1 ment to address global warming under the United
2 Nations Framework Convention on Climate Change,
3 done at New York on May 9, 1992 (or a successor
4 agreement).

5 **SEC. 3. ECONOMYWIDE EMISSION REDUCTION GOALS.**

6 The goals of this Act and the amendments made by
7 this Act are to reduce steadily the quantity of United
8 States greenhouse gas emissions such that—

9 (1) in 2012, the quantity of United States
10 greenhouse gas emissions does not exceed 97 percent
11 of the quantity of United States greenhouse gas
12 emissions in 2005;

13 (2) in 2020, the quantity of United States
14 greenhouse gas emissions does not exceed 80 percent
15 of the quantity of United States greenhouse gas
16 emissions in 2005;

17 (3) in 2030, the quantity of United States
18 greenhouse gas emissions does not exceed 58 percent
19 of the quantity of United States greenhouse gas
20 emissions in 2005; and

21 (4) in 2050, the quantity of United States
22 greenhouse gas emissions does not exceed 17 percent
23 of the quantity of United States greenhouse gas
24 emissions in 2005.

1 **SEC. 4. DEFINITIONS.**

2 In this Act:

3 (1) ADMINISTRATOR.—The term “Adminis-
4 trator” means the Administrator of the Environ-
5 mental Protection Agency.

6 (2) INDIAN TRIBE.—The term “Indian tribe”
7 has the meaning given the term in section 302 of the
8 Clean Air Act (42 U.S.C. 7602).

9 (3) STATE.—The term “State” has the mean-
10 ing given that term in section 302 of the Clean Air
11 Act (42 U.S.C. 7602).

12 **DIVISION A—AUTHORIZATIONS**
13 **FOR POLLUTION REDUCTION,**
14 **TRANSITION, AND ADAPTA-**
15 **TION**

16 **SEC. 101. STRUCTURE OF ACT.**

17 (a) AUTHORIZED AND ALLOCATED PROGRAMS.—The
18 following programs authorized under this division are eli-
19 gible to receive an allocation under title VII of the Clean
20 Air Act:

21 (1) The program for greenhouse gas emission
22 reductions through transportation efficiency under
23 part C of title VIII the Clean Air Act (as added by
24 sections 112 and 113 of this division).

1 (2) The program for nuclear worker training
2 under section 132 of this division and 214 of divi-
3 sion B.

4 (3) State recycling programs under section 154
5 of this division and section 211 of division B.

6 (4) The supplemental agriculture and forestry
7 greenhouse gas reduction and renewable energy pro-
8 gram under section 155 of this division and section
9 215 of division B.

10 (5) The program for energy efficiency in build-
11 ing codes under section 163 of this division and sec-
12 tion 203 of division B.

13 (6) The program for retrofit for energy and en-
14 vironmental performance under section 164 of this
15 division and section 204 of division B.

16 (7) The program for worker transition under
17 part 2 of subtitle A of title III of this division and
18 section 210 of division B.

19 (8) The program for public health and climate
20 change under subpart B of part 1 of subtitle C of
21 title III of this division and section 212 of division
22 B.

23 (9) The program for climate change safeguards
24 for natural resources conservation under subpart C

1 of part 1 of subtitle C of title III of this division and
2 section 213 of division B.

3 (10) The program for emission reductions from
4 reduced deforestation under section 753 of the Clean
5 Air Act (as added by section 322 of this division)
6 and section 771(d) of the Clean Air Act (as added
7 by section 111 of division B.

8 (11) The International Clean Energy Deploy-
9 ment Program under section 323 of this division and
10 section 207 of division B.

11 (12) The international climate change adapta-
12 tion and global security program under 324 of this
13 division and section 208 of division B.

14 (13) The program for water system mitigation
15 and adaptation partnerships under section 381 of
16 this division and section 211 of division B.

17 (14) The program for flood control, protection,
18 prevention, and response under section 382 of this
19 division and section 211 of division B.

20 (15) The program for wildfire under section
21 383 of this division and section 211 of division B.

22 (16) The Coastal and Great Lakes State Adap-
23 tation Program under section 384 of this division
24 and section 211 of division B.

1 (b) ALLOCATED PROGRAMS.—The following alloca-
2 tions are provided under title VII of the Clean Air Act:

3 (1) The Market Stability Reserve Fund under
4 section 726 of the Clean Air Act (as added by sec-
5 tion 101 of division B).

6 (2) The program to ensure real reductions in
7 industrial emissions under part F of title VII of the
8 Clean Air Act (as added by section 141 of division
9 B).

10 (3) The program for electricity consumers pur-
11 suant to section 772 of the Clean Air Act (as added
12 by section 111 of division B).

13 (4) The program for natural gas consumers
14 pursuant to section 773 of the Clean Air Act (as
15 added by section 111 of division B).

16 (5) The program for home heating oil and pro-
17 pane consumers pursuant to section 774 of the
18 Clean Air Act (as added by section 111 of division
19 B).

20 (6) The program for domestic fuel production,
21 including petroleum refiners and small business re-
22 finers, under section 775 of the Clean Air Act (as
23 added by section 111 of division B).

24 (7) The program for climate change consumer
25 refunds and low- and moderate-income consumers

1 pursuant to section 776 of the Clean Air Act (as
2 added by section 111 of division B), including—

3 (A) consumer rebates under section 776(a)
4 of the Clean Air Act (as so added); and

5 (B) energy refunds under section 776(b) of
6 the Clean Air Act (as so added).

7 (8) **【**The program for commercial deployment
8 of carbon capture and storage technology under sec-
9 tion 780 of the Clean Air Act (as added by section
10 111 of division B)**】**.

11 (9) The program for early action recognition
12 pursuant to section 782 of the Clean Air Act (as
13 added by section 111 of division B).

14 (10) The program for investment in clean vehi-
15 cle technology under section 201 of division B.

16 (11) The program for State and local invest-
17 ment in energy efficiency and renewable energy
18 under section 202 of division B.

19 (12) The program for Energy Innovation Hubs
20 pursuant to section 205 of division B.

21 (13) The program for ARPA-E research pursu-
22 ant to section 206 of division B.

23 (14) The program for energy efficiency and re-
24 newable energy worker training under section 209 of
25 division B.

1 (15) The State programs for greenhouse gas re-
2 duction and climate adaptation pursuant to section
3 211 of division B.

4 (c) NONALLOCATED PROGRAMS.—The following pro-
5 grams are authorized under this division:

6 (1) The SmartWay Transportation Efficiency
7 Program under section 822 of the Clean Air Act (as
8 added by section 114 of this division).

9 (2) The carbon capture and sequestration dem-
10 onstration and early deployment program under sec-
11 tion 125 of this division.

12 (3) The nuclear safety and waste management
13 programs under section 133 of this division.

14 (4) Water efficiency programs under subtitle D
15 of title I of this division.

16 (5) The Office of Consumer Advocacy under
17 section 151 of this division.

18 (6) The clean technology business competition
19 grant program under section 152 of this division.

20 (7) The product carbon disclosure program
21 under section 153 of this division.

22 (8) The Economic Development Climate
23 Change Fund under section 219 of the Public Works
24 and Economic Development Act of 1965 (as added
25 by section 156 of this division).

1 (9) The program for renewable energy under
2 section 161 of this division.

3 (10) The program for advanced biofuels under
4 section 162 of this division.

5 (11) The program for emission reductions from
6 public transportation vehicles under subtitle G of
7 title I of this division.

8 (12) The Clean Energy and Accelerated Emis-
9 sion Reduction Program under section 181 of this
10 division.

11 (13) The program for advanced natural gas
12 technologies under section 182 of this division.

13 (14) The program for advanced energy research
14 under subtitle A of title II of this division.

15 (15) The program for drinking water adapta-
16 tion, technology, education, and research under sub-
17 title B of title II of this division.

18 (16) The program for clean energy curriculum
19 development grants under section 301 of this divi-
20 sion.

21 (17) The program for Development of Informa-
22 tion and Resources clearinghouse for vocational edu-
23 cation and job training in renewable energy sectors
24 under section 302 of this division.

1 (18) The green construction careers demonstra-
2 tion project under section 303 of this division.

3 **TITLE I—GREENHOUSE GAS**
4 **REDUCTION PROGRAMS**
5 **Subtitle A—Clean Transportation**

6 **SEC. 111. EMISSION STANDARDS.**

7 Title VIII of the Clean Air Act (as added by section
8 121 of division B) is amended by adding at the end the
9 following:

10 **“PART B—MOBILE SOURCES**

11 **“SEC. 821. GREENHOUSE GAS EMISSION STANDARDS FOR**
12 **MOBILE SOURCES.**

13 “(a) NEW MOTOR VEHICLES AND NEW MOTOR VE-
14 HICLE ENGINES.—(1) Pursuant to section 202(a)(1), by
15 December 31, 2010, the Administrator shall promulgate
16 standards applicable to emissions of greenhouse gases
17 from new heavy-duty motor vehicles or new heavy-duty
18 motor vehicle engines, excluding such motor vehicles cov-
19 ered by the Tier II standards (as established by the Ad-
20 ministrator as of the date of the enactment of this sec-
21 tion). The Administrator may revise these standards from
22 time to time.

23 “(2) Regulations issued under section 202(a)(1) ap-
24 plicable to emissions of greenhouse gases from new heavy-
25 duty motor vehicles or new heavy-duty motor vehicle en-

1 gines, excluding such motor vehicles covered by the Tier
2 II standards (as established by the Administrator as of
3 the date of the enactment of this section), shall contain
4 standards that reflect the greatest degree of emissions re-
5 duction achievable through the application of technology
6 which the Administrator determines will be available for
7 the model year to which such standards apply, giving ap-
8 propriate consideration to cost, energy, and safety factors
9 associated with the application of such technology. Any
10 such regulations shall take effect after such period as the
11 Administrator finds necessary to permit the development
12 and application of the requisite technology, and, at a min-
13 imum, shall apply for a period no less than 3 model years
14 beginning no earlier than the model year commencing 4
15 years after such regulations are promulgated.

16 “(3) Regulations issued under section 202(a)(1) ap-
17 plicable to emissions of greenhouse gases from new heavy-
18 duty motor vehicles or new heavy-duty motor vehicle en-
19 gines, excluding such motor vehicles covered by the Tier
20 II standards (as established by the Administrator as of
21 the date of the enactment of this section), shall supersede
22 and satisfy any and all of the rulemaking and compliance
23 requirements of section 32902(k) of title 49, United
24 States Code.

1 “(4) Other than as specifically set forth in paragraph
2 (3) of this subsection, nothing in this section shall affect
3 or otherwise increase or diminish the authority of the Sec-
4 retary of Transportation to adopt regulations to improve
5 the overall fuel efficiency of the commercial goods move-
6 ment system.

7 “(b) NONROAD VEHICLES AND ENGINES.—(1) Pur-
8 suant to section 213(a)(4) and (5), the Administrator
9 shall identify those classes or categories of new nonroad
10 vehicles or engines, or combinations of such classes or cat-
11 egories, that, in the judgment of the Administrator, both
12 contribute significantly to the total emissions of green-
13 house gases from nonroad engines and vehicles, and pro-
14 vide the greatest potential for significant and cost-effective
15 reductions in emissions of greenhouse gases. The Adminis-
16 trator shall promulgate standards applicable to emissions
17 of greenhouse gases from these new nonroad engines or
18 vehicles by December 31, 2012. The Administrator shall
19 also promulgate standards applicable to emissions of
20 greenhouse gases for such other classes and categories of
21 new nonroad vehicles and engines as the Administrator de-
22 termines appropriate and in the timeframe the Adminis-
23 trator determines appropriate. The Administrator shall
24 base such determination, among other factors, on the rel-
25 ative contribution of greenhouse gas emissions, and the

1 costs for achieving reductions, from such classes or cat-
2 egories of new nonroad engines and vehicles. The Adminis-
3 trator may revise these standards from time to time.

4 “(2) Standards under section 213(a)(4) and (5) ap-
5 plicable to emissions of greenhouse gases from those class-
6 es or categories of new nonroad engines or vehicles identi-
7 fied in the first sentence of paragraph (1) of this sub-
8 section, shall achieve the greatest degree of emissions re-
9 duction achievable based on the application of technology
10 which the Administrator determines will be available at
11 the time such standards take effect, taking into consider-
12 ation cost, energy, and safety factors associated with the
13 application of such technology. Any such regulations shall
14 take effect at the earliest possible date after such period
15 as the Administrator finds necessary to permit the devel-
16 opment and application of the requisite technology, giving
17 appropriate consideration to the cost of compliance within
18 such period, the applicable compliance dates for other
19 standards, and other appropriate factors, including the pe-
20 riod of time appropriate for the transfer of applicable tech-
21 nology from other applications, including motor vehicles,
22 and the period of time in which previously promulgated
23 regulations have been in effect.

24 “(3) For purposes of this section and standards
25 under section 213(a)(4) or (5) applicable to emissions of

1 greenhouse gases, the term ‘nonroad engines and vehicles’
2 shall include non-internal combustion engines and the ve-
3 hicles these engines power (such as electric engines and
4 electric vehicles), for those non-internal combustion en-
5 gines and vehicles which would be in the same category
6 and have the same uses as nonroad engines and vehicles
7 that are powered by internal combustion engines.

8 “(c) AVERAGING, BANKING, AND TRADING OF EMIS-
9 SIONS CREDITS.—In establishing standards applicable to
10 emissions of greenhouse gases pursuant to this section and
11 sections 202(a), 213(a)(4) and (5), and 231(a), the Ad-
12 ministrator may establish provisions for averaging, bank-
13 ing, and trading of greenhouse gas emissions credits with-
14 in or across classes or categories of motor vehicles and
15 motor vehicle engines, nonroad vehicles and engines (in-
16 cluding marine vessels), and aircraft and aircraft engines,
17 to the extent the Administrator determines appropriate
18 and considering the factors appropriate in setting stand-
19 ards under those sections. Such provisions may include
20 reasonable and appropriate provisions concerning genera-
21 tion, banking, trading, duration, and use of credits.

22 “(d) REPORTS.—The Administrator shall, from time
23 to time, submit a report to Congress that projects the
24 amount of greenhouse gas emissions from the transpor-
25 tation sector, including transportation fuels, for the years

1 2030 and 2050, based on the standards adopted under
2 this section.

3 “(e) GREENHOUSE GASES.—Notwithstanding the
4 provisions of section 711, hydrofluorocarbons shall be con-
5 sidered a greenhouse gas for purposes of this section.”.

6 **SEC. 112. GREENHOUSE GAS EMISSION REDUCTIONS**
7 **THROUGH TRANSPORTATION EFFICIENCY.**

8 (a) ENVIRONMENTAL PROTECTION AGENCY.—Title
9 VIII of the Clean Air Act (as amended by section 111
10 of this division) is amended by adding at the end the fol-
11 lowing:

12 **“PART C—TRANSPORTATION EMISSIONS**
13 **“SEC. 831. GREENHOUSE GAS EMISSION REDUCTIONS**
14 **THROUGH TRANSPORTATION EFFICIENCY.**

15 “(a) IN GENERAL.—The Administrator, in consulta-
16 tion with the Secretary of Transportation (referred to in
17 this part as the ‘Secretary’), shall promulgate, and update
18 from time to time, regulations to establish—

19 “(1) national transportation-related greenhouse
20 gas emission reduction goals that are commensurate
21 with the emission reduction goals established under
22 the Clean Energy Jobs and American Power Act
23 and amendments made by that Act;

24 “(2) standardized emission models and related
25 methods, to be used by States, metropolitan plan-

1 ning organizations, and air quality agencies to ad-
2 dress emission reduction goals, including—

3 “(A) the development of surface transpor-
4 tation-related greenhouse gas emission reduc-
5 tion targets pursuant to sections 134 and 135
6 of title 23, and sections 5303 and 5304 of title
7 49, United States Code;

8 “(B) the assessment of projected surface
9 transportation-related greenhouse gas emissions
10 from transportation strategies;

11 “(C) the assessment of projected surface
12 transportation-related greenhouse gas emissions
13 from State and regional transportation plans;

14 “(D) the establishment of surface trans-
15 portation-related greenhouse gas emission base-
16 lines at a national, State, and regional level;
17 and

18 “(E) the measurement and assessment of
19 actual surface transportation-related emissions
20 to assess progress toward achievement of emis-
21 sion targets at the State and regional level;

22 “(3) methods for collection of data on transpor-
23 tation-related greenhouse gas emissions; and

24 “(4) publication and distribution of successful
25 strategies employed by States, metropolitan planning

1 organizations, and other entities to reduce transpor-
2 tation-related greenhouse gas emissions.

3 “(b) ROLE OF DEPARTMENT OF TRANSPOR-
4 TATION.—The Secretary, in consultation with the Admin-
5 istrator, shall promulgate, and update from time to time,
6 regulations—

7 “(1) to improve the ability of transportation
8 planning models and tools, including travel demand
9 models, to address greenhouse gas emissions;

10 “(2) to assess projected surface transportation-
11 related travel activity and transportation strategies
12 from State and regional transportation plans; and

13 “(3) to update transportation planning require-
14 ments and approval of transportation plans as nec-
15 essary to carry out this section.

16 “(c) CONSULTATION AND MODELS.—In promul-
17 gating the regulations, the Administrator and the Sec-
18 retary—

19 “(1) shall consult with States, metropolitan
20 planning organizations, and air quality agencies;

21 “(2) may use existing models and methodolo-
22 gies if the models and methodologies are widely con-
23 sidered to reflect the best practicable modeling or
24 methodological approach for assessing actual and
25 projected transportation-related greenhouse gas

1 emissions from transportation plans and projects;
2 and

3 “(3) shall consider previously developed plans
4 that were based on models and methodologies for re-
5 ducing greenhouse gas emissions in applying those
6 regulations to the first approvals after promulgation.

7 “(d) TIMING.—The Administrator and the Secretary
8 shall—

9 “(1) publish proposed regulations under sub-
10 sections (a) and (b) not later than 1 year after the
11 date of enactment of this section; and

12 “(2) promulgate final regulations under sub-
13 sections (a) and (b) not later than 18 months after
14 the date of enactment of this section.

15 “(e) ASSESSMENT.—

16 “(1) IN GENERAL.—At least every 6 years after
17 promulgating final regulations under subsections (a)
18 and (b), the Administrator and the Secretary shall
19 jointly assess current and projected progress in re-
20 ducing national transportation-related greenhouse
21 gas emissions.

22 “(2) REQUIREMENTS.—The assessment shall
23 examine the contributions to emission reductions at-
24 tributable to—

25 “(A) improvements in vehicle efficiency;

1 “(B) greenhouse gas performance of trans-
2 portation fuels;

3 “(C) reductions in vehicle miles traveled;

4 “(D) changes in consumer demand and use
5 of transportation management systems; and

6 “(E) any other greenhouse gas-related
7 transportation policies enacted by Congress.

8 “(3) RESULTS OF ASSESSMENT.—The Sec-
9 retary and the Administrator shall consider—

10 “(A) the results of the assessment con-
11 ducted under this subsection; and

12 “(B) based on those results, whether tech-
13 nical or other updates to regulations required
14 under this section and sections 134 and 135 of
15 title 23, and sections 5303 and 5304 of title 49,
16 United States Code, are necessary.”.

17 (b) METROPOLITAN PLANNING ORGANIZATIONS.—

18 (1) TITLE 23.—Section 134 of title 23, United
19 States Code, is amended—

20 (A) in subsection (a)(1)—

21 (i) by striking “minimizing” and in-
22 sserting “reducing”; and

23 (ii) by inserting “, reliance on oil, im-
24 pacts on the environment, transportation-

1 related greenhouse gas emissions,” after
2 “consumption”;

3 (B) in subsection (h)(1)(E)—

4 (i) by inserting “sustainability, and
5 livability, reduce surface transportation-re-
6 lated greenhouse gas emissions and reli-
7 ance on oil, adapt to the effects of climate
8 change,” after “energy conservation,”;

9 (ii) by inserting “and public health”
10 after “quality of life”; and

11 (iii) by inserting “, including housing
12 and land use patterns” after “development
13 patterns”;

14 (C) in subsection (i)—

15 (i) in paragraph (4)(A)—

16 (I) by striking “consult, as ap-
17 propriate,” and inserting “cooperate”;

18 (II) by inserting “transportation,
19 public transportation, air quality, and
20 housing, and shall consult, as appro-
21 priate, with State and local agencies
22 responsible for” after “responsible
23 for” and

24 (III) by inserting “public
25 health,” after “conservation,”; and

1 (ii) in paragraph (5)(C)(iii), by insert-
2 ing “and through the website of the metro-
3 politan planning organization, including
4 emission reduction targets and strategies
5 developed under subsection (k)(6), includ-
6 ing an analysis of the anticipated effects of
7 the targets and strategies,” after “World
8 Wide Web”; and

9 (D) in subsection (k), by adding at the end
10 the following:

11 “(6) TRANSPORTATION GREENHOUSE GAS RE-
12 DUCION EFFORTS.—

13 “(A) IN GENERAL.—Within a metropolitan
14 planning area serving a transportation manage-
15 ment area, the transportation planning process
16 under this section shall address transportation-
17 related greenhouse gas emissions by including
18 emission reduction targets and strategies to
19 meet those targets.

20 “(B) ELIGIBLE ORGANIZATIONS.—

21 “(i) MPOS WITHIN TMAS.—All provi-
22 sions and requirements of this section, in-
23 cluding the requirements of the transpor-
24 tation greenhouse gas reduction efforts,
25 shall apply to metropolitan planning orga-

1 nizations that also serve as transportation
2 management areas.

3 “(ii) OTHER MPOS.—A metropolitan
4 planning organization that does not serve
5 as a transportation management area—

6 “(I) may develop transportation
7 greenhouse gas emission reduction
8 targets and strategies to meet those
9 targets; and

10 “(II) if those targets and strate-
11 gies are developed, shall be subject to
12 all applicable provisions and require-
13 ments of this section and the Clean
14 Energy Jobs and American Power
15 Act, including requirements of the
16 transportation greenhouse gas reduc-
17 tion efforts.

18 “(C) ESTABLISHMENT OF TARGETS AND
19 CRITERIA.—

20 “(i) IN GENERAL.—Not later than 2
21 years after the promulgation of the final
22 regulations required under section 831 of
23 the Clean Air Act, each metropolitan plan-
24 ning organization that also serves as a
25 transportation management area shall de-

1 velop surface transportation-related green-
2 house gas emission reduction targets, as
3 well as strategies to meet those targets, in
4 consultation with State air agencies as
5 part of the metropolitan transportation
6 planning process under this section.

7 “(ii) MULTIPLE DESIGNATIONS.—If
8 more than 1 metropolitan planning organi-
9 zation has been designated within a metro-
10 politan area, each metropolitan planning
11 organization shall coordinate with other
12 metropolitan planning organizations in the
13 same metropolitan area to develop the tar-
14 gets and strategies described in clause (i).

15 “(iii) MINIMUM REQUIREMENTS.—
16 Each metropolitan transportation plan de-
17 veloped by a metropolitan planning organi-
18 zation under clause (i) shall, within the
19 plan, demonstrate progress in stabilizing
20 and reducing transportation-related green-
21 house gas emissions so as to contribute to
22 the achievement of State targets pursuant
23 to section 135(f)(9).

24 “(iv) REQUIREMENTS FOR TARGETS
25 AND STRATEGIES.—The targets and strat-

1 egies developed under this subparagraph
2 shall, at a minimum—

3 “(I) be based on the emission
4 and travel demand models and related
5 methodologies established in the final
6 regulations required under section
7 831 of the Clean Air Act;

8 “(II) inventory all sources of sur-
9 face transportation-related greenhouse
10 gas emissions;

11 “(III) apply to those modes of
12 surface transportation that are ad-
13 dressed in the planning process under
14 this section;

15 “(IV) be integrated and con-
16 sistent with regional transportation
17 plans and transportation improvement
18 programs; and

19 “(V) be selected through scenario
20 analysis, and include, pursuant to the
21 requirements of the transportation
22 planning process under this section,
23 transportation investment and man-
24 agement strategies that reduce green-
25 house gas emissions from the trans-

1 portation sector over the life of the
2 plan, such as—

3 “(aa) efforts to increase
4 public transportation ridership,
5 including through service im-
6 provements, capacity expansions,
7 and access enhancement;

8 “(bb) efforts to increase
9 walking, bicycling, and other
10 forms of nonmotorized transpor-
11 tation;

12 “(cc) implementation of zon-
13 ing and other land use regula-
14 tions and plans to support infill,
15 transit-oriented development, re-
16 development, or mixed use devel-
17 opment;

18 “(dd) travel demand man-
19 agement programs (including
20 carpool, vanpool, or car-share
21 projects), transportation pricing
22 measures, parking policies, and
23 programs to promote telecom-
24 muting, flexible work schedules,
25 and satellite work centers;

1 “(ee) surface transportation
2 system operation improvements,
3 including intelligent transpor-
4 tation systems or other oper-
5 ational improvements to reduce
6 long-term greenhouse gas emis-
7 sions through reduced congestion
8 and improved system manage-
9 ment;

10 “(ff) intercity passenger rail
11 improvements;

12 “(gg) intercity bus improve-
13 ments;

14 “(hh) freight rail improve-
15 ments;

16 “(ii) use of materials or
17 equipment associated with the
18 construction or maintenance of
19 transportation projects that re-
20 duce greenhouse gas emissions;

21 “(jj) public facilities for sup-
22 plying electricity to electric or
23 plug-in hybrid-electric vehicles; or

24 “(kk) any other effort that
25 demonstrates progress in reduc-

1 ing transportation-related green-
2 house gas emissions in each met-
3 ropolitan planning organization
4 under this subsection.

5 “(D) REVIEW AND APPROVAL.—Not later
6 than 180 days after the date of submission of
7 a plan under this section—

8 “(i) the Secretary and the Adminis-
9 trator shall review the plan; and

10 “(ii) the Secretary shall approve a
11 plan developed by a metropolitan planning
12 organization pursuant to subparagraph (C)
13 if—

14 “(I) the Secretary finds that a
15 metropolitan planning organization
16 has developed, submitted, and pub-
17 lished the plan of the metropolitan
18 planning organization pursuant to this
19 section;

20 “(II) the Secretary, in consulta-
21 tion with the Administrator, deter-
22 mines that the plan is likely to achieve
23 the targets established by the metro-
24 politan planning organization under
25 this subsection; and

1 “(i) the involvement of the general
2 public, key stakeholders, and elected offi-
3 cials on a broad scale;

4 “(ii) the creation of an opportunity
5 for those participants to educate each
6 other as to growth trends and trade-offs,
7 as a means to incorporate values and feed-
8 back into future plans; and

9 “(iii) the use of continuing efforts and
10 ongoing processes; and

11 “(C) may include key elements such as—

12 “(i) identification of the driving forces
13 behind planning decisions and outcomes;

14 “(ii) determination of patterns of
15 interaction;

16 “(iii) creation of scenarios for discus-
17 sion purposes;

18 “(iv) analysis of implications;

19 “(v) evaluation of scenarios; and

20 “(vi) use of monitoring indicators.”.

21 (2) TITLE 49.—Section 5303 of title 49, United
22 States Code, is amended—

23 (A) in subsection (a)(1)—

24 (i) by striking “minimizing” and in-
25 serting “reducing”; and

1 (ii) by inserting “, reliance on oil, im-
2 pacts on the environment, transportation-
3 related greenhouse gas emissions,” after
4 “consumption”;

5 (B) in subsection (h)(1)(E)—

6 (i) by inserting “sustainability, and
7 livability, reduce surface transportation-re-
8 lated greenhouse gas emissions and reli-
9 ance on oil, adapt to the effects of climate
10 change,” after “energy conservation,”;

11 (ii) by inserting “and public health”
12 after “quality of life”; and

13 (iii) by inserting “, including housing
14 and land use patterns” after “development
15 patterns”;

16 (C) in subsection (i)—

17 (i) in paragraph (4)(A)—

18 (I) by striking “consult, as ap-
19 propriate,” and inserting “cooperate”;

20 (II) by inserting “transportation,
21 public transportation, air quality, and
22 housing, and shall consult, as appro-
23 priate, with State and local agencies
24 responsible for” after “responsible
25 for” and

1 (III) by inserting “public
2 health,” after “conservation,”; and

3 (ii) in paragraph (5)(C)(iii), by insert-
4 ing “and through the website of the metro-
5 politan planning organization, including
6 emission reduction targets and strategies
7 developed under subsection (k)(6), includ-
8 ing an analysis of the anticipated effects of
9 the targets and strategies,” after “World
10 Wide Web”; and

11 (D) in subsection (k), by adding at the end
12 the following:

13 “(6) TRANSPORTATION GREENHOUSE GAS RE-
14 DUCION EFFORTS.—

15 “(A) IN GENERAL.—Within a metropolitan
16 planning area serving a transportation manage-
17 ment area, the transportation planning process
18 under this section shall address transportation-
19 related greenhouse gas emissions by including
20 emission reduction targets and strategies to
21 meet those targets.

22 “(B) ELIGIBLE ORGANIZATIONS.—

23 “(i) IN GENERAL.—The requirements
24 of the transportation greenhouse gas re-
25 duction efforts shall apply only to metro-

1 politan planning organizations within a
2 transportation management area.

3 “(ii) DEVELOPMENT OF PLAN.—A
4 metropolitan planning organization that
5 does not serve as a transportation manage-
6 ment area—

7 “(I) may develop transportation
8 greenhouse gas emission reduction
9 targets and strategies to meet those
10 targets; and

11 “(II) if those targets and strate-
12 gies are developed, shall be subject to
13 all provisions and requirements of this
14 section, including requirements of the
15 transportation greenhouse gas reduc-
16 tion efforts.

17 “(C) ESTABLISHMENT OF TARGETS AND
18 CRITERIA.—

19 “(i) IN GENERAL.—Not later than 2
20 years after the promulgation of the final
21 regulations required under section 831 of
22 the Clean Air Act, each metropolitan plan-
23 ning organization shall develop surface
24 transportation-related greenhouse gas
25 emission reduction targets, as well as

1 strategies to meet those targets, in con-
2 sultation with State air agencies as part of
3 the metropolitan transportation planning
4 process under this section.

5 “(ii) MULTIPLE DESIGNATIONS.—If
6 more than 1 metropolitan planning organi-
7 zation has been designated within a metro-
8 politan area, each metropolitan planning
9 organization shall coordinate with other
10 metropolitan planning organizations in the
11 same metropolitan area to develop the tar-
12 gets and strategies described in clause (i).

13 “(iii) MINIMUM REQUIREMENTS.—
14 Each metropolitan transportation plan de-
15 veloped by a metropolitan planning organi-
16 zation under clause (i) shall, within the
17 plan, demonstrate progress in stabilizing
18 and reducing transportation-related green-
19 house gas emissions so as to contribute to
20 the achievement of State targets pursuant
21 to section 135(f)(9) of title 23.

22 “(iv) REQUIREMENTS FOR TARGETS
23 AND STRATEGIES.—The targets and strat-
24 egies developed under this subparagraph
25 shall, at a minimum—

1 “(I) be based on the emission
2 models and related methodologies es-
3 tablished in the final regulations re-
4 quired under section 831 of the Clean
5 Air Act;

6 “(II) inventory all sources of sur-
7 face transportation-related greenhouse
8 gas emissions;

9 “(III) apply to those modes of
10 surface transportation that are ad-
11 dressed in the planning process under
12 this section;

13 “(IV) be integrated and con-
14 sistent with regional transportation
15 plans and transportation improvement
16 programs; and

17 “(V) be selected through scenario
18 analysis (as defined in section 134(k)
19 of title 23), and include, pursuant to
20 the requirements of the transportation
21 planning process under this section,
22 transportation investment and man-
23 agement strategies that reduce green-
24 house gas emissions from the trans-

1 portation sector over the life of the
2 plan, such as—

3 “(aa) efforts to increase
4 public transportation ridership,
5 including through service im-
6 provements, capacity expansions,
7 and access enhancement;

8 “(bb) efforts to increase
9 walking, bicycling, and other
10 forms of nonmotorized transpor-
11 tation;

12 “(cc) implementation of zon-
13 ing and other land use regula-
14 tions and plans to support infill,
15 transit-oriented development, re-
16 development, or mixed use devel-
17 opment;

18 “(dd) travel demand man-
19 agement programs (including
20 carpool, vanpool, or car-share
21 projects), transportation pricing
22 measures, parking policies, and
23 programs to promote telecom-
24 muting, flexible work schedules,
25 and satellite work centers;

1 “(ee) surface transportation
2 system operation improvements,
3 including intelligent transpor-
4 tation systems or other oper-
5 ational improvements to reduce
6 long-term greenhouse gas emis-
7 sions through reduced congestion
8 and improved system manage-
9 ment;

10 “(ff) intercity passenger rail
11 improvements;

12 “(gg) intercity bus improve-
13 ments;

14 “(hh) freight rail improve-
15 ments;

16 “(ii) use of materials or
17 equipment associated with the
18 construction or maintenance of
19 transportation projects that re-
20 duce greenhouse gas emissions;

21 “(jj) public facilities for sup-
22 plying electricity to electric or
23 plug-in hybrid-electric vehicles; or

24 “(kk) any other effort that
25 demonstrates progress in reduc-

1 ing transportation-related green-
2 house gas emissions in each met-
3 ropolitan planning organization
4 under this subsection.

5 “(D) REVIEW AND APPROVAL.—Not later
6 than 180 days after the date of submission of
7 a plan under this section—

8 “(i) the Secretary and the Adminis-
9 trator shall review the plan; and

10 “(ii) the Secretary shall approve a
11 plan developed by a metropolitan planning
12 organization pursuant to subparagraph (C)
13 if—

14 “(I) the Secretary finds that a
15 metropolitan planning organization
16 has developed, submitted, and pub-
17 lished the plan of the metropolitan
18 planning organization pursuant to this
19 section;

20 “(II) the Secretary, in consulta-
21 tion with the Administrator, deter-
22 mines that the plan is likely to achieve
23 the targets established by the metro-
24 politan planning organization under
25 this subsection; and

1 (iii) by inserting “, including housing
2 and land use patterns” after “development
3 patterns”; and

4 (B) in subsection (f)—

5 (i) in paragraph (2)(D)(i)—

6 (I) by striking “, as appropriate,
7 in consultation” and inserting “in co-
8 operation”;

9 (II) by inserting “State and local
10 agencies responsible for transpor-
11 tation, public transportation, air qual-
12 ity, and housing and in consultation
13 with” before “State, tribal”; and

14 (III) by inserting “public
15 health,” after “conservation,”;

16 (ii) in paragraph (3)(B)(iii), by insert-
17 ing “and through the website of the State,
18 including emission reduction targets and
19 strategies developed under paragraph (9)
20 and an analysis of the anticipated effects
21 of the targets and strategies” after “World
22 Wide Web”; and

23 (iii) by adding at the end the fol-
24 lowing:

1 “(9) TRANSPORTATION GREENHOUSE GAS RE-
2 DUCTION EFFORTS.—

3 “(A) IN GENERAL.—Within a State, the
4 transportation planning process under this sec-
5 tion, shall address transportation-related green-
6 house gas emissions by including emission re-
7 duction targets and strategies to meet those
8 targets.

9 “(B) ESTABLISHMENT OF TARGETS AND
10 CRITERIA.—

11 “(i) IN GENERAL.—Not later than 2
12 years after the promulgation of the final
13 regulations required under section 831 of
14 the Clean Air Act, each State shall develop
15 surface transportation-related greenhouse
16 gas emission reduction targets, as well as
17 strategies to meet those targets, in con-
18 sultation with State air agencies as part of
19 the transportation planning process under
20 this section.

21 “(ii) MINIMUM REQUIREMENTS.—
22 Each transportation plan developed by a
23 State under clause (i) shall, within the
24 plan, demonstrate progress in stabilizing
25 and reducing transportation-related green-

1 house gas emissions in the State so as to
2 contribute to the achievement of national
3 targets pursuant to section 831(a)(1) of
4 the Clean Air Act.

5 “(iii) REQUIREMENTS FOR TARGETS
6 AND STRATEGIES.—The targets and strat-
7 egies developed under this subparagraph
8 shall, at a minimum—

9 “(I) be based on the emission
10 models and related methodologies es-
11 tablished in the final regulations re-
12 quired under section 831 of the Clean
13 Air Act;

14 “(II) inventory all sources of sur-
15 face transportation-related greenhouse
16 gas emissions;

17 “(III) apply to those modes of
18 surface transportation that are ad-
19 dressed in the planning process under
20 this section;

21 “(IV) be integrated and con-
22 sistent with statewide transportation
23 plans and statewide transportation
24 improvement programs; and

1 “(V) be selected through scenario
2 analysis (as defined in section
3 134(k)), and include, pursuant to the
4 requirements of the transportation
5 planning process under this section,
6 transportation investment and man-
7 agement strategies that reduce green-
8 house gas emissions from the trans-
9 portation sector over the life of the
10 plan, such as—

11 “(aa) efforts to increase
12 public transportation ridership,
13 including through service im-
14 provements, capacity expansions,
15 and access enhancement;

16 “(bb) efforts to increase
17 walking, bicycling, and other
18 forms of nonmotorized transpor-
19 tation;

20 “(cc) implementation of zon-
21 ing and other land use regula-
22 tions and plans to support infill,
23 transit-oriented development, re-
24 development, or mixed use devel-
25 opment;

1 “(dd) travel demand man-
2 agement programs (including
3 carpool, vanpool, or car-share
4 projects), transportation pricing
5 measures, parking policies, and
6 programs to promote telecom-
7 muting, flexible work schedules,
8 and satellite work centers;

9 “(ee) surface transportation
10 system operation improvements,
11 including intelligent transpor-
12 tation systems or other oper-
13 ational improvements to reduce
14 congestion and improve system
15 management;

16 “(ff) intercity passenger rail
17 improvements;

18 “(gg) intercity bus improve-
19 ments;

20 “(hh) freight rail improve-
21 ments;

22 “(ii) use of materials or
23 equipment associated with the
24 construction or maintenance of

1 transportation projects that re-
2 duce greenhouse gas emissions;

3 “(jj) public facilities for sup-
4 plying electricity to electric or
5 plug-in hybrid-electric vehicles; or

6 “(kk) any other effort that
7 demonstrates progress in reduc-
8 ing transportation-related green-
9 house gas emissions.

10 “(C) COORDINATION AND CONSULTATION
11 WITH PUBLIC AGENCIES.—Transportation
12 greenhouse gas targets and plans pursuant to
13 this section shall be developed—

14 “(i) in coordination with—

15 “(I) all metropolitan planning or-
16 ganizations covered by this section
17 within the State; and

18 “(II) transportation and air qual-
19 ity agencies within the State; and

20 “(ii) in consultation with representa-
21 tives of State and local housing, economic
22 development, and land use agencies.

23 “(D) ENFORCEMENT.—Not later than 180
24 days after the date of submission of a plan
25 under this section—

1 “(i) the Secretary and the Adminis-
2 trator shall review the plan; and

3 “(ii) the Secretary shall approve a
4 plan developed by a State pursuant to sub-
5 paragraph (B) if—

6 “(I) the Secretary finds that a
7 State has developed, submitted, and
8 published the plan pursuant to this
9 section;

10 “(II) the Secretary, in consulta-
11 tion with the Administrator, deter-
12 mines that the plan is likely to achieve
13 the targets established by the State
14 under this subsection; and

15 “(III) the development of the
16 plan complies with the minimum re-
17 quirements established under clauses
18 (ii) and (iii) of subparagraph (B).

19 “(E) PLANNING FINDING.—Failure to
20 comply with the requirements under subpara-
21 graph (B) shall not impact the planning finding
22 under subsection (g)(7).”.

23 (2) TITLE 49.—Section 5304 of title 49, United
24 States Code is amended—

25 (A) in subsection (d)(1)(E)—

1 (i) by inserting “sustainability, and
2 livability, reduce surface transportation-re-
3 lated greenhouse gas emissions and reli-
4 ance on oil, adapt to the effects of climate
5 change,” after “energy conservation,”;

6 (ii) by inserting “and public health”
7 after “quality of life”; and

8 (iii) by inserting “, including housing
9 and land use patterns” after “development
10 patterns”; and

11 (B) in subsection (f)—

12 (i) in paragraph (2)(D)(i)—

13 (I) by striking “, as appropriate,
14 in consultation” and inserting “in co-
15 operation”;

16 (II) by inserting “State and local
17 agencies responsible for transpor-
18 tation, public transportation, air qual-
19 ity, and housing and in consultation
20 with” before “State, tribal”; and

21 (III) by inserting “public
22 health,” after “conservation,”;

23 (ii) in paragraph (3)(B)(iii), by insert-
24 ing “and through the website of the State,
25 including emission reduction targets and

1 strategies developed under paragraph (9)
2 and an analysis of the anticipated effects
3 of the targets and strategies” after “World
4 Wide Web”; and

5 (iii) by adding at the end the fol-
6 lowing:

7 “(9) TRANSPORTATION GREENHOUSE GAS RE-
8 Duction EFFORTS.—

9 “(A) IN GENERAL.—Within a State, the
10 transportation planning process under this sec-
11 tion, shall address transportation-related green-
12 house gas emissions by including emission re-
13 duction targets and strategies to meet those
14 targets.

15 “(B) ESTABLISHMENT OF TARGETS AND
16 CRITERIA.—

17 “(i) IN GENERAL.—Not later than 2
18 years after the promulgation of the final
19 regulations required under section 831 of
20 the Clean Air Act, each State shall develop
21 surface transportation-related greenhouse
22 gas emission reduction targets, as well as
23 strategies to meet those targets, in con-
24 sultation with State air agencies as part of

1 the transportation planning process under
2 this section.

3 “(ii) MINIMUM REQUIREMENTS.—
4 Each transportation plan developed by a
5 State under clause (i) shall, within the
6 plan, demonstrate progress in stabilizing
7 and reducing transportation-related green-
8 house gas emissions in the State so as to
9 contribute to the achievement of national
10 targets pursuant to section 831(a)(1) of
11 the Clean Air Act.

12 “(iii) REQUIREMENTS FOR TARGETS
13 AND STRATEGIES.—The targets and strat-
14 egies developed under this subparagraph
15 shall, at a minimum—

16 “(I) be based on the emission
17 models and related methodologies es-
18 tablished in the final regulations re-
19 quired under section 831 of the Clean
20 Air Act;

21 “(II) inventory all sources of sur-
22 face transportation-related greenhouse
23 gas emissions;

24 “(III) apply to those modes of
25 surface transportation that are ad-

1 dressed in the planning process under
2 this section;

3 “(IV) be integrated and con-
4 sistent with statewide transportation
5 plans and statewide transportation
6 improvement programs; and

7 “(V) be selected through scenario
8 analysis (as defined in section 134(k)
9 of title 23), and include, pursuant to
10 the requirements of the transportation
11 planning process under this section,
12 transportation investment and man-
13 agement strategies that reduce green-
14 house gas emissions from the trans-
15 portation sector over the life of the
16 plan, such as—

17 “(aa) efforts to increase
18 public transportation ridership,
19 including through service im-
20 provements, capacity expansions,
21 and access enhancement;

22 “(bb) efforts to increase
23 walking, bicycling, and other
24 forms of nonmotorized transpor-
25 tation;

1 “(cc) implementation of zon-
2 ing and other land use regula-
3 tions and plans to support infill,
4 transit-oriented development, re-
5 development, or mixed use devel-
6 opment;

7 “(dd) travel demand man-
8 agement programs (including
9 carpool, vanpool, or car-share
10 projects), transportation pricing
11 measures, parking policies, and
12 programs to promote telecom-
13 muting, flexible work schedules,
14 and satellite work centers;

15 “(ee) surface transportation
16 system operation improvements,
17 including intelligent transpor-
18 tation systems or other oper-
19 ational improvements to reduce
20 congestion and improve system
21 management;

22 “(ff) intercity passenger rail
23 improvements;

24 “(gg) intercity bus improve-
25 ments;

1 “(hh) freight rail improve-
2 ments;

3 “(ii) use of materials or
4 equipment associated with the
5 construction or maintenance of
6 transportation projects that re-
7 duce greenhouse gas emissions;

8 “(jj) public facilities for sup-
9 plying electricity to electric or
10 plug-in hybrid-electric vehicles; or

11 “(kk) any other effort that
12 demonstrates progress in reduc-
13 ing transportation-related green-
14 house gas emissions.

15 “(C) COORDINATION AND CONSULTATION
16 WITH PUBLIC AGENCIES.—Transportation
17 greenhouse gas targets and plans pursuant to
18 this section shall be developed—

19 “(i) in coordination with—

20 “(I) all metropolitan planning or-
21 ganizations covered by this section
22 within the State; and

23 “(II) transportation and air qual-
24 ity agencies within the State; and

1 “(ii) in consultation with representa-
2 tives of State and local housing, economic
3 development, and land use agencies.

4 “(D) ENFORCEMENT.—Not later than 180
5 days after the date of submission of a plan
6 under this section—

7 “(i) the Secretary and the Adminis-
8 trator shall review the plan; and

9 “(ii) the Secretary shall approve a
10 plan developed by a State pursuant to sub-
11 paragraph (B) if—

12 “(I) the Secretary finds that a
13 State has developed, submitted, and
14 published the plan pursuant to this
15 section;

16 “(II) the Secretary, in consulta-
17 tion with the Administrator, deter-
18 mines that the plan is likely to achieve
19 the targets established by the State
20 under this subsection; and

21 “(III) the development of the
22 plan complies with the minimum re-
23 quirements established under clauses
24 (ii) and (iii) of subparagraph (B).

1 “(E) PLANNING FINDING.—Failure to
2 comply with the requirements under subpara-
3 graph (B) shall not impact the planning finding
4 under subsection (g)(7).”.

5 (d) APPLICABILITY.—Section 304 of the Clean Air
6 Act (42 U.S.C. 7604) shall not apply to the planning pro-
7 visions of this section or any amendment made by this
8 section.

9 (e) LAND USE AUTHORITY.—Nothing in this section
10 or an amendment made by this section—

11 (1) infringes on the existing authority of local
12 governments to plan or control land use; or

13 (2) provides or transfers authority over land
14 use to any other entity.

15 **SEC. 113. TRANSPORTATION GREENHOUSE GAS EMISSION**
16 **REDUCTION PROGRAM GRANTS.**

17 Part C of title VIII of the Clean Air Act (as amended
18 by section 112) is amended by adding at the end the fol-
19 lowing:

20 **“SEC. 832. TRANSPORTATION GREENHOUSE GAS EMISSION**
21 **REDUCTION PROGRAM GRANTS.**

22 “(a) IN GENERAL.—The Secretary of Transportation
23 (referred to in this section as the ‘Secretary’) shall provide
24 grants to States and metropolitan planning organizations

1 to carry out the purposes of this section for each fiscal
2 year—

3 “(1) to support the developing and updating of
4 transportation greenhouse gas reduction targets and
5 strategies; and

6 “(2) to provide financial assistance to imple-
7 ment plans approved pursuant to—

8 “(A) sections 134(k)(6) and 135(f)(9) of
9 title 23, United States Code; and

10 “(B) sections 5303(k)(6) and 5304(f)(9) of
11 title 49, United States Code.

12 “(b) PLANNING GRANTS.—

13 “(1) IN GENERAL.—Subject to paragraph (2),
14 the Secretary shall allocate not more than 5 percent
15 of the funds available to carry out this section for
16 a fiscal year for metropolitan planning organizations
17 to develop and update transportation plans, includ-
18 ing targets and strategies for greenhouse gas emis-
19 sion reduction under—

20 “(A) sections 134(k)(6) and 135(f)(9) of
21 title 23, United States Code; and

22 “(B) sections 5303(k)(6) and 5304(f)(9) of
23 title 49, United States Code.

24 “(2) ELIGIBLE ORGANIZATIONS.—The Sec-
25 retary shall distribute the funds available in (1) to

1 metropolitan planning organizations (as defined in
2 section 134(k)(7) of title 23, United States Code) in
3 the proportion that—

4 “(A) the population within such a metro-
5 politan planning organization; bears to

6 “(B) the total population of all such met-
7 ropolitan planning organizations.

8 “(c) PERFORMANCE GRANTS.—

9 “(1) IN GENERAL.—After allocating funds pur-
10 suant to subsection (b)(1), the Secretary shall use
11 the remainder of amounts made available to carry
12 out this section to provide grants to States and met-
13 ropolitan planning organizations.

14 “(2) CRITERIA.—In providing grants under this
15 subsection, the Secretary, in consultation with the
16 Administrator, shall develop criteria for providing
17 the grants, taking into consideration, with respect to
18 areas to be covered by the grants—

19 “(A) the quantity of total greenhouse gas
20 emissions to be reduced as a result of imple-
21 mentation of a plan, within a covered area, as
22 determined by methods established under sec-
23 tion 831(a);

24 “(B) the quantity of total greenhouse gas
25 emissions to be reduced per capita as a result

1 of implementation of a plan, within the covered
2 area, as determined by methods established
3 under section 831(a);

4 “(C) the cost-effectiveness of reducing
5 greenhouse gas emissions during the life of the
6 plan;

7 “(D) progress toward achieving emission
8 reductions target established under—

9 “(i) sections 134(k)(6) and 135(f)(9)
10 of title 23, United States Code; and

11 “(ii) sections 5303(k)(6) and
12 5304(f)(9) of title 49, United States Code;

13 “(E) reductions in greenhouse gas emis-
14 sions previously achieved by States and metro-
15 politan planning organizations during the 5-
16 year period beginning on the date of enactment
17 of this Act;

18 “(F) plans that increase transportation op-
19 tions and mobility, particularly for low-income
20 individuals, minorities, the elderly, households
21 without motor vehicles, cost-burdened house-
22 holds, and the disabled; and

23 “(G) other factors, including innovative ap-
24 proaches, minimization of costs, and consider-
25 ation of economic development, revenue genera-

1 tion, consumer fuel cost-savings, and other eco-
2 nomic, environmental and health benefits, as
3 the Secretary determines to be appropriate.

4 “(d) REQUIREMENT FOR REDUCED EMISSIONS.—A
5 performance grant under subsection (c) may be used only
6 to fund strategies that demonstrate a reduction in green-
7 house gas emissions that is sustainable over the life of the
8 applicable transportation plan.

9 “(e) COST-SHARING.—The Federal share of the costs
10 of a project receiving Federal financial assistance under
11 this section shall be 80 percent.

12 “(f) COMPLIANCE WITH APPLICABLE LAWS.—

13 “(1) IN GENERAL.—Subject to paragraph (2), a
14 project receiving funds under this section shall com-
15 ply with all applicable Federal laws (including regu-
16 lations), including—

17 “(A) subchapter IV of chapter 31 of title
18 40, United States Code; and

19 “(B) applicable requirements of titles 23
20 and 49, United States Code.

21 “(2) ELIGIBILITY.—Project eligibility shall be
22 determined in accordance with this section.

23 “(3) DETERMINATION OF APPLICABLE MODAL
24 REQUIREMENTS.—The Secretary shall—

1 “(A) have the discretion to designate the
2 specific modal requirements that shall apply to
3 a project; and

4 “(B) be guided by the predominant modal
5 characteristics of the project in the event that
6 a project has cross-modal application.

7 “(g) ADDITIONAL REQUIREMENTS.—

8 “(1) IN GENERAL.—As a condition on the re-
9 ceipt of financial assistance under this section, the
10 interests of public transportation employees affected
11 by the assistance shall be protected under arrange-
12 ments that the Secretary of Labor determines—

13 “(A) to be fair and equitable; and

14 “(B) to provide benefits equal to the bene-
15 fits established under section 5333(b) of title
16 49, United States Code.

17 “(2) WAGES AND BENEFITS.—Laborers and
18 mechanics employed on projects funded with
19 amounts made available under this section shall be
20 paid wages and benefits not less than those deter-
21 mined by the Secretary of Labor under subchapter
22 IV of chapter 31 of title 40, United States Code, to
23 be prevailing in the same locality.

24 “(h) MISCELLANEOUS.—

1 “(1) ROAD-USE AND CONGESTION PRICING
2 MEASURES.—All projects funded by amounts made
3 available under this section shall be eligible to re-
4 ceive amounts collected through road-use and con-
5 gestion pricing measures.

6 “(2) LIMITATIONS.—The Administrator may
7 not approve any transportation plan for a project
8 that would be inconsistent with existing design, pro-
9 curement, and construction guidelines established by
10 the Department of Transportation.

11 “(3) SUBGRANTEES.—With the approval of the
12 Secretary, recipients of funding under this section
13 may enter into agreements providing for the transfer
14 of funds to noneligible public entities (such as local
15 governments, air quality agencies, zoning commis-
16 sions, special districts and transit agencies) that
17 have statutory responsibility or authority for actions
18 necessary to implement the strategies pursuant to—

19 “(A) sections 134(k)(6) and 135(f)(9) of
20 title 23, United States Code; and

21 “(B) sections 5303(k)(6) and 5304(f)(9) of
22 title 49, United States Code.”.

1 **SEC. 114. SMARTWAY TRANSPORTATION EFFICIENCY PRO-**
2 **GRAM.**

3 Part B of title VIII of the Clean Air Act (as amended
4 by section 111) is amended by adding at the end the fol-
5 lowing:

6 **“SEC. 822. SMARTWAY TRANSPORTATION EFFICIENCY PRO-**
7 **GRAM.**

8 “(a) IN GENERAL.—There is established within the
9 Environmental Protection Agency a SmartWay Transpor-
10 tation Efficiency Program to quantify, demonstrate, and
11 promote the benefits of technologies, products, fuels, and
12 operational strategies that reduce petroleum consumption,
13 air pollution, and greenhouse gas emissions from the mo-
14 bile source sector.

15 “(b) GENERAL DUTIES.—Under the program estab-
16 lished under this section, the Administrator shall carry out
17 each of the following:

18 “(1) Development of measurement protocols to
19 evaluate the energy consumption and greenhouse gas
20 impacts from technologies and strategies in the mo-
21 bile source sector, including those for passenger
22 transport and goods movement.

23 “(2) Development of qualifying thresholds for
24 certifying, verifying, or designating energy-efficient,
25 low-greenhouse gas SmartWay technologies and

1 strategies for each mode of passenger transportation
2 and goods movement.

3 “(3) Development of partnership and recogni-
4 tion programs to promote best practices and drive
5 demand for energy-efficient, low-greenhouse gas
6 transportation performance.

7 “(4) Promotion of the availability of, and en-
8 couragement of the adoption of, SmartWay certified
9 or verified technologies and strategies, and publica-
10 tion of the availability of financial incentives, such
11 as assistance from loan programs and other Federal
12 and State incentives.

13 “(c) SMARTWAY TRANSPORT FREIGHT PARTNER-
14 SHIP.—The Administrator shall establish a SmartWay
15 Transport Partnership program with shippers and carriers
16 of goods to promote energy-efficient, low-greenhouse gas
17 transportation. In carrying out such partnership, the Ad-
18 ministrator shall undertake each of the following:

19 “(1) Verification of the energy and greenhouse
20 gas performance of participating freight carriers, in-
21 cluding those operating rail, trucking, marine, and
22 other goods movement operations.

23 “(2) Publication of a comprehensive energy and
24 greenhouse gas performance index of freight modes
25 (including rail, trucking, marine, and other modes of

1 transporting goods) and individual freight companies
2 so that shippers can choose to deliver their goods
3 more efficiently.

4 “(3) Development of tools for—

5 “(A) carriers to calculate their energy and
6 greenhouse gas performance; and

7 “(B) shippers to calculate the energy and
8 greenhouse gas impacts of moving their prod-
9 ucts and to evaluate the relative impacts from
10 transporting their goods by different modes and
11 corporate carriers.

12 “(4) Provision of recognition opportunities for
13 participating shipper and carrier companies dem-
14 onstrating advanced practices and achieving superior
15 levels of greenhouse gas performance.

16 “(d) IMPROVING FREIGHT GREENHOUSE GAS PER-
17 FORMANCE DATABASES.—The Administrator shall, in co-
18 ordination with the Secretary of Commerce and other ap-
19 propriate agencies, define and collect data on the physical
20 and operational characteristics of the Nation’s truck popu-
21 lation, with special emphasis on data related to energy ef-
22 ficiency and greenhouse gas performance to inform the
23 performance index published under subsection (c)(2) of
24 this section, and other means of goods transport as nec-

1 essary, at least every 5 years as part of the economic cen-
2 sus required under title 13, United States Code.

3 “(e) ESTABLISHMENT OF FINANCING PROGRAM.—

4 The Administrator shall establish a SmartWay Financing
5 Program to competitively award funding to eligible entities
6 identified by the Administrator in accordance with the
7 program requirements in subsection (g).

8 “(f) PURPOSES.—Under the SmartWay Financing
9 Program, eligible entities shall—

10 “(1) use funds awarded by the Administrator to
11 provide flexible loan and/or lease terms that increase
12 approval rates or lower the costs of loans and/or
13 leases in accordance with guidance developed by the
14 Administrator;

15 “(2) make such loans and/or leases available to
16 public and private entities for the purpose of adopt-
17 ing low-greenhouse gas technologies or strategies for
18 the mobile source sector that are designated by the
19 Administrator; and

20 “(3) use funds provided by the Administrator
21 for electrification of freight transportation systems
22 in major national goods movement corridors, giving
23 priority to electrification of transportation systems
24 in areas that are gateways for high volumes of inter-
25 national and national freight transport and require

1 substantial criteria pollutant emission reductions in
2 order to attain national ambient air quality stand-
3 ards.

4 “(g) PROGRAM REQUIREMENTS.—The Administrator
5 shall determine program design elements and require-
6 ments, including—

7 “(1) the type of financial mechanism with
8 which to award funding, in the form of grants and/
9 or contracts;

10 “(2) the designation of eligible entities to re-
11 ceive funding, such as State, tribal, and local gov-
12 ernments, regional organizations comprised of gov-
13 ernmental units, nonprofit organizations, or for-prof-
14 it companies;

15 “(3) criteria for evaluating applications from el-
16 igible entities, including anticipated—

17 “(A) cost-effectiveness of loan or lease pro-
18 gram on a metric-ton-of-greenhouse gas-saved-
19 per-dollar basis; and

20 “(B) ability to promote the loan or lease
21 program and associated technologies and strate-
22 gies to the target audience; and

23 “(4) reporting requirements for entities that re-
24 ceive awards, including—

1 “(A) actual cost-effectiveness and green-
2 house gas savings from the loan or lease pro-
3 gram based on a methodology designated by the
4 Administrator;

5 “(B) the total number of applications and
6 number of approved applications; and

7 “(C) terms granted to loan and lease re-
8 cipients compared to prevailing market prac-
9 tices and/or rates.

10 “(h) AUTHORIZATION OF APPROPRIATIONS.—Such
11 sums as necessary are authorized to be appropriated to
12 the Administrator to carry out this section.”.

13 **Subtitle B—Carbon Capture and** 14 **Sequestration**

15 **SEC. 121. NATIONAL STRATEGY.**

16 (a) IN GENERAL.—Not later than 1 year after the
17 date of enactment of this Act, the Administrator, in con-
18 sultation with the Secretary of Energy, the Secretary of
19 the Interior, and the heads of such other relevant Federal
20 agencies as the President may designate, shall submit to
21 Congress a report establishing a unified and comprehen-
22 sive strategy to address the key legal, regulatory, and
23 other barriers to the commercial-scale deployment of car-
24 bon capture and storage.

1 (b) BARRIERS.—The report under this section
2 shall—

3 (1) identify the regulatory, legal, and other
4 gaps and barriers that—

5 (A) could be addressed by a Federal agen-
6 cy using existing statutory authority;

7 (B) require Federal legislation, if any; or

8 (C) would be best addressed at the State,
9 tribal, or regional level;

10 (2) identify regulatory implementation chal-
11 lenges, including challenges relating to approval of
12 State and tribal programs and delegation of author-
13 ity for permitting; and

14 (3) recommend rulemakings, Federal legisla-
15 tion, or other actions that should be taken to further
16 evaluate and address those barriers.

17 (c) FINDING.—Congress finds that it is in the public
18 interest to achieve widespread, commercial-scale deploy-
19 ment of carbon capture and storage in the United States
20 and throughout Asia before January 1, 2030.

21 **SEC. 122. REGULATIONS FOR GEOLOGICAL SEQUESTRA-**
22 **TION SITES.**

23 (a) COORDINATED CERTIFICATION AND PERMITTING
24 PROCESS.—Part A of title VIII of the Clean Air Act (as

1 amended by section 124 of this division) is amended by
2 adding at the end the following:

3 **“SEC. 813. GEOLOGICAL STORAGE SITES.**

4 “(a) COORDINATED PROCESS.—

5 “(1) IN GENERAL.—The Administrator shall es-
6 tablish a coordinated approach to certifying and per-
7 mitting geological storage, taking into consideration
8 all relevant statutory authorities.

9 “(2) REQUIREMENTS.—In establishing such ap-
10 proach, the Administrator shall—

11 “(A) take into account, and reduce redun-
12 dancy with, the requirements of section 1421 of
13 the Safe Drinking Water Act (42 U.S.C. 300h),
14 including the rulemaking for geological storage
15 wells described in the proposed rule entitled
16 ‘Federal Requirements Under the Underground
17 Injection Control (UIC) Program for Carbon
18 Dioxide (CO₂) Geologic Sequestration (GS)
19 Wells’ (73 Fed. Reg. 43492 (July 25, 2008));
20 and

21 “(B) to the maximum extent practicable,
22 reduce the burden on certified entities and im-
23 plementing authorities.

24 “(b) REGULATIONS.—Not later than 2 years after
25 the date of enactment of this title, the Administrator shall

1 promulgate regulations to protect human health and the
2 environment by minimizing the risk of escape to the at-
3 mosphere of carbon dioxide injected for purposes of geo-
4 logical storage.

5 “(c) REQUIREMENTS.—The regulations under sub-
6 section (b) shall include—

7 “(1) a process to obtain certification for geo-
8 logical storage under this section; and

9 “(2) requirements for—

10 “(A) monitoring, recordkeeping, and re-
11 porting for emissions associated with injection
12 into, and escape from, geological storage sites,
13 taking into account any requirements or proto-
14 cols developed under section 713;

15 “(B) public participation in the certifi-
16 cation process that maximizes transparency;

17 “(C) the sharing of data among States, In-
18 dian tribes, and the Environmental Protection
19 Agency; and

20 “(D) other elements or safeguards nec-
21 essary to achieve the purpose described in sub-
22 section (b).

23 “(d) REPORT.—

24 “(1) IN GENERAL.—Not later than 2 years
25 after the date of promulgation of regulations pursu-

1 ant to subsection (b), and not less frequently than
2 once every 3 years thereafter, the Administrator
3 shall submit to the Committee on Energy and Com-
4 merce of the House of Representatives and the Com-
5 mittee on Environment and Public Works of the
6 Senate a report describing geological storage in the
7 United States, and, to the extent relevant, other
8 countries in North America.

9 “(2) INCLUSIONS.—Each report under para-
10 graph (1) shall include—

11 “(A) data regarding injection, emissions to
12 the atmosphere, if any, and performance of ac-
13 tive and closed geological storage sites, includ-
14 ing those at which enhanced hydrocarbon recov-
15 ery operations occur;

16 “(B) an evaluation of the performance of
17 relevant Federal environmental regulations and
18 programs in ensuring environmentally protec-
19 tive geological storage practices;

20 “(C) recommendations on how those pro-
21 grams and regulations should be improved or
22 made more effective; and

23 “(D) other relevant information.”.

1 (b) SAFE DRINKING WATER ACT STANDARDS.—Sec-
2 tion 1421 of the Safe Drinking Water Act (42 U.S.C.
3 300h) is amended by adding at the end the following:

4 “(e) CARBON DIOXIDE GEOLOGICAL STORAGE
5 WELLS.—

6 “(1) IN GENERAL.—Not later than 1 year after
7 the date of enactment of this subsection, the Admin-
8 istrator shall promulgate regulations under sub-
9 section (a) for carbon dioxide geological storage
10 wells.

11 “(2) FINANCIAL RESPONSIBILITY.—

12 “(A) IN GENERAL.—The regulations under
13 paragraph (1) shall include requirements for
14 maintaining evidence of financial responsibility,
15 including financial responsibility for emergency
16 and remedial response, well plugging, site clo-
17 sure, and post-injection site care.

18 “(B) REGULATIONS.—Financial responsi-
19 bility may be established for carbon dioxide geo-
20 logical wells in accordance with regulations pro-
21 mulgated by the Administrator by any 1, or any
22 combination, of the following:

23 “(i) Insurance.

24 “(ii) Guarantee.

25 “(iii) Trust.

- 1 “(iv) Standby trust.
2 “(v) Surety bond.
3 “(vi) Letter of credit.
4 “(vii) Qualification as a self-insurer.
5 “(viii) Any other method satisfactory
6 to the Administrator.”.

7 **SEC. 123. STUDIES AND REPORTS.**

8 (a) STUDY OF LEGAL FRAMEWORK FOR GEOLOGICAL
9 STORAGE SITES.—

10 (1) ESTABLISHMENT OF TASK FORCE.—

11 (A) IN GENERAL.—As soon as practicable,
12 but not later than 180 days after the date of
13 enactment of this Act, the Administrator shall
14 establish a task force, to be composed of an
15 equal number of—

16 (i) subject matter experts;

17 (ii) nongovernmental organizations
18 with expertise regarding environmental pol-
19 icy;

20 (iii) academic experts with expertise in
21 environmental law;

22 (iv) State and tribal officials with en-
23 vironmental expertise;

24 (v) representatives of State and tribal
25 attorneys general;

1 (vi) representatives of the Environ-
2 mental Protection Agency, the Department
3 of the Interior, the Department of Energy,
4 the Department of Transportation, and
5 other relevant Federal agencies; and

6 (vii) members of the private sector.

7 (B) STUDY.—The task force established
8 under subparagraph (A) shall conduct a study
9 of—

10 (i) existing Federal environmental
11 statutes, State environmental statutes, and
12 State common law that apply to geological
13 storage sites for carbon dioxide, including
14 the ability of those laws to serve as risk
15 management tools;

16 (ii) the existing statutory framework,
17 including Federal and State laws, that
18 apply to harm and damage to the environ-
19 ment or public health at closed sites at
20 which carbon dioxide injection has been
21 used for enhanced hydrocarbon recovery;

22 (iii) the statutory framework, environ-
23 mental health and safety considerations,
24 implementation issues, and financial impli-
25 cations of potential models for Federal,

1 State, or private sector assumption of li-
2 abilities and financial responsibilities with
3 respect to closed geological storage sites;

4 (iv) private sector mechanisms, includ-
5 ing insurance and bonding, that may be
6 available to manage environmental, health,
7 and safety risks from closed geological
8 storage sites; and

9 (v) the subsurface mineral rights,
10 water rights, and property rights issues as-
11 sociated with geological storage of carbon
12 dioxide, including issues specific to Federal
13 land.

14 (2) REPORT.—Not later than 18 months after
15 the date of enactment of this Act, the task force es-
16 tablished under paragraph (1)(A) shall submit to
17 Congress a report describing the results of the study
18 conducted under that paragraph, including any con-
19 sensus recommendations of the task force.

20 (b) ENVIRONMENTAL STATUTES.—

21 (1) STUDY.—The Administrator shall conduct a
22 study of the means by which, and under what cir-
23 cumstances, the environmental statutes for which
24 the Environmental Protection Agency has responsi-

1 bility would apply to carbon dioxide injection and ge-
2 ological storage activities.

3 (2) REPORT.—Not later than 1 year after the
4 date of enactment of this Act, the Administrator
5 shall submit to Congress a report describing the re-
6 sults of the study conducted under paragraph (1).

7 **SEC. 124. PERFORMANCE STANDARDS FOR COAL-FUELED**
8 **POWER PLANTS.**

9 (a) IN GENERAL.—Part A of title VIII of the Clean
10 Air Act (as added by section 121 of division B) is amended
11 by adding at the end the following:

12 **“SEC. 812. PERFORMANCE STANDARDS FOR NEW COAL-**
13 **FIRED POWER PLANTS.**

14 “(a) DEFINITIONS.—For purposes of this section:

15 “(1) COVERED EGU.—The term ‘covered EGU’
16 means a utility unit that is required to have a per-
17 mit under section 503(a) and is authorized under
18 State or Federal law to derive at least 30 percent of
19 its annual heat input from coal, petroleum coke, or
20 any combination of these fuels.

21 “(2) INITIALLY PERMITTED.—The term ‘ini-
22 tially permitted’ means that the owner or operator
23 has received a preconstruction approval or permit
24 under this Act, for the covered EGU as a new (not
25 a modified) source, but administrative review or ap-

1 peal of such approval or permit has not been ex-
2 hausted. A subsequent modification of any such ap-
3 proval or permits, ongoing administrative or court
4 review, appeals, or challenges, or the existence or
5 tolling of any time to pursue further review, appeals,
6 or challenges shall not affect the date on which a
7 covered EGU is considered to be initially permitted
8 under this paragraph.

9 “(b) STANDARDS.—(1) A covered EGU that is ini-
10 tially permitted on or after January 1, 2020, shall achieve
11 an emission limit that is a 65 percent reduction in emis-
12 sions of the carbon dioxide produced by the unit, as
13 measured on an annual basis, or meet such more stringent
14 standard as the Administrator may establish pursuant to
15 subsection (c).

16 “(2) A covered EGU that is initially permitted after
17 January 1, 2009, and before January 1, 2020, shall, by
18 the applicable compliance date established under this
19 paragraph, achieve an emission limit that is a 50 percent
20 reduction in emissions of the carbon dioxide produced by
21 the unit, as measured on an annual basis. Compliance
22 with the requirement set forth in this paragraph shall be
23 required by the earliest of the following:

24 “(A) Four years after the date the Adminis-
25 trator has published pursuant to subsection (d) a re-

1 port that there are in commercial operation in the
2 United States electric generating units or other sta-
3 tionary sources equipped with carbon capture and
4 sequestration technology that, in the aggregate—

5 “(i) have a total of at least 4 gigawatts of
6 nameplate generating capacity of which—

7 “(I) at least 3 gigawatts must be elec-
8 tric generating units; and

9 “(II) up to 1 gigawatt may be indus-
10 trial applications, for which capture and
11 sequestration of 3,000,000 tons of carbon
12 dioxide per year on an aggregate
13 annualized basis shall be considered equiv-
14 alent to 1 gigawatt;

15 “(ii) include at least 2 electric generating
16 units, each with a nameplate generating capac-
17 ity of 250 megawatts or greater, that capture,
18 inject, and sequester carbon dioxide into geo-
19 logic formations other than oil and gas fields;
20 and

21 “(iii) are capturing and sequestering in the
22 aggregate at least 12,000,000 tons of carbon
23 dioxide per year, calculated on an aggregate
24 annualized basis.

25 “(B) January 1, 2025.

1 “(3) If the deadline for compliance with paragraph
2 (2) is January 1, 2025, the Administrator may extend the
3 deadline for compliance by a covered EGU by up to 18
4 months if the Administrator makes a determination, based
5 on a showing by the owner or operator of the unit, that
6 it will be technically infeasible for the unit to meet the
7 standard by the deadline. The owner or operator must
8 submit a request for such an extension by no later than
9 January 1, 2022, and the Administrator shall provide for
10 public notice and comment on the extension request.

11 “(c) REVIEW AND REVISION OF STANDARDS.—Not
12 later than 2025 and at 5-year intervals thereafter, the Ad-
13 ministrator shall review the standards for new covered
14 EGUs under this section and shall, by rule, reduce the
15 maximum carbon dioxide emission rate for new covered
16 EGUs to a rate which reflects the degree of emission limi-
17 tation achievable through the application of the best sys-
18 tem of emission reduction which (taking into account the
19 cost of achieving such reduction and any nonair quality
20 health and environmental impact and energy require-
21 ments) the Administrator determines has been adequately
22 demonstrated.

23 “(d) REPORTS.—Not later than 18 months after the
24 date of enactment of this title and semiannually there-
25 after, the Administrator shall publish a report on the

1 nameplate capacity of units (determined pursuant to sub-
2 section (b)(2)(A)) in commercial operation in the United
3 States equipped with carbon capture and sequestration
4 technology, including the information described in sub-
5 section (b)(2)(A) (including the cumulative generating ca-
6 pacity to which carbon capture and sequestration retrofit
7 projects meeting the criteria described in section
8 775(b)(1)(A)(ii) and (b)(1)(A)(iv)(II) has been applied
9 and the quantities of carbon dioxide captured and seques-
10 tered by such projects).

11 “(e) REGULATIONS.—Not later than 2 years after the
12 date of enactment of this title, the Administrator shall
13 promulgate regulations to carry out the requirements of
14 this section.”.

15 **SEC. 125. CARBON CAPTURE AND SEQUESTRATION DEM-**
16 **ONSTRATION AND EARLY DEPLOYMENT PRO-**
17 **GRAM.**

18 (a) DEFINITIONS.—For purposes of this section:

19 (1) SECRETARY.—The term “Secretary” means
20 the Secretary of Energy.

21 (2) DISTRIBUTION UTILITY.—The term “dis-
22 tribution utility” means an entity that distributes
23 electricity directly to retail consumers under a legal,
24 regulatory, or contractual obligation to do so.

1 (3) **ELECTRIC UTILITY.**—The term “electric
2 utility” has the meaning provided by section 3 of the
3 Federal Power Act (16 U.S.C. 796).

4 (4) **FOSSIL FUEL-BASED ELECTRICITY.**—The
5 term “fossil fuel-based electricity” means electricity
6 that is produced from the combustion of fossil fuels.

7 (5) **FOSSIL FUEL.**—The term “fossil fuel”
8 means coal, petroleum, natural gas or any derivative
9 of coal, petroleum, or natural gas.

10 (6) **CORPORATION.**—The term “Corporation”
11 means the Carbon Storage Research Corporation es-
12 tablished in accordance with this section.

13 (7) **QUALIFIED INDUSTRY ORGANIZATION.**—The
14 term “qualified industry organization” means the
15 Edison Electric Institute, the American Public
16 Power Association, the National Rural Electric Co-
17 operative Association, a successor organization of
18 such organizations, or a group of owners or opera-
19 tors of distribution utilities delivering fossil fuel-
20 based electricity who collectively represent at least
21 20 percent of the volume of fossil fuel-based elec-
22 tricity delivered by distribution utilities to consumers
23 in the United States.

24 (8) **RETAIL CONSUMER.**—The term “retail con-
25 sumer” means an end-user of electricity.

1 (b) CARBON STORAGE RESEARCH CORPORATION.—

2 (1) ESTABLISHMENT.—

3 (A) REFERENDUM.—Qualified industry or-
4 ganizations may conduct, at their own expense,
5 a referendum among the owners or operators of
6 distribution utilities delivering fossil fuel-based
7 electricity for the creation of a Carbon Storage
8 Research Corporation. Such referendum shall
9 be conducted by an independent auditing firm
10 agreed to by the qualified industry organiza-
11 tions. Voting rights in such referendum shall be
12 based on the quantity of fossil fuel-based elec-
13 tricity delivered to consumers in the previous
14 calendar year or other representative period as
15 determined by the Secretary pursuant to sub-
16 section (f). Upon approval of those persons rep-
17 resenting two-thirds of the total quantity of fos-
18 sil fuel-based electricity delivered to retail con-
19 sumers, the Corporation shall be established un-
20 less opposed by the State regulatory authorities
21 pursuant to subparagraph (B). All distribution
22 utilities voting in the referendum shall certify to
23 the independent auditing firm the quantity of
24 fossil fuel-based electricity represented by their
25 vote.

1 (B) STATE REGULATORY AUTHORITIES.—

2 Upon its own motion or the petition of a quali-
3 fied industry organization, each State regu-
4 latory authority shall consider its support or op-
5 position to the creation of the Corporation
6 under subparagraph (A). State regulatory au-
7 thorities may notify the independent auditing
8 firm referred to in subparagraph (A) of their
9 views on the creation of the Corporation within
10 180 days after the date of enactment of this
11 Act. If 40 percent or more of the State regu-
12 latory authorities submit to the independent au-
13 diting firm written notices of opposition, the
14 Corporation shall not be established notwith-
15 standing the approval of the qualified industry
16 organizations as provided in subparagraph (A).

17 (2) TERMINATION.—The Corporation shall be
18 authorized to collect assessments and conduct oper-
19 ations pursuant to this section for a 10-year period
20 from the date 6 months after the date of enactment
21 of this Act. After such 10-year period, the Corpora-
22 tion is no longer authorized to collect assessments
23 and shall be dissolved on the date 15 years after
24 such date of enactment, unless the period is ex-
25 tended by an Act of Congress.

1 (3) GOVERNANCE.—The Corporation shall oper-
2 ate as a division or affiliate of the Electric Power
3 Research Institute (referred to in this section as
4 “EPRI”) and be managed by a Board of not more
5 than 15 voting members responsible for its oper-
6 ations, including compliance with this section. EPRI,
7 in consultation with the Edison Electric Institute,
8 the American Public Power Association and the Na-
9 tional Rural Electric Cooperative Association shall
10 appoint the Board members under clauses (i), (ii),
11 and (iii) of subparagraph (A) from among can-
12 didates recommended by those organizations. At
13 least a majority of the Board members appointed by
14 EPRI shall be representatives of distribution utilities
15 subject to assessments under subsection (d).

16 (A) MEMBERS.—The Board shall include
17 at least 1 representative of each of the fol-
18 lowing:

- 19 (i) Investor-owned utilities.
20 (ii) Utilities owned by a State agency,
21 a municipality, and an Indian tribe.
22 (iii) Rural electric cooperatives.
23 (iv) Fossil fuel producers.
24 (v) Nonprofit environmental organiza-
25 tions.

1 (vi) Independent generators or whole-
2 sale power providers.

3 (vii) Consumer groups.

4 (viii) The National Energy Tech-
5 nology laboratory of the Department of
6 Energy.

7 (ix) The Environmental Protection
8 Agency.

9 (B) NONVOTING MEMBERS.—The Board
10 shall also include as additional nonvoting Mem-
11 bers the Secretary of Energy or his designee
12 and 2 representatives of State regulatory au-
13 thorities as defined in section 3 of the Public
14 Utility Regulatory Policies Act of 1978 (16
15 U.S.C. 2602), each designated by the National
16 Association of State Regulatory Utility Com-
17 missioners from States that are not within the
18 same transmission interconnection.

19 (4) COMPENSATION.—Corporation Board mem-
20 bers shall receive no compensation for their services,
21 nor shall Corporation Board members be reimbursed
22 for expenses relating to their service.

23 (5) TERMS.—Corporation Board members shall
24 serve terms of 4 years and may serve not more than
25 2 full consecutive terms. Members filling unexpired

1 terms may serve not more than a total of 8 consecu-
2 tive years. Former members of the Corporation
3 Board may be reappointed to the Corporation Board
4 if they have not been members for a period of 2
5 years. Initial appointments to the Corporation Board
6 shall be for terms of 1, 2, 3, and 4 years, staggered
7 to provide for the selection of 3 members each year.

8 (6) STATUS OF CORPORATION.—The Corpora-
9 tion shall not be considered to be an agency, depart-
10 ment, or instrumentality of the United States, and
11 no officer or director or employee of the Corporation
12 shall be considered to be an officer or employee of
13 the United States Government, for purposes of title
14 5 or title 31 of the United States Code, or for any
15 other purpose, and no funds of the Corporation shall
16 be treated as public money for purposes of chapter
17 33 of title 31, United States Code, or for any other
18 purpose.

19 (c) FUNCTIONS AND ADMINISTRATION OF THE COR-
20 PORATION.—

21 (1) IN GENERAL.—The Corporation shall estab-
22 lish and administer a program to accelerate the com-
23 mercial availability of carbon dioxide capture and
24 storage technologies and methods, including tech-
25 nologies which capture and store, or capture and

1 convert, carbon dioxide. Under such program com-
2 petitively awarded grants, contracts, and financial
3 assistance shall be provided and entered into with el-
4 igible entities. Except as provided in paragraph (8),
5 the Corporation shall use all funds derived from as-
6 sessments under subsection (d) to issue grants and
7 contracts to eligible entities.

8 (2) PURPOSE.—The purposes of the grants,
9 contracts, and assistance under this subsection shall
10 be to support commercial-scale demonstrations of
11 carbon capture or storage technology projects capa-
12 ble of advancing the technologies to commercial
13 readiness. Such projects should encompass a range
14 of different coal and other fossil fuel varieties, be
15 geographically diverse, involve diverse storage media,
16 and employ capture or storage, or capture and con-
17 version, technologies potentially suitable either for
18 new or for retrofit applications. The Corporation
19 shall seek, to the extent feasible, to support at least
20 5 commercial-scale demonstration projects inte-
21 grating carbon capture and sequestration or conver-
22 sion technologies.

23 (3) ELIGIBLE ENTITIES.—Entities eligible for
24 grants, contracts or assistance under this subsection
25 may include distribution utilities, electric utilities

1 and other private entities, academic institutions, na-
2 tional laboratories, Federal research agencies, State
3 and tribal research agencies, nonprofit organizations,
4 or consortiums of 2 or more entities. Pilot-scale and
5 similar small-scale projects are not eligible for sup-
6 port by the Corporation. Owners or developers of
7 projects supported by the Corporation shall, where
8 appropriate, share in the costs of such projects.
9 Projects supported by the Corporation shall meet the
10 eligibility criteria of section 780(b) of the Clean Air
11 Act.

12 (4) GRANTS FOR EARLY MOVERS.—Fifty per-
13 cent of the funds raised under this section shall be
14 provided in the form of grants to electric utilities
15 that had, prior to the award of any grant under this
16 section, committed resources to deploy a large scale
17 electricity generation unit with integrated carbon
18 capture and sequestration or conversion applied to a
19 substantial portion of the unit's carbon dioxide emis-
20 sions. Grant funds shall be provided to defray costs
21 incurred by such electricity utilities for at least 5
22 such electricity generation units.

23 (5) ADMINISTRATION.—The members of the
24 Board of Directors of the Corporation shall elect a
25 Chairman and other officers as necessary, may es-

1 establish committees and subcommittees of the Cor-
2 poration, and shall adopt rules and bylaws for the
3 conduct of business and the implementation of this
4 section. The Board shall appoint an Executive Di-
5 rector and professional support staff who may be
6 employees of the Electric Power Research Institute
7 (EPRI). After consultation with the Technical Advi-
8 sory Committee established under subsection (j), the
9 Secretary, and the Director of the National Energy
10 Technology Laboratory to obtain advice and rec-
11 ommendations on plans, programs, and project selec-
12 tion criteria, the Board shall establish priorities for
13 grants, contracts, and assistance; publish requests
14 for proposals for grants, contracts, and assistance;
15 and award grants, contracts, and assistance competi-
16 tively, on the basis of merit, after the establishment
17 of procedures that provide for scientific peer review
18 by the Technical Advisory Committee. The Board
19 shall give preference to applications that reflect the
20 best overall value and prospect for achieving the
21 purposes of the section, such as those which dem-
22 onstrate an integrated approach for capture and
23 storage or capture and conversion technologies. The
24 Board members shall not participate in making

1 grants or awards to entities with whom they are af-
2 filiated.

3 (6) USES OF GRANTS, CONTRACTS, AND ASSIST-
4 ANCE.—A grant, contract, or other assistance pro-
5 vided under this subsection may be used to purchase
6 carbon dioxide when needed to conduct tests of car-
7 bon dioxide storage sites, in the case of established
8 projects that are storing carbon dioxide emissions, or
9 for other purposes consistent with the purposes of
10 this section. The Corporation shall make publicly
11 available at no cost information learned as a result
12 of projects which it supports financially.

13 (7) INTELLECTUAL PROPERTY.—The Board
14 shall establish policies regarding the ownership of in-
15 tellectual property developed as a result of Corpora-
16 tion grants and other forms of technology support.
17 Such policies shall encourage individual ingenuity
18 and invention.

19 (8) ADMINISTRATIVE EXPENSES.—Up to 5 per-
20 cent of the funds collected in any fiscal year under
21 subsection (d) may be used for the administrative
22 expenses of operating the Corporation (not including
23 costs incurred in the determination and collection of
24 the assessments pursuant to subsection (d)).

1 (9) PROGRAMS AND BUDGET.—Before August 1
2 each year, the Corporation, after consulting with the
3 Technical Advisory Committee and the Secretary
4 and the Director of the Department’s National En-
5 ergy Technology Laboratory and other interested
6 parties to obtain advice and recommendations, shall
7 publish for public review and comment its proposed
8 plans, programs, project selection criteria, and
9 projects to be funded by the Corporation for the
10 next calendar year. The Corporation shall also pub-
11 lish for public review and comment a budget plan for
12 the next calendar year, including the probable costs
13 of all programs, projects, and contracts and a rec-
14 ommended rate of assessment sufficient to cover
15 such costs. The Secretary may recommend programs
16 and activities the Secretary considers appropriate.
17 The Corporation shall include in the first publication
18 it issues under this paragraph a strategic plan or
19 roadmap for the achievement of the purposes of the
20 Corporation, as set forth in paragraph (2).

21 (10) RECORDS; AUDITS.—The Corporation shall
22 keep minutes, books, and records that clearly reflect
23 all of the acts and transactions of the Corporation
24 and make public such information. The books of the
25 Corporation shall be audited by a certified public ac-

1 countant at least once each fiscal year and at such
2 other times as the Corporation may designate. Cop-
3 ies of each audit shall be provided to the Congress,
4 all Corporation board members, all qualified indus-
5 try organizations, each State regulatory authority
6 and, upon request, to other members of the industry.
7 If the audit determines that the Corporation's prac-
8 tices fail to meet generally accepted accounting prin-
9 ciples the assessment collection authority of the Cor-
10 poration under subsection (d) shall be suspended
11 until a certified public accountant renders a subse-
12 quent opinion that the failure has been corrected.
13 The Corporation shall make its books and records
14 available for review by the Secretary or the Comp-
15 troller General of the United States.

16 (11) PUBLIC ACCESS.—The Corporation
17 Board's meetings shall be open to the public and
18 shall occur after at least 30 days advance public no-
19 tice. Meetings of the Board of Directors may be
20 closed to the public where the agenda of such meet-
21 ings includes only confidential matters pertaining to
22 project selection, the award of grants or contracts,
23 personnel matters, or the receipt of legal advice. The
24 minutes of all meetings of the Corporation shall be

1 made available to and readily accessible by the pub-
2 lic.

3 (12) ANNUAL REPORT.—Each year the Cor-
4 poration shall prepare and make publicly available a
5 report which includes an identification and descrip-
6 tion of all programs and projects undertaken by the
7 Corporation during the previous year. The report
8 shall also detail the allocation or planned allocation
9 of Corporation resources for each such program and
10 project. The Corporation shall provide its annual re-
11 port to the Congress, the Secretary, each State regu-
12 latory authority, and upon request to the public. The
13 Secretary shall, not less than 60 days after receiving
14 such report, provide to the President and Congress
15 a report assessing the progress of the Corporation in
16 meeting the objectives of this section.

17 (d) ASSESSMENTS.—

18 (1) AMOUNT.—(A) In all calendar years fol-
19 lowing its establishment, the Corporation shall col-
20 lect an assessment on distribution utilities for all
21 fossil fuel-based electricity delivered directly to retail
22 consumers (as determined under subsection (f)). The
23 assessments shall reflect the relative carbon dioxide
24 emission rates of different fossil fuel-based elec-

1 tricity, and initially shall be not less than the fol-
 2 lowing amounts for coal, natural gas, and oil:

Fuel type	Rate of assessment per kilowatt hour
Coal	\$0.00043
Natural Gas	\$0.00022
Oil	\$0.00032.

3 (B) The Corporation is authorized to adjust the
 4 assessments on fossil fuel-based electricity to reflect
 5 changes in the expected quantities of such electricity
 6 from different fuel types, such that the assessments
 7 generate not less than \$1.0 billion and not more
 8 than \$1.1 billion annually. The Corporation is au-
 9 thorized to supplement assessments through addi-
 10 tional financial commitments.

11 (2) INVESTMENT OF FUNDS.—Pending dis-
 12 bursement pursuant to a program, plan, or project,
 13 the Corporation may invest funds collected through
 14 assessments under this subsection, and any other
 15 funds received by the Corporation, only in obliga-
 16 tions of the United States or any agency thereof, in
 17 general obligations of any State or any political sub-
 18 division thereof, in any interest-bearing account or
 19 certificate of deposit of a bank that is a member of
 20 the Federal Reserve System, or in obligations fully
 21 guaranteed as to principal and interest by the
 22 United States.

1 (3) REVERSION OF UNUSED FUNDS.—If the
2 Corporation does not disburse, dedicate or assign 75
3 percent or more of the available proceeds of the as-
4 sessed fees in any calendar year 7 or more years fol-
5 lowing its establishment, due to an absence of quali-
6 fied projects or similar circumstances, it shall reim-
7 burse the remaining undedicated or unassigned bal-
8 ance of such fees, less administrative and other ex-
9 penses authorized by this section, to the distribution
10 utilities upon which such fees were assessed, in pro-
11 portion to their collected assessments.

12 (e) ERCOT.—

13 (1) ASSESSMENT, COLLECTION, AND REMIT-
14 TANCE.—(A) Notwithstanding any other provision of
15 this section, within ERCOT, the assessment pro-
16 vided for in subsection (d) shall be—

17 (i) levied directly on qualified scheduling
18 entities, or their successor entities;

19 (ii) charged consistent with other charges
20 imposed on qualified scheduling entities as a fee
21 on energy used by the load-serving entities; and

22 (iii) collected and remitted by ERCOT to
23 the Corporation in the amounts and in the
24 same manner as set forth in subsection (d).

1 (B) The assessment amounts referred to in sub-
2 paragraph (A) shall be—

3 (i) determined by the amount and types of
4 fossil fuel-based electricity delivered directly to
5 all retail customers in the prior calendar year
6 beginning with the year ending immediately
7 prior to the period described in subsection
8 (b)(2); and

9 (ii) take into account the number of renew-
10 able energy credits retired by the load-serving
11 entities represented by a qualified scheduling
12 entity within the prior calendar year.

13 (2) ADMINISTRATION EXPENSES.—Up to 1 per-
14 cent of the funds collected in any fiscal year by
15 ERCOT under the provisions of this subsection may
16 be used for the administrative expenses incurred in
17 the determination, collection and remittance of the
18 assessments to the Corporation.

19 (3) AUDIT.—ERCOT shall provide a copy of its
20 annual audit pertaining to the administration of the
21 provisions of this subsection to the Corporation.

22 (4) DEFINITIONS.—For the purposes of this
23 subsection:

24 (A) The term “ERCOT” means the Elec-
25 tric Reliability Council of Texas.

1 (B) The term “load-serving entities” has
2 the meaning adopted by ERCOT Protocols and
3 in effect on the date of enactment of this Act.

4 (C) The term “qualified scheduling enti-
5 ties” has the meaning adopted by ERCOT Pro-
6 tocols and in effect on the date of enactment of
7 this Act.

8 (D) The term “renewable energy credit”
9 has the meaning as promulgated and adopted
10 by the Public Utility Commission of Texas pur-
11 suant to section 39.904(b) of the Public Utility
12 Regulatory Act of 1999, and in effect on the
13 date of enactment of this Act.

14 (f) DETERMINATION OF FOSSIL FUEL-BASED ELEC-
15 TRICITY DELIVERIES.—

16 (1) FINDINGS.—The Congress finds that:

17 (A) The assessments under subsection (d)
18 are to be collected based on the amount of fossil
19 fuel-based electricity delivered by each distribu-
20 tion utility.

21 (B) Since many distribution utilities pur-
22 chase all or part of their retail consumer’s elec-
23 tricity needs from other entities, it may not be
24 practical to determine the precise fuel mix for

1 the power sold by each individual distribution
2 utility.

3 (C) It may be necessary to use average
4 data, often on a regional basis with reference to
5 Regional Transmission Organization (“RTO”)
6 or NERC regions, to make the determinations
7 necessary for making assessments.

8 (2) DOE PROPOSED RULE.—The Secretary,
9 acting in close consultation with the Energy Infor-
10 mation Administration, shall issue for notice and
11 comment a proposed rule to determine the level of
12 fossil fuel electricity delivered to retail customers by
13 each distribution utility in the United States during
14 the most recent calendar year or other period deter-
15 mined to be most appropriate. Such proposed rule
16 shall balance the need to be efficient, reasonably pre-
17 cise, and timely, taking into account the nature and
18 cost of data currently available and the nature of
19 markets and regulation in effect in various regions
20 of the country. Different methodologies may be ap-
21 plied in different regions if appropriate to obtain the
22 best balance of such factors.

23 (3) FINAL RULE.—Within 6 months after the
24 date of enactment of this Act, and after opportunity
25 for comment, the Secretary shall issue a final rule

1 under this subsection for determining the level and
2 type of fossil fuel-based electricity delivered to retail
3 customers by each distribution utility in the United
4 States during the appropriate period. In issuing
5 such rule, the Secretary may consider opportunities
6 and costs to develop new data sources in the future
7 and issue recommendations for the Energy Informa-
8 tion Administration or other entities to collect such
9 data. After notice and opportunity for comment the
10 Secretary may, by rule, subsequently update and
11 modify the methodology for making such determina-
12 tions.

13 (4) ANNUAL DETERMINATIONS.—Pursuant to
14 the final rule issued under paragraph (3), the Sec-
15 retary shall make annual determinations of the
16 amounts and types for each such utility and publish
17 such determinations in the Federal Register. Such
18 determinations shall be used to conduct the ref-
19 erendum under subsection (b) and by the Corpora-
20 tion in applying any assessment under this sub-
21 section.

22 (5) REHEARING AND JUDICIAL REVIEW.—The
23 owner or operator of any distribution utility that be-
24 lieves that the Secretary has misapplied the method-
25 ology in the final rule in determining the amount

1 and types of fossil fuel electricity delivered by such
2 distribution utility may seek rehearing of such deter-
3 mination within 30 days of publication of the deter-
4 mination in the Federal Register. The Secretary
5 shall decide such rehearing petitions within 30 days.
6 The Secretary's determinations following rehearing
7 shall be final and subject to judicial review in the
8 United States Court of Appeals for the District of
9 Columbia.

10 (g) COMPLIANCE WITH CORPORATION ASSESS-
11 MENTS.—The Corporation may bring an action in the ap-
12 propriate court of the United States to compel compliance
13 with an assessment levied by the Corporation under this
14 section. A successful action for compliance under this sub-
15 section may also require payment by the defendant of the
16 costs incurred by the Corporation in bringing such action.

17 (h) MIDCOURSE REVIEW.—Not later than 5 years
18 following establishment of the Corporation, the Comp-
19 troller General of the United States shall prepare an anal-
20 ysis, and report to Congress, assessing the Corporation's
21 activities, including project selection and methods of dis-
22 bursement of assessed fees, impacts on the prospects for
23 commercialization of carbon capture and storage tech-
24 nologies, adequacy of funding, and administration of
25 funds. The report shall also make such recommendations

1 as may be appropriate in each of these areas. The Cor-
2 poration shall reimburse the Government Accountability
3 Office for the costs associated with performing this mid-
4 course review.

5 (i) RECOVERY OF COSTS.—

6 (1) IN GENERAL.—A distribution utility whose
7 transmission, delivery, or sales of electric energy are
8 subject to any form of rate regulation shall not be
9 denied the opportunity to recover the full amount of
10 the prudently incurred costs associated with com-
11 plying with this section, consistent with applicable
12 State or Federal law.

13 (2) RATEPAYER REBATES.—Regulatory authori-
14 ties that approve cost recovery pursuant to para-
15 graph (1) may order rebates to ratepayers to the ex-
16 tent that distribution utilities are reimbursed
17 undedicated or unassigned balances pursuant to sub-
18 section (d)(3).

19 (j) TECHNICAL ADVISORY COMMITTEE.—

20 (1) ESTABLISHMENT.—There is established an
21 advisory committee, to be known as the “Technical
22 Advisory Committee”.

23 (2) MEMBERSHIP.—The Technical Advisory
24 Committee shall be comprised of not less than 7
25 members appointed by the Board from among aca-

1 demic institutions, national laboratories, independent
2 research institutions, and other qualified institu-
3 tions. No member of the Committee shall be affili-
4 ated with EPRI or with any organization having
5 members serving on the Board. At least one member
6 of the Committee shall be appointed from among of-
7 ficers or employees of the Department of Energy
8 recommended to the Board by the Secretary of En-
9 ergy.

10 (3) CHAIRPERSON AND VICE CHAIRPERSON.—
11 The Board shall designate one member of the Tech-
12 nical Advisory Committee to serve as Chairperson of
13 the Committee and one to serve as Vice Chairperson
14 of the Committee.

15 (4) COMPENSATION.—The Board shall provide
16 compensation to members of the Technical Advisory
17 Committee for travel and other incidental expenses
18 and such other compensation as the Board deter-
19 mines to be necessary.

20 (5) PURPOSE.—The Technical Advisory Com-
21 mittee shall provide independent assessments and
22 technical evaluations, as well as make non-binding
23 recommendations to the Board, concerning Corpora-
24 tion activities, including but not limited to the fol-
25 lowing:

1 (A) Reviewing and evaluating the Corpora-
2 tion's plans and budgets described in subsection
3 (c)(9), as well as any other appropriate areas,
4 which could include approaches to prioritizing
5 technologies, appropriateness of engineering
6 techniques, monitoring and verification tech-
7 nologies for storage, geological site selection,
8 and cost control measures.

9 (B) Making annual non-binding rec-
10 ommendations to the Board concerning any of
11 the matters referred to in subparagraph (A), as
12 well as what types of investments, scientific re-
13 search, or engineering practices would best fur-
14 ther the goals of the Corporation.

15 (6) PUBLIC AVAILABILITY.—All reports, evalua-
16 tions, and other materials of the Technical Advisory
17 Committee shall be made available to the public by
18 the Board, without charge, at time of receipt by the
19 Board.

20 (k) LOBBYING RESTRICTIONS.—No funds collected
21 by the Corporation shall be used in any manner for influ-
22 encing legislation or elections, except that the Corporation
23 may recommend to the Secretary and the Congress
24 changes in this section or other statutes that would fur-
25 ther the purposes of this section.

1 (l) DAVIS-BACON COMPLIANCE.—The Corporation
2 shall ensure that entities receiving grants, contracts, or
3 other financial support from the Corporation for the
4 project activities authorized by this section are in compli-
5 ance with subchapter IV of chapter 31 of title 40, United
6 States Code (commonly known as the “Davis-Bacon
7 Act”).

8 **Subtitle C—Nuclear and Advanced** 9 **Technologies**

10 **SEC. 131. FINDINGS AND POLICY.**

11 (a) FINDINGS.—Congress finds that—

12 (1) in 2008, 104 nuclear power plants produced
13 19.6 percent of the electricity generated in the
14 United States, slightly less than the electricity gen-
15 erated by natural gas;

16 (2) nuclear energy is the largest provider of
17 clean, low-carbon, electricity, almost 8 times larger
18 than all renewable power production combined, ex-
19 cluding hydroelectric power;

20 (3) nuclear energy supplies consistent, base-load
21 electricity, independent of environmental conditions;

22 (4) by displacing fossil fuels that would other-
23 wise be used for electricity production, nuclear power
24 plants virtually eliminate emissions of greenhouse

1 gases and criteria pollutants associated with acid
2 rain, smog, or ozone;

3 (5) nuclear power generation continues to re-
4 quire robust efforts to address issues of safety,
5 waste, and proliferation;

6 (6) even if every nuclear plant is granted a 20-
7 year extension, all currently operating nuclear plants
8 will be retired by 2055;

9 (7) long lead times for nuclear power plant con-
10 struction indicate that action to stimulate the nu-
11 clear power industry should not be delayed;

12 (8) the high upfront capital costs of nuclear
13 plant construction remain a substantial obstacle, de-
14 spite theoretical potential for significant cost reduc-
15 tion;

16 (9) translating theoretical cost reduction poten-
17 tial into actual reduced construction costs remains a
18 significant industry challenge that can be overcome
19 only through demonstrated performance;

20 (10) as of January 2009, 17 companies and
21 consortia have submitted applications to the Nuclear
22 Regulatory Commission for 26 new reactors in the
23 United States;

24 (11) those proposed reactors will use the latest
25 in nuclear technology for efficiency and safety, more

1 advanced than the technology of the 1960s and
2 1970s found in the reactors currently operating in
3 the United States;

4 (12) increased resources for the Nuclear Regu-
5 latory Commission and reform of the licensing proc-
6 ess have improved the safety and timeliness of the
7 regulatory environment;

8 (13) the United States has not built a new re-
9 actor since the 1970s and, as a result, will need to
10 revitalize and retool the institutions and infrastruc-
11 ture necessary to construct, maintain, and support
12 new reactors, including improvements in manufac-
13 turing of nuclear components and training for the
14 next generation nuclear workforce; and

15 (14) those new reactors will launch a new era
16 for the nuclear industry, and translate into tens of
17 thousands of jobs

18 (b) STATEMENT OF POLICY.—It is the policy of the
19 United States, given the importance of transitioning to a
20 clean energy, low-carbon economy, to facilitate the contin-
21 ued development and growth of a safe and clean nuclear
22 energy industry, through—

23 (1) reductions in financial and technical bar-
24 riers to construction and operation; and

1 (2) incentives for the development of a well-
2 trained workforce and the growth of safe domestic
3 nuclear and nuclear-related industries.

4 **SEC. 132. NUCLEAR WORKER TRAINING.**

5 (a) DEFINITION OF APPLICABLE PERIOD.—In this
6 section, the term “applicable period” means—

7 (1) the 5-year period beginning on January 1,
8 2012; and

9 (2) each 5-year period beginning on each Janu-
10 ary 1 thereafter.

11 (b) USE OF FUNDS.—Of amounts made available to
12 carry out this section for the calendar years in each appli-
13 cable period—

14 (1) the Secretary of Energy shall use such
15 amounts for each applicable period as the Secretary
16 of Energy determines to be necessary to increase the
17 number and amounts of nuclear science talent ex-
18 pansion grants and nuclear science competitiveness
19 grants provided under section 5004 of the America
20 COMPETES Act (42 U.S.C. 16532); and

21 (2) the Secretary of Labor, in consultation with
22 nuclear energy entities and organized labor, shall
23 use such amounts for each applicable period as the
24 Secretary of Labor determines to be necessary to
25 carry out programs expanding workforce training to

1 meet the high demand for workers skilled in nuclear
2 power plant construction and operation, including
3 programs for—

4 (A) electrical craft certification;

5 (B) preapprenticeship career technical edu-
6 cation for industrialized skilled crafts that are
7 useful in the construction of nuclear power
8 plants;

9 (C) community college and skill center
10 training for nuclear power plant technicians;

11 (D) training of construction management
12 personnel for nuclear power plant construction
13 projects; and

14 (E) regional grants for integrated nuclear
15 energy workforce development programs.

16 **SEC. 133. NUCLEAR SAFETY AND WASTE MANAGEMENT**
17 **PROGRAMS.**

18 (a) **NUCLEAR FACILITY LONG-TERM OPERATIONS**
19 **RESEARCH AND DEVELOPMENT PROGRAM.—**

20 (1) **ESTABLISHMENT.—**As soon as practicable
21 after the date of enactment of this Act, the Sec-
22 retary of Energy (referred to in this section as the
23 “Secretary”) shall establish a research and develop-
24 ment program—

1 (A) to address the reliability, availability,
2 productivity, component aging, safety, and secu-
3 rity of nuclear power plants;

4 (B) to improve the performance of nuclear
5 power plants;

6 (C) to sustain the health and safety of em-
7 ployees of nuclear power plants;

8 (D) to assess the feasibility of nuclear
9 power plants to continue to provide clean and
10 economic electricity safely, substantially beyond
11 the first license extension period of the nuclear
12 power plants, which will—

13 (i) significantly contribute to the en-
14 ergy security of the United States; and

15 (ii) help protect the environment of
16 the United States; and

17 (E) to support significant carbon reduc-
18 tions, lower overall costs that are required to
19 reduce carbon emissions, and increase energy
20 security.

21 (2) CONDUCT OF PROGRAM.—

22 (A) IN GENERAL.—In carrying out the
23 program established under paragraph (1), the
24 Secretary shall—

1 (i) build a fundamental scientific basis
2 to understand, predict, and measure
3 changes in materials, systems, structures,
4 equipment, and components as the mate-
5 rials, systems, structures, equipment, and
6 components age through continued oper-
7 ations in long-term service environments;

8 (ii) develop new safety analysis tools
9 and methods to enhance the performance
10 and safety of nuclear power plants;

11 (iii) develop advanced online moni-
12 toring, control, and diagnostics tech-
13 nologies to prevent equipment failures and
14 improve the safety of nuclear power plants;

15 (iv) establish a technical basis for ad-
16 vanced fuel designs (including silicon car-
17 bide fuel cladding) to increase the safety
18 margins of nuclear power plants; and

19 (v) examine issues, including—

20 (I) issues relating to material
21 degradation, plant aging, and tech-
22 nology upgrades; and

23 (II) any other issue that would
24 impact decisions to extend the lifespan
25 of nuclear power plants.

1 (B) TECHNICAL SUPPORT.—In carrying
2 out the program established under paragraph
3 (1), the Secretary shall provide to the Chairman
4 of the Nuclear Regulatory Commission informa-
5 tion collected under the program—

6 (i) to help ensure informed decisions
7 regarding the extension of the life of nu-
8 clear power plants beyond a 60-year life-
9 span; and

10 (ii) for the licensing and long-term
11 management, and safe and economical op-
12 eration, of nuclear power plants.

13 (b) SPENT NUCLEAR WASTE DISPOSAL RESEARCH
14 AND DEVELOPMENT PROGRAM.—

15 (1) ESTABLISHMENT.—As soon as practicable
16 after the date of enactment of this Act, the Sec-
17 retary shall establish a research and development
18 program to improve the understanding of nuclear
19 spent fuel management and the entire nuclear fuel
20 cycle life.

21 (2) CONDUCT OF PROGRAM.—In carrying out
22 the program established under paragraph (1), the
23 Secretary shall carry out science-based research and
24 development activities to pursue dramatic improve-
25 ments in a range of nuclear spent fuel management

1 options, including short-term and long-term storage
2 and disposal, and proliferation-resistant nuclear
3 spent fuel recycling.

4 (c) AUTHORIZATION OF APPROPRIATIONS.—There
5 are authorized to be appropriated such sums as are nec-
6 essary to carry out this section.

7 **Subtitle D—Water Efficiency**

8 **SEC. 141. WATERSENSE.**

9 (a) IN GENERAL.—There is established within the
10 Environmental Protection Agency a WaterSense program
11 to identify and promote water-efficient products, build-
12 ings, landscapes, facilities, processes, and services, so as—

13 (1) to reduce water use;

14 (2) to reduce the strain on water, wastewater,
15 and stormwater infrastructure;

16 (3) to conserve energy used to pump, heat,
17 transport, and treat water; and

18 (4) to preserve water resources for future gen-
19 erations, through voluntary labeling of, or other
20 forms of communications about, products, buildings,
21 landscapes, facilities, processes, and services that
22 meet the highest water efficiency and performance
23 criteria.

24 (b) DUTIES.—The Administrator shall—

25 (1) establish—

1 (A) a WaterSense label to be used for cer-
2 tain items; and

3 (B) the procedure by which an item may
4 be certified to display the WaterSense label;

5 (2) promote WaterSense-labeled products,
6 buildings, landscapes, facilities, processes, and serv-
7 ices in the market place as the preferred tech-
8 nologies and services for—

9 (A) reducing water use; and

10 (B) ensuring product and service perform-
11 ance;

12 (3) work to enhance public awareness of the
13 WaterSense label through public outreach, edu-
14 cation, and other means;

15 (4) preserve the integrity of the WaterSense
16 label by—

17 (A) establishing and maintaining perform-
18 ance criteria so that products, buildings, land-
19 scapes, facilities, processes, and services labeled
20 with the WaterSense label perform as well or
21 better than less water-efficient counterparts;

22 (B) overseeing WaterSense certifications
23 made by third parties;

24 (C) conducting reviews of the use of the
25 WaterSense label in the marketplace and taking

1 corrective action in any case in which misuse of
2 the label is identified; and

3 (D) carrying out such other measures as
4 the Administrator determines to be appropriate;

5 (5) regularly review and, if appropriate, update
6 WaterSense criteria for categories of products, build-
7 ings, landscapes, facilities, processes, and services,
8 at least once every 4 years;

9 (6) to the maximum extent practicable, regu-
10 larly estimate and make available to the public the
11 production and relative market shares of, and the
12 savings of water, energy, and capital costs of water,
13 wastewater, and stormwater infrastructure attrib-
14 utable to the use of WaterSense-labeled products,
15 buildings, landscapes, facilities, processes, and serv-
16 ices, at least annually;

17 (7) solicit comments from interested parties and
18 the public prior to establishing or revising a
19 WaterSense category, specification, installation cri-
20 terion, or other criterion (or prior to effective dates
21 for any such category, specification, installation cri-
22 terion, or other criterion);

23 (8) provide reasonable notice to interested par-
24 ties and the public of any changes (including effec-
25 tive dates), on the adoption of a new or revised cat-

1 category, specification, installation criterion, or other
2 criterion, along with—

3 (A) an explanation of the changes; and

4 (B) as appropriate, responses to comments
5 submitted by interested parties and the public;

6 (9) provide appropriate lead time (as deter-
7 mined by the Administrator) prior to the applicable
8 effective date for a new or significant revision to a
9 category, specification, installation criterion, or other
10 criterion, taking into account the timing require-
11 ments of the manufacturing, marketing, training,
12 and distribution process for the specific product,
13 building and landscape, or service category ad-
14 dressed;

15 (10) identify and, if appropriate, implement
16 other voluntary approaches in commercial, institu-
17 tional, residential, industrial, and municipal sectors
18 to encourage recycling and reuse technologies to im-
19 prove water efficiency or lower water use; and

20 (11) where appropriate, apply the WaterSense
21 label to water-using products that are labeled by the
22 Energy Star program implemented by the Adminis-
23 trator and the Secretary of Energy.

1 (c) AUTHORIZATION OF APPROPRIATIONS.—There
2 are authorized to be appropriated to carry out this sec-
3 tion—

4 (1) \$7,500,000 for fiscal year 2010;

5 (2) \$10,000,000 for fiscal year 2011;

6 (3) \$20,000,000 for fiscal year 2012;

7 (4) \$50,000,000 for fiscal year 2013; and

8 (5) for each subsequent fiscal year, the applica-
9 ble amount during the preceding fiscal year, as ad-
10 justed to reflect changes for the 12-month period
11 ending the preceding November 30 in the Consumer
12 Price Index for All Urban Consumers published by
13 the Bureau of Labor Statistics of the Department of
14 Labor.

15 **SEC. 142. FEDERAL PROCUREMENT OF WATER-EFFICIENT**
16 **PRODUCTS.**

17 (a) DEFINITIONS.—In this section:

18 (1) AGENCY.—The term “Agency” has the
19 meaning given the term in section 7902(a) of title
20 5, United States Code.

21 (2) FEMP-DESIGNATED PRODUCT.—The term
22 “FEMP-designated product” means a product that
23 is designated under the Federal Energy Manage-
24 ment Program of the Department of Energy as

1 being among the highest 25 percent of equivalent
2 products for efficiency.

3 (3) PRODUCT, BUILDING, LANDSCAPE, FACIL-
4 ITY, PROCESS, AND SERVICE.—The terms “product”,
5 “building”, “landscape”, “facility”, “process”, and
6 “service” do not include—

7 (A) any water-using product, building,
8 landscape, facility, process, or service designed
9 or procured for combat or combat-related mis-
10 sions; or

11 (B) any product, building, landscape, facil-
12 ity, process, or service already covered by the
13 Federal procurement regulations established
14 under section 553 of the National Energy Con-
15 servation Policy Act (42 U.S.C. 8259b).

16 (4) WATERSENSE PRODUCT, BUILDING, LAND-
17 SCAPE, FACILITY, PROCESS, OR SERVICE.—The term
18 “WaterSense product, building, landscape, facility,
19 process, or service” means a product, building, land-
20 scape, facility, process, or service that is labeled for
21 water efficiency under the WaterSense program.

22 (5) WATERSENSE PROGRAM.—The term
23 “WaterSense program” means the program estab-
24 lished by section 141.

1 (b) PROCUREMENT OF WATER EFFICIENT PROD-
2 UCTS.—

3 (1) REQUIREMENT.—

4 (A) IN GENERAL.—To meet the require-
5 ments of an agency for a water-using product,
6 building, landscape, facility, process, or service,
7 the head of an Agency shall, except as provided
8 in paragraph (2), procure—

9 (i) a WaterSense product, building,
10 landscape, facility, process, or service; or

11 (ii) a FEMP-designated product.

12 (B) SENSE OF CONGRESS REGARDING IN-
13 STALLATION PREFERENCES.—It is the sense of
14 Congress that a WaterSense irrigation system
15 should, to the maximum extent practicable, be
16 installed and audited by a WaterSense-certified
17 irrigation professional to ensure optimal per-
18 formance.

19 (2) EXCEPTIONS.—The head of an Agency shall
20 not be required to procure a WaterSense product,
21 building, landscape, facility, process, or service or
22 FEMP-designated product under paragraph (1) if
23 the head of the Agency finds in writing that—

24 (A) a WaterSense product, building, land-
25 scape, facility, process, or service or FEMP-des-

1 ignated product is not cost-effective over the life
2 of the product, building, landscape, facility,
3 process, or service, taking energy, water, and
4 wastewater service cost savings into account; or

5 (B) no WaterSense product, building, land-
6 scape, facility, process, or service or FEMP-des-
7 ignated product is reasonably available that
8 meets the functional requirements of the Agen-
9 cy.

10 (3) PROCUREMENT PLANNING.—

11 (A) IN GENERAL.—The head of an Agency
12 shall incorporate criteria used for evaluating
13 WaterSense products, buildings, landscapes, fa-
14 cilities, processes, and services and FEMP-des-
15 ignated products into—

16 (i) the specifications for all procure-
17 ments involving water-using products,
18 buildings, landscapes, facilities, processes,
19 and systems, including guide specifications,
20 project specifications, and construction,
21 renovation, and services contracts that in-
22 clude provision of water-using products,
23 buildings, landscapes, facilities, processes,
24 and systems; and

1 (ii) the factors for the evaluation of
2 offers received for the procurement.

3 (B) LISTING OF WATER-EFFICIENT PROD-
4 UCTS IN FEDERAL CATALOGS.—WaterSense
5 products, buildings, landscapes, facilities, proc-
6 esses, and systems and FEMP-designated prod-
7 ucts shall be clearly identified and prominently
8 displayed in any inventory or listing of products
9 by the General Services Administration or the
10 Defense Logistics Agency.

11 (C) ADDITIONAL MEASURES.—The head of
12 an Agency shall consider, to the maximum ex-
13 tent practicable, additional measures for reduc-
14 ing Agency water use, including water reuse
15 technologies, leak detection and repair, and use
16 of waterless products that perform similar func-
17 tions to existing water-using products.

18 (c) RETROFIT PROGRAMS.—The head of each Agen-
19 cy, working in coordination with the Administrator and
20 the heads of such other Agencies as the President may
21 designate, shall develop standards and implementation
22 procedures for a building water efficiency retrofit pro-
23 gram, which shall include the following elements:

24 (1) EVALUATION OF PRODUCTS AND SYS-
25 TEMS.—Not later than 270 days after the date of

1 enactment of this Act, each Agency shall evaluate
2 water-consuming products and systems in buildings
3 operated by such Agency and identify opportunities
4 for retrofit and replacement of such products and
5 systems with high-efficiency equipment, such as
6 zero-water-consumption equipment, high-efficiency
7 toilets, high-efficiency shower heads, and high-effi-
8 ciency faucets, and other products that are certified
9 as Watersense products or FEMP-designated prod-
10 ucts.

11 (2) RETROFIT PLAN.—Not later than 360 days
12 after the date of enactment of this Act, each Agency
13 shall, in coordination with other appropriate Agen-
14 cies and officials, prepare a water efficiency retrofit
15 plan that shall, to the maximum extent practicable,
16 maximize retrofitting of water-consuming products
17 and systems and replacement with high-efficiency
18 equipment described in paragraph (1).

19 (d) GUIDELINES.—Not later than 180 days after the
20 date of enactment of this Act, the Administrator, working
21 in coordination with the Secretary of Energy and the
22 heads of such other Agencies as the President may des-
23 ignate, shall issue guidelines to carry out this section.

1 **SEC. 143. STATE RESIDENTIAL WATER EFFICIENCY AND**
2 **CONSERVATION INCENTIVES PROGRAM.**

3 (a) DEFINITIONS.—In this section:

4 (1) ELIGIBLE ENTITY.—The term “eligible enti-
5 ty” means a State government, local or county gov-
6 ernment, tribal government, wastewater or sewerage
7 utility, municipal water authority, energy utility,
8 water utility, or nonprofit organization that meets
9 the requirements of subsection (b).

10 (2) INCENTIVE PROGRAM.—The term “incentive
11 program” means a program for administering finan-
12 cial incentives for consumer purchase and installa-
13 tion of water-efficient products, buildings (including
14 New Water-Efficient Homes), landscapes, processes,
15 or services described in subsection (b)(1).

16 (3) RESIDENTIAL WATER-EFFICIENT PRODUCT,
17 BUILDING, LANDSCAPE, PROCESS, OR SERVICE.—

18 (A) IN GENERAL.—The term “residential
19 water-efficient product, building, landscape,
20 process, or service” means a product, building,
21 landscape, process, or service for a residence or
22 its landscape that is rated for water efficiency
23 and performance—

24 (i) by the WaterSense program; or

25 (ii) if a WaterSense specification does
26 not exist, by the Energy Star program or

1 an incentive program approved by the Ad-
2 ministrator.

3 (B) INCLUSIONS.—The term “residential
4 water-efficient product, building, landscape,
5 process, or service” includes—

6 (i) faucets;

7 (ii) irrigation technologies and serv-
8 ices;

9 (iii) point-of-use water treatment de-
10 vices;

11 (iv) reuse and recycling technologies;

12 (v) toilets;

13 (vi) clothes washers;

14 (vii) dishwashers;

15 (viii) showerheads;

16 (ix) xeriscaping and other landscape
17 conversions that replace irrigated turf; and

18 (x) New Water Efficient Homes cer-
19 tified by the WaterSense program.

20 (4) WATERSENSE PROGRAM.—The term
21 “WaterSense program” means the program estab-
22 lished by section 141.

23 (b) ELIGIBLE ENTITIES.—An entity shall be eligible
24 to receive an allocation under subsection (c) if the entity—

1 (1) establishes (or has established) an incentive
2 program to provide financial incentives to residential
3 consumers for the purchase of residential water-effi-
4 cient products, buildings, landscapes, processes, or
5 services;

6 (2) submits an application for the allocation at
7 such time, in such form, and containing such infor-
8 mation as the Administrator may require; and

9 (3) provides assurances satisfactory to the Ad-
10 ministrator that the entity will use the allocation to
11 supplement, but not supplant, funds made available
12 to carry out the incentive program.

13 (c) AMOUNT OF ALLOCATIONS.—For each fiscal year,
14 the Administrator shall determine the amount to allocate
15 to each eligible entity to carry out subsection (d), taking
16 into consideration—

17 (1) the population served by the eligible entity
18 during the most recent calendar year for which data
19 are available;

20 (2) the targeted population of the incentive pro-
21 gram of the eligible entity, such as general house-
22 holds, low-income households, or first-time home-
23 owners, and the probable effectiveness of the incen-
24 tive program for that population;

1 (3) for existing programs, the effectiveness of
2 the program in encouraging the adoption of water-
3 efficient products, buildings, landscapes, facilities,
4 processes, and services;

5 (4) any allocation to the eligible entity for a
6 preceding fiscal year that remains unused; and

7 (5) the per capita water demand of the popu-
8 lation served by the eligible entity during the most
9 recent calendar year for which data are available
10 and the accessibility of water supplies to such entity.

11 (d) USE OF ALLOCATED FUNDS.—Funds allocated to
12 an eligible entity under subsection (c) may be used to pay
13 up to 50 percent of the cost of establishing and carrying
14 out an incentive program.

15 (e) FIXTURE RECYCLING.—Eligible entities are en-
16 couraged to promote or implement fixture recycling pro-
17 grams to manage the disposal of older fixtures replaced
18 due to the incentive program under this section.

19 (f) ISSUANCE OF INCENTIVES.—

20 (1) IN GENERAL.—Financial incentives may be
21 provided to residential consumers that meet the re-
22 quirements of the applicable incentive program.

23 (2) MANNER OF ISSUANCE.—An eligible entity
24 may—

1 (A) issue all financial incentives directly to
2 residential consumers; or

3 (B) with approval of the Administrator,
4 delegate all or part of financial incentive admin-
5 istration to other organizations, including local
6 governments, municipal water authorities, water
7 utilities, and non-profit organizations.

8 (3) AMOUNT.—The amount of a financial in-
9 centive shall be determined by the eligible entity,
10 taking into consideration—

11 (A) the amount of any Federal or State in-
12 centive available for the purchase of the resi-
13 dential water-efficient product or service;

14 (B) the amount necessary to change con-
15 sumer behavior to purchase water-efficient
16 products and services; and

17 (C) the consumer expenditures for onsite
18 preparation, assembly, and original installation
19 of the product.

20 (g) AUTHORIZATION OF APPROPRIATIONS.—There
21 are authorized to be appropriated to the Administrator to
22 carry out this section—

23 (1) \$100,000,000 for fiscal year 2010;

24 (2) \$150,000,000 for fiscal year 2011;

25 (3) \$200,000,000 for fiscal year 2012;

- 1 (4) \$150,000,000 for fiscal year 2013;
- 2 (5) \$100,000,000 for fiscal year 2014; and
- 3 (6) for each subsequent fiscal year, the applica-
- 4 ble amount during the preceding fiscal year, as ad-
- 5 justed to reflect changes for the 12-month period
- 6 ending the preceding November 30 in the Consumer
- 7 Price Index for All Urban Consumers published by
- 8 the Bureau of Labor Statistics of the Department of
- 9 Labor.

10 **Subtitle E—Miscellaneous**

11 **SEC. 151. OFFICE OF CONSUMER ADVOCACY.**

12 (a) OFFICE.—

13 (1) ESTABLISHMENT.—There is established an

14 Office of Consumer Advocacy to serve as an advo-

15 cate for the public interest.

16 (2) DIRECTOR.—The Office shall be headed by

17 a Director to be appointed by the President, who is

18 admitted to the Federal Bar, with experience in pub-

19 lic utility proceedings, and by and with the advice

20 and consent of the Senate.

21 (3) DUTIES.—The Office may—

22 (A) represent, and appeal on behalf of, en-

23 ergy customers on matters concerning rates or

24 service of public utilities and natural gas com-

1 panies under the jurisdiction of the Commis-
2 sion—

3 (i) at hearings of the Commission;

4 (ii) in judicial proceedings in the
5 courts of the United States; and

6 (iii) at hearings or proceedings of
7 other Federal regulatory agencies and com-
8 missions;

9 (B) monitor and review energy customer
10 complaints and grievances on matters con-
11 cerning rates or service of public utilities and
12 natural gas companies under the jurisdiction of
13 the Commission;

14 (C) investigate independently, or within the
15 context of formal proceedings, the services pro-
16 vided by, the rates charged by, and the valu-
17 ation of the properties of, public utilities and
18 natural gas companies under the jurisdiction of
19 the Commission;

20 (D) develop means, such as public dissemi-
21 nation of information, consultative services, and
22 technical assistance, to ensure, to the maximum
23 extent practicable, that the interests of energy
24 consumers are adequately represented in the

1 course of any hearing or proceeding described
2 in subparagraph (A);

3 (E) collect data concerning rates or service
4 of public utilities and natural gas companies
5 under the jurisdiction of the Commission; and

6 (F) prepare and issue reports and rec-
7 ommendations.

8 (4) COMPENSATION AND POWERS.—The Direc-
9 tor may—

10 (A) employ and fix the compensation of
11 such staff personnel as is deemed necessary;
12 and

13 (B) procure temporary and intermittent
14 services as needed.

15 (5) ACCESS TO INFORMATION.—Each depart-
16 ment, agency, and instrumentality of the Federal
17 Government is authorized and directed to furnish to
18 the Director such reports and other information as
19 he deems necessary to carry out his functions under
20 this section.

21 (b) CONSUMER ADVOCACY ADVISORY COMMITTEE.—

22 (1) ESTABLISHMENT.—The Director shall es-
23 tablish an advisory committee to be known as Con-
24 sumer Advocacy Advisory Committee (in this section
25 referred to as the “Advisory Committee”) to review

1 rates, services, and disputes and to make rec-
2 ommendations to the Director.

3 (2) COMPOSITION.—The Director shall appoint
4 5 members to the Advisory Committee including—

5 (A) 2 individuals representing State Utility
6 Consumer Advocates; and

7 (B) 1 individual, from a nongovernmental
8 organization, representing consumers.

9 (3) MEETINGS.—The Advisory Committee shall
10 meet at such frequency as may be required to carry
11 out its duties.

12 (4) REPORTS.—The Director shall provide for
13 publication of recommendations of the Advisory
14 Committee on the public website established for the
15 Office.

16 (5) DURATION.—Notwithstanding any other
17 provision of law, the Advisory Committee shall con-
18 tinue in operation during the period in which the Of-
19 fice exists.

20 (6) APPLICATION OF FACA.—Except as other-
21 wise specifically provided, the Advisory Committee
22 shall be subject to the Federal Advisory Committee
23 Act.

24 (c) DEFINITIONS.—In this section:

1 (1) COMMISSION.—The term “Commission”
2 means the Federal Energy Regulatory Commission.

3 (2) ENERGY CUSTOMER.—The term “energy
4 customer” means a residential customer or a small
5 commercial customer that receives products or serv-
6 ices from a public utility or natural gas company
7 under the jurisdiction of the Commission.

8 (3) NATURAL GAS COMPANY.—The term “nat-
9 ural gas company” has the meaning given the term
10 in section 2 of the Natural Gas Act (15 U.S.C.
11 717a).

12 (4) OFFICE.—The term “Office” means the Of-
13 fice of Consumer Advocacy established by subsection
14 (a)(1).

15 (5) PUBLIC UTILITY.—The term “public util-
16 ity” has the meaning given the term in section
17 201(e) of the Federal Power Act (16 U.S.C. 824(e)).

18 (6) SMALL COMMERCIAL CUSTOMER.—The term
19 “small commercial customer” means a commercial
20 customer that has a peak demand of not more than
21 1,000 kilowatts per hour.

22 (d) AUTHORIZATION OF APPROPRIATIONS.—There
23 are authorized such sums as necessary to carry out this
24 section.

1 (e) SAVINGS CLAUSE.—Nothing in this section af-
2 fects the rights or obligations of State Utility Consumer
3 Advocates.

4 **SEC. 152. CLEAN TECHNOLOGY BUSINESS COMPETITION**
5 **GRANT PROGRAM.**

6 (a) IN GENERAL.—The Administrator may provide
7 grants to organizations to conduct business competitions
8 that provide incentives, training, and mentorship to entre-
9 preneurs and early stage start-up companies throughout
10 the United States to meet high-priority economic, environ-
11 mental, and energy goals in areas including air quality,
12 energy efficiency and renewable energy, transportation,
13 water quality and conservation, green buildings, and waste
14 management.

15 (b) PURPOSES.—

16 (1) IN GENERAL.—The competitions described
17 in subsection (a) shall have the purposes of—

18 (A) accelerating the development and de-
19 ployment of clean technology businesses and
20 green jobs;

21 (B) stimulating green economic develop-
22 ment;

23 (C) providing business training and men-
24 toring to early stage clean technology compa-
25 nies; and

1 (D) strengthening the competitiveness of
2 United States clean technology industry in
3 world trade markets.

4 (2) PRIORITY.—Priority shall be given to busi-
5 ness competitions that—

6 (A) are led by the private sector;

7 (B) encourage regional and interregional
8 cooperation; and

9 (C) can demonstrate market-driven prac-
10 tices and the creation of cost-effective green
11 jobs through an annual publication of competi-
12 tion activities and directory of companies.

13 (c) ELIGIBILITY.—

14 (1) IN GENERAL.—To be eligible for a grant
15 under this section, an organization shall be any
16 sponsored entity of an organization described in sub-
17 paragraph (A) that is operated as a nonprofit entity.

18 (2) PRIORITY.—In making grants under this
19 section, the Administrator shall give priority to orga-
20 nizations that can demonstrate broad funding sup-
21 port from private and other non-Federal funding
22 sources to leverage Federal investment.

23 (d) AUTHORIZATION OF APPROPRIATIONS.—There is
24 authorized to be appropriated to carry out this section
25 \$20,000,000.

1 **SEC. 153. PRODUCT CARBON DISCLOSURE PROGRAM.**

2 (a) EPA STUDY.—The Administrator shall conduct
3 a study to determine the feasibility of establishing a na-
4 tional program for measuring, reporting, publicly dis-
5 closing, and labeling products or materials sold in the
6 United States for their carbon content, and shall, not later
7 than 18 months after the date of enactment of this Act,
8 transmit a report to Congress which shall include the fol-
9 lowing:

10 (1) A determination of whether a national prod-
11 uct carbon disclosure program and labeling program
12 would be effective in achieving the intended goals of
13 achieving greenhouse gas reductions and an exam-
14 ination of existing programs globally and their
15 strengths and weaknesses.

16 (2) Criteria for identifying and prioritizing sec-
17 tors and products and processes that should be cov-
18 ered in such program or programs.

19 (3) An identification of products, processes, or
20 sectors whose inclusion could have a substantial car-
21 bon impact (prioritizing industrial products such as
22 iron and steel, aluminum, cement, chemicals, and
23 paper products, and also including food, beverage,
24 hygiene, cleaning, household cleaners, construction,
25 metals, clothing, semiconductor, and consumer elec-
26 tronics).

1 (4) Suggested methodology and protocols for
2 measuring the carbon content of the products across
3 the entire carbon lifecycle of such products for use
4 in a carbon disclosure program and labeling pro-
5 gram.

6 (5) A review of existing greenhouse gas product
7 accounting standards, methodologies, and practices
8 including the Greenhouse Gas Protocol, ISO 14040/
9 44, ISO 14067, and Publically Available Specifica-
10 tion 2050, and including a review of the strengths
11 and weaknesses of each.

12 (6) A survey of secondary databases including
13 the Manufacturing Energy Consumption Survey, an
14 evaluation of the quality of data for use in a product
15 carbon disclosure program and product carbon label-
16 ing program, an identification of gaps in the data
17 relative to the potential purposes of a national prod-
18 uct carbon disclosure program and product carbon
19 labeling program, and development of recommenda-
20 tions for addressing these data gaps.

21 (7) An assessment of the utility of comparing
22 products and the appropriateness of product carbon
23 standards.

24 (8) An evaluation of the information needed on
25 a label for clear and accurate communication, in-

1 including what pieces of quantitative and qualitative
2 information need to be disclosed.

3 (9) An evaluation of the appropriate boundaries
4 of the carbon lifecycle analysis for different sectors
5 and products.

6 (10) An analysis of whether default values
7 should be developed for products whose producer
8 does not participate in the program or does not have
9 data to support a disclosure or label and a deter-
10 mination of the best ways to develop such default
11 values.

12 (11) A recommendation of certification and
13 verification options necessary to assure the quality
14 of the information and avoid greenwashing or the
15 use of insubstantial or meaningless environmental
16 claims to promote a product.

17 (12) An assessment of options for educating
18 consumers about product carbon content and the
19 product carbon disclosure program and product car-
20 bon labeling program.

21 (13) An analysis of the costs and timelines as-
22 sociated with establishing a national product carbon
23 disclosure program and product carbon labeling pro-
24 gram, including options for a phased approach.
25 Costs should include those for businesses associated

1 with the measurement of carbon footprints and
2 those associated with creating a product carbon label
3 and managing and operating a product carbon label-
4 ing program, and options for minimizing these costs.

5 (14) An evaluation of incentives (such as finan-
6 cial incentives, brand reputation, and brand loyalty)
7 to determine whether reductions in emissions can be
8 accelerated through encouraging more efficient man-
9 ufacturing or by encouraging preferences for lower-
10 emissions products to substitute for higher-emissions
11 products whose level of performance is no better.

12 (b) DEVELOPMENT OF NATIONAL CARBON DISCLO-
13 SURE PROGRAM.—Upon conclusion of the study, and not
14 later than 3 years after the date of enactment of this Act,
15 the Administrator shall establish a national product car-
16 bon disclosure program, participation in which shall be
17 voluntary, and which may involve a product carbon label
18 with broad applicability to the wholesale and consumer
19 markets to enable and encourage knowledge about carbon
20 content by producers and consumers and to inform efforts
21 to reduce energy consumption (carbon dioxide equivalent
22 emissions) nationwide. In developing such a program, the
23 Administrator shall—

24 (1) consider the results of the study conducted
25 under subsection (a);

1 (2) consider existing and planned programs and
2 proposals and measurement standards (including the
3 Publicly Available Specification 2050, standards to
4 be developed by the World Resource Institute/World
5 Business Council for Sustainable Development, the
6 International Standards Organization, and the bill
7 AB19 pending in the California legislature as of the
8 date of enactment of this Act);

9 (3) consider the compatibility of a national
10 product carbon disclosure program with existing pro-
11 grams;

12 (4) utilize incentives and other means to spur
13 the adoption of product carbon disclosure and prod-
14 uct carbon labeling;

15 (5) develop protocols and parameters for a
16 product carbon disclosure program, including a
17 methodology and formula for assessing, verifying,
18 and potentially labeling a product's greenhouse gas
19 content, and for data quality requirements to allow
20 for product comparison;

21 (6) create a means to—

22 (A) document best practices;

23 (B) ensure clarity and consistency;

24 (C) work with suppliers, manufacturers,
25 and retailers to encourage participation;

1 (D) ensure that protocols are consistent
2 and comparable across like products; and

3 (E) evaluate the effectiveness of the pro-
4 gram;

5 (7) make publicly available information on
6 product carbon content to ensure transparency;

7 (8) provide for public outreach, including a con-
8 sumer education program to increase awareness;

9 (9) develop training and education programs to
10 help businesses learn how to measure and commu-
11 nicate their carbon footprint and easy tools and tem-
12 plates for businesses to use to reduce cost and time
13 to measure their products' carbon lifecycle;

14 (10) consult with the Secretary of Energy, the
15 Secretary of Commerce, the Federal Trade Commis-
16 sion, and other Federal agencies, as necessary;

17 (11) gather input from stakeholders through
18 consultations, public workshops, or hearings with
19 representatives of consumer product manufacturers,
20 consumer groups, and environmental groups;

21 (12) utilize systems for verification and product
22 certification that will ensure that claims manufactur-
23 ers make about their products are valid;

24 (13) create a process for reviewing the accuracy
25 of product carbon label information and protecting

1 the product carbon label in the case of a change in
2 the product's energy source, supply chain, ingredi-
3 ents, or other factors, and specify the frequency to
4 which data should be updated; and

5 (14) develop a standardized, easily understand-
6 able carbon label, if appropriate, and create a proc-
7 ess for responding to inaccuracies and misuses of
8 such a label.

9 (c) REPORT TO CONGRESS.—Not later than 5 years
10 after the program is established pursuant to subsection
11 (b), the Administrator shall report to Congress on the ef-
12 fectiveness and impact of the program, the level of vol-
13 untary participation, and any recommendations for addi-
14 tional measures.

15 (d) DEFINITIONS.—In this section:

16 (1) The term “carbon content” means the
17 quantity of greenhouse gas emissions and the warm-
18 ing impact of those emissions on the atmosphere ex-
19 pressed in carbon dioxide equivalent associated with
20 a product's value chain.

21 (2) The term “carbon footprint” means the
22 level of greenhouse gas emissions produced by a par-
23 ticular activity, service, or entity.

24 (3) The term “carbon lifecycle” means the
25 greenhouse gas emissions that are released as part

1 of the processes of creating, producing, processing,
2 manufacturing, modifying, transporting, distrib-
3 uting, storing, using, recycling, or disposing of goods
4 and services.

5 (e) AUTHORIZATION OF APPROPRIATIONS.—There is
6 authorized to be appropriated to the Administrator—

7 (1) to carry out the study required by sub-
8 section (a), \$5,000,000; and

9 (2) to carry out the program required under
10 subsection (b), \$25,000,000 for each of fiscal years
11 2010 through 2025.

12 **SEC. 154. STATE RECYCLING PROGRAMS.**

13 (a) ESTABLISHMENT.—The Administrator shall es-
14 tablish a State Recycling Program governing the use of
15 funds by States in accordance with this Act.

16 (b) USE OF FUNDING.—

17 (1) IN GENERAL.—States receiving funding to
18 carry out this section shall use the proceeds to carry
19 out recycling programs in accordance with this sec-
20 tion.

21 (2) COUNTY AND MUNICIPAL PROGRAMS.—Not
22 less than $\frac{1}{4}$ of the funding made available to a State
23 to carry out this section shall be distributed by the
24 State to county and municipal recycling programs as
25 described in subsection (c)(1), to be used exclusively

1 to support recycling purposes and associated source
2 reduction purposes, including to provide incentives—

3 (A) for recycling-related technology that—

4 (i) reduces or avoids greenhouse gas
5 emissions;

6 (ii) increases collection rates; and

7 (iii) improves the quality of recyclable
8 material that is separated from solid
9 waste;

10 (B) for energy-efficiency projects for trans-
11 portation fleets and recycling equipment used to
12 collect and sort recyclable material separated
13 from solid waste;

14 (C) for recycling program-related expenses,
15 including—

16 (i) education and job training;

17 (ii) development and implementation
18 of variable rate (commonly referred to as
19 “pay-as-you-throw”) recycling programs
20 and anaerobic digestion programs;

21 (iii) promotion of public space recy-
22 cling programs;

23 (iv) approaches for assuring compli-
24 ance with recycling requirements; and

1 (v) development or implementation of
2 best practices for municipal solid waste re-
3 duction programs; and

4 (D) to ensure that recyclable material is
5 not sent for disposal or incineration during flue-
6 tuating markets.

7 (3) RECYCLING FACILITIES.—Not less than $\frac{1}{4}$
8 of the funding made available to a State to carry out
9 this section shall be distributed by the State to eligi-
10 ble recycling facilities as described in subsection
11 (c)(2) to be used exclusively to support the recycling
12 purposes and associated source reduction purposes
13 of the facilities, including to provide—

14 (A) incentives for the demonstration or de-
15 ployment of recycling-related technology and
16 equipment that reduce or avoid greenhouse gas
17 emissions;

18 (B) incentives to facilities that increase the
19 quantity and quality of recyclable material that
20 is recycled versus sent for disposal or inciner-
21 ation;

22 (C) funding for research, management,
23 and removal of impediments to recycling, in-
24 cluding—

25 (i) radioactive material; and

1 (ii) devices or materials that contain
2 polychlorinated biphenyls, mercury, or
3 chlorofluorocarbons;

4 (D) funding for research on, and develop-
5 ment and deployment of, new technologies to
6 more efficiently and effectively recycle items
7 such as automobile shredder residue, cathode
8 ray tubes, plastics, and tires; and

9 (E) incentives to recycle materials identi-
10 fied by the Administrator that are not being re-
11 cycled at a recycling facility.

12 (4) MANUFACTURING FACILITIES.—Not less
13 than $\frac{1}{4}$ of the funding made available to a State to
14 carry out this section shall be distributed by the
15 State to eligible manufacturing facilities as described
16 in subsection (c)(3) to be used exclusively to support
17 recycling purposes, including to provide incentives
18 for the demonstration or deployment of—

19 (A) manufacturing-related technology and
20 equipment that would increase the use of recy-
21 clable material and avoid or reduce greenhouse
22 gas emissions;

23 (B) radiation detection equipment and the
24 costs associated with recovery of detected radi-
25 ated recyclable material;

1 (C) technologies that will detect and sepa-
2 rate contaminants, including mercury-, lead-,
3 and cadmium-containing devices;

4 (D) strategies and technologies to remove
5 impediments to recovering recyclable material;
6 and

7 (E) strategies and technologies to improve
8 the energy efficiency of technology and equip-
9 ment used to manufacture recyclable material.

10 (c) ELIGIBILITY REQUIREMENTS.—

11 (1) COUNTY AND MUNICIPALITY PROGRAMS.—
12 Funds provided under subsection (b)(2) shall be pro-
13 vided on a competitive basis to county and municipal
14 recycling programs that—

15 (A) have within the solid waste manage-
16 ment plans of the programs a recycling man-
17 agement plan that includes an education out-
18 reach program for the individuals and entities
19 served by the program constituency that high-
20 lights the lifecycle benefits of recycling; and

21 (B) collect at least 5 recyclable materials,
22 such as—

23 (i) ferrous and nonferrous metal;

24 (ii) aluminum;

25 (iii) plastic;

- 1 (iv) tires and rubber;
- 2 (v) household electronic equipment;
- 3 (vi) glass;
- 4 (vii) scrap food;
- 5 (viii) recoverable fiber or paper; and
- 6 (ix) textiles;

7 (C) demonstrate, not later than 3 years
8 after the date of receipt of funds under this
9 subtitle, reasonable progress toward achieving—

10 (i) a collection rate goal of at least 30
11 percent of the total recyclable materials
12 available from the solid waste stream in
13 the requesting State, county, or municipal
14 program; or

15 (ii) a 10-percent increase of collected
16 recyclable materials compared to the total
17 solid waste stream in the requesting State,
18 county, or municipal program; and

19 (D)(i) own, operate, or contract to oper-
20 ate—

21 (I) a curbside recyclables collection
22 program;

23 (II) a redemption center or drop-off
24 facility for recyclables; and

25 (III) a materials recovery facility; and

1 (ii) have in place a quality, environmental,
2 health, and safety management system (such as
3 that of the International Standards Organiza-
4 tion or an equivalent) that includes goals to re-
5 duce the operational carbon baselines of the
6 programs.

7 (2) RECYCLING FACILITY.—Funds provided
8 under subsection (b)(3) shall be provided on a com-
9 petitive basis to a recycling facility that—

10 (A) processes recyclable material into com-
11 mercial specification-grade commodities for use
12 as raw material feed stock at recovery facilities,
13 including for use as—

14 (i) a replacement or substitute for a
15 virgin raw material; or

16 (ii) a replacement or substitute for a
17 product made, in whole or in part, from a
18 virgin raw material;

19 (B) has a verifiable carbon baseline; and

20 (C) has an environmental, health and safe-
21 ty, and quality management system (such as
22 that of the International Standards Organiza-
23 tion or an equivalent) that includes goals to re-
24 duce the operational carbon baseline of the re-
25 cycling facility per unit of material processed.

1 (4) documentation of the quantity of net recy-
2 clable material that was collected and processed and
3 greenhouse gas emissions that were reduced or
4 avoided accordingly, through use of the funding,
5 based on a lifecycle calculation developed by the Ad-
6 ministrator.

7 (e) METHODOLOGY AND DECISIONMAKING.—The Ad-
8 ministrator, as appropriate—

9 (1) shall develop and periodically update
10 lifecycle methods to quantify the relationship be-
11 tween waste management decisions, including recy-
12 cling and waste reduction, greenhouse gas reduc-
13 tions, and energy use reductions, for purposes that
14 include—

15 (A) helping to support decisions under
16 Federal, State, and municipal recycling and
17 waste management programs, including—

18 (i) estimating greenhouse gas and en-
19 ergy benefits of increasing collection or
20 adding new materials to recycling pro-
21 grams;

22 (ii) comparing the benefits of recy-
23 cling and waste reduction to other green-
24 house gas and energy use reduction strate-
25 gies;

1 (iii) optimizing waste management
2 strategies to maximize greenhouse gas re-
3 ductions and energy use reductions; and

4 (iv) public education; and

5 (B) designing products to optimize waste
6 reduction and recycling opportunities and use of
7 recycled materials in the manufacturing pro-
8 cess;

9 (2) may collect data to support the development
10 of the methods described in paragraph (1); and

11 (3) to improve national consistency, shall, in
12 consultation with appropriate State and local rep-
13 resentatives and municipal recycling programs, iden-
14 tify best practices to promote improvement in, and
15 support State efforts in improving, municipal recy-
16 cling and resource recovery programs.

17 **SEC. 155. SUPPLEMENTAL AGRICULTURE AND FORESTRY**

18 **GREENHOUSE GAS REDUCTION AND RENEW-**

19 **ABLE ENERGY PROGRAM.**

20 (a) AGRICULTURAL GREENHOUSE GAS REDUC-
21 TIONS.—

22 (1) ESTABLISHMENT.—

23 (A) IN GENERAL.—The Secretary of Agri-
24 culture (referred to in this section as the “Sec-
25 retary”), in coordination with the Secretary of

1 the Interior, shall establish a Greenhouse Gas
2 Reduction Incentives Program (referred to in
3 this section as the “program”) to provide finan-
4 cial assistance to owners and operators of agri-
5 cultural land (including land on which specialty
6 crops are produced and private or public land
7 used for grazing) and forest land for projects
8 and activities that measurably increase carbon
9 sequestration or reduce greenhouse gas emis-
10 sions.

11 (B) SHARED AUTHORITY.—The Secretary
12 shall delegate to the Secretary of the Interior
13 the authority to carry out projects on land
14 under the jurisdiction of or operated by the De-
15 partment of the Interior.

16 (2) PRIORITY.—In carrying out the program,
17 the Secretary shall give priority to projects or activi-
18 ties that—

19 (A) reduce greenhouse gas emissions or in-
20 crease sequestration of greenhouse gases, and
21 achieve significant other environmental benefits,
22 such as the improvements of water or air qual-
23 ity or natural resources; and

24 (B) reduce greenhouse gas emissions or se-
25 quester carbon in agricultural and forestry op-

1 erations where there are limited recognized op-
2 portunities to achieve such emission reductions
3 or sequestration.

4 (3) ELIGIBLE PROJECTS AND ACTIVITIES.—Eli-
5 gible projects and payments shall include those
6 that—

7 (A) reflect the comparable amount that the
8 owners or operators would receive in the offset
9 market if not for compliance with environ-
10 mental laws that preclude the owners and oper-
11 ators from being eligible for receiving an offset
12 credit under a Federal law enacted for the pur-
13 pose of regulating greenhouse gas emissions;

14 (B) provide greenhouse gas emission bene-
15 fits, but do not receive an offset credit or qual-
16 ify for an early action allowance under a Fed-
17 eral law enacted for the purpose of regulating
18 greenhouse gas emissions, including projects
19 and activities that provide an opportunity to
20 demonstrate and test new or uncertain methods
21 to reduce or sequester emissions;

22 (C) reward early adopters, including pro-
23 ducers that practice no-till agriculture, and en-
24 sure that individuals and entities that took ac-
25 tion prior to the implementation of a Federal

1 law enacted for the purpose of regulating green-
2 house gas emissions are not placed at a com-
3 petitive disadvantage, including giving special
4 consideration to owners or operators located in
5 jurisdictions with more stringent environmental
6 laws (including regulations), compliance with
7 which precludes the owners or operators from
8 participating such an offset market;

9 (D) provide incentives for supplemental
10 greenhouse gas emission reductions on private
11 forest land of the United States;

12 (E) prevent any conversion of land, includ-
13 ing native grassland, native prairie, rangeland,
14 cropland, or forested land, that would increase
15 greenhouse gas emissions or a loss of carbon se-
16 questration; or

17 (F) support action on Federal, State, or
18 tribal land.

19 (4) REQUIREMENTS.—Financial incentives and
20 support provided by the Secretary for a project or
21 activity under this section shall, to the maximum ex-
22 tent practicable—

23 (A) be directly proportional to the quantity
24 and duration of greenhouse gas emissions re-
25 duced or carbon sequestered (except with re-

1 spect to projects and activities that provide ad-
2 aptation benefits); and

3 (B) complement and leverage existing con-
4 servation, forestry, and energy program expend-
5 itures to provide measurable emission reduction
6 and sequestration benefits that otherwise may
7 not take place or continue to exist.

8 (5) ELIGIBILITY.—An owner or operator shall
9 not be prohibited from participating in the program
10 established under this section due to participation of
11 the owner or operator in other Federal or State con-
12 servation or agricultural assistance programs.

13 (6) FORMS OF ASSISTANCE.—The Secretary
14 may use any of the following to provide assistance
15 under this section:

16 (A) Conservation easements.

17 (B) Carbon sequestration and mitigation
18 contracts between the owner or operator and
19 the Secretary for the performance of projects or
20 activities that reduce greenhouse gas emissions
21 or sequester carbon.

22 (C) Financial incentives through timber
23 harvest contracts.

24 (D) Financial incentives through grazing
25 contracts.

1 (E) Grants.

2 (F) Such other forms of assistance as the
3 Secretary determines to be appropriate.

4 (7) REVERSALS.—The Secretary shall specify
5 methods to address intentional or unintentional re-
6 versal of carbon sequestration or greenhouse gas
7 emission reductions that occur during the term of a
8 contract or easement under this section.

9 (8) ACCOUNTING SYSTEMS.—In carrying out
10 this section, the Secretary shall develop and imple-
11 ment—

12 (A) a national accounting system for car-
13 bon stocks, sequestration, and greenhouse gas
14 emissions that may be used to assess progress
15 in implementing this section at a national level;
16 and

17 (B) credible reporting and accounting sys-
18 tems to ensure that incentives provided under
19 this section are achieving stated objectives.

20 (9) PROGRAM MEASUREMENT, MONITORING,
21 AND VERIFICATION.—The Secretary, in consultation
22 with the Administrator—

23 (A) shall establish and implement protocols
24 that provide reasonable monitoring and
25 verification of compliance with terms associated

1 with assistance provided under this section, in-
2 cluding field sampling of actual performance, to
3 develop annual estimates of emission reductions
4 achieved under the program;

5 (B) shall report annually the total number
6 of tons of carbon dioxide sequestered or the
7 total number of tons of emissions avoided
8 through incentives provided under this section;
9 and

10 (C) not later than 2 years after the date
11 of enactment of this Act, and at least every 18
12 months thereafter, submit to Congress and
13 make available to the public on the website of
14 the Department of Agriculture a report that in-
15 cludes—

16 (i) an estimate of annual and cumu-
17 lative reductions generated through the
18 program under this section, determined
19 using standardized measures (including
20 economic efficiency); and

21 (ii) a summary of any changes to the
22 program, in accordance with this section,
23 that will be made as a result of program
24 measurement, monitoring, and verification
25 conducted under this section.

1 (b) RESEARCH PROGRAM.—The Secretary shall es-
2 tablish by rule a program to conduct research to develop
3 additional projects and activities for crops to find addi-
4 tional techniques and methods to reduce greenhouse gas
5 emissions or sequester greenhouse gases that may or may
6 not meet criteria for a Federal law enacted for the purpose
7 of regulating greenhouse gas emissions.

8 **SEC. 156. ECONOMIC DEVELOPMENT CLIMATE CHANGE**
9 **FUND.**

10 (a) IN GENERAL.—Title II of the Public Works and
11 Economic Development Act of 1965 (42 U.S.C. 3141 et
12 seq.) is amended by adding at the end the following:

13 **“SEC. 219. ECONOMIC DEVELOPMENT CLIMATE CHANGE**
14 **FUND.**

15 “(a) IN GENERAL.—On the application of an eligible
16 recipient, the Secretary may provide technical assistance,
17 make grants, enter into contracts, or otherwise provide
18 amounts for projects—

19 “(1) to promote energy efficiency to enhance
20 economic competitiveness;

21 “(2) to increase the use of renewable energy re-
22 sources to support sustainable economic development
23 and job growth;

1 “(3) to support the development of conventional
2 energy resources to produce alternative transpor-
3 tation fuels, electricity and heat;

4 “(4) to develop energy efficient or environ-
5 mentally sustainable infrastructure;

6 “(5) to promote environmentally sustainable
7 economic development practices and models;

8 “(6) to support development of energy effi-
9 ciency and alternative energy development plans,
10 studies or analysis, including enhancement of new
11 and existing Comprehensive Economic Development
12 Strategies funded under this Act; and

13 “(7) to supplement other Federal grants, loans,
14 or loan guarantees for purposes described in para-
15 graphs (1) through (6).

16 “(b) FEDERAL SHARE.—The Federal share of the
17 cost of any project carried out under this section shall not
18 exceed 80 percent, except that the Federal share of a Fed-
19 eral grant, loan, or loan guarantee provided under sub-
20 section (a)(7) may be 100 percent.

21 “(c) AUTHORIZATION OF APPROPRIATIONS.—There
22 is authorized to be appropriated to carry out this section
23 \$50,000,000 for each of fiscal years 2009 through 2013,
24 to remain available until expended.”.

1 (b) CONFORMING AMENDMENT.—The table of con-
2 tents contained in section 1(b) of the Public Works and
3 Economic Development Act of 1965 (42 U.S.C. 3141 et
4 seq.) is amended by inserting after the item relating to sec-
5 tion 218 the following:

“Sec. 219. Economic Development Climate Change Fund.”.

6 **SEC. 157. STUDY OF RISK-BASED PROGRAMS ADDRESSING**
7 **VULNERABLE AREAS.**

8 (a) IN GENERAL.—The Administrator, or the heads
9 of such other Federal agencies as the President may des-
10 ignate, shall conduct a study and, not later than 2 years
11 after the date of enactment of this Act, submit to Con-
12 gress a report regarding risk-based policies and programs
13 addressing vulnerable areas.

14 (b) REQUIREMENTS.—The report shall

15 (1) review and assess Federal predisaster miti-
16 gation, emergency response, and flood insurance
17 policies and programs that affect areas vulnerable to
18 the impacts of climate change;

19 (2) describe strategies for better addressing
20 such vulnerabilities and provide implementation rec-
21 ommendations;

22 (3) assess whether the policies and programs
23 described in paragraph (1) support the State re-
24 sponse and adaptation goals and objectives identified
25 under this Act;

1 (4) identify, and make recommendations to re-
2 solve, inconsistencies in Federal policies and pro-
3 grams in effect as of the date of enactment of this
4 Act that address areas vulnerable to climate change;
5 and

6 (5) identify annual cost savings to the Federal
7 Government associated with the implementation of
8 the strategies and recommendations contained in the
9 report.

10 **Subtitle F—Energy Efficiency and** 11 **Renewable Energy**

12 **SEC. 161. RENEWABLE ENERGY.**

13 (a) DEFINITIONS.—In this section:

14 (1) RENEWABLE ENERGY.—The term “renew-
15 able energy” means electric energy generated from
16 solar, wind, biomass, landfill gas, ocean (including
17 tidal, wave, current, and thermal), geothermal, mu-
18 nicipal solid waste, or new hydroelectric generation
19 capacity achieved from increased efficiency or addi-
20 tions of new capacity at an existing hydroelectric
21 project.

22 (2) RENEWABLE PORTFOLIO STANDARD.—The
23 term “renewable portfolio standard” means a state
24 statute that requires electricity providers to obtain a

1 minimum percentage of their power from renewable
2 energy resources by a certain date.

3 (b) GRANTS.—The Administrator, in consultation
4 with the Secretaries of Energy, Interior, and Agriculture,
5 may provide grants for projects to increase the quantity
6 of energy a State uses from renewable sources under State
7 renewable portfolio standard laws.

8 (c) ELIGIBILITY.—The Administrator shall review for
9 approval projects applications that are—

10 (1) submitted by State and local governments,
11 Indian tribes, public utilities, regional energy co-
12 operatives, or individual energy producers from
13 states with a binding Renewable Portfolio Standard;
14 or

15 (2) submitted by State and local governments,
16 Indian tribes, public utilities, or regional energy co-
17 operatives from states with nonbinding goals for
18 adoption of renewable energy requirements.

19 (d) PRIORITY.—The Administrator shall give priority
20 to project applications that are—

21 (1) submitted by States with a binding renew-
22 able portfolio standard;

23 (2) cost-effective in achieving greater renewable
24 energy production in each State.

25 (e) CERTIFICATION.—

1 (1) IN GENERAL.—The Administrator shall no-
2 tify in writing the Governor of each eligible State as
3 described in section (c) at the time at which the Ad-
4 ministrator begins review of a project application re-
5 ceived from an eligible entity within the State.

6 (2) CERTIFICATION.—The Governor shall cer-
7 tify in writing within 30 days of receipt of the Ad-
8 ministrator’s notification described in subsection (1)
9 that the project application—

10 (A) will assist the State in reaching renew-
11 able portfolio standard targets under applicable
12 state laws; and

13 (B) has secured non-Federal funding
14 sources that, in conjunction with the requested
15 grant amount, will be sufficient to complete the
16 renewable energy project.

17 (f) RULEMAKING.—

18 (1) IN GENERAL.—Not later than 90 days after
19 the date of enactment of this Act, the Administrator
20 shall initiate rulemaking procedures necessary to im-
21 plement this section.

22 (2) FINAL RULES; ACCEPTANCE OF APPLICA-
23 TIONS.—Not later than 90 days after the close of
24 the public comment period relating to the rule-

1 making described in paragraph (1), the Adminis-
2 trator shall—

3 (A) promulgate final regulations to carry
4 out this section; and

5 (B) begin accepting project applications for
6 review.

7 (g) REPORTING.—Not later than 180 days after the
8 date of enactment of this Act, and every 180 days there-
9 after, the Administrator shall submit to the Committee on
10 Energy and Commerce of the House of Representatives
11 and the Committee on Environment and Public Works of
12 the Senate a report specifying, with respect to the pro-
13 gram under this section—

14 (1) the project applications received;

15 (2) the project applications approved;

16 (3) the amount of funding allocated per project;

17 and

18 (4) the cumulative benefits of the grant pro-
19 gram.

20 (h) GRANT AMOUNT.—A grant provided under this
21 section may be in an amount that does not exceed 50 per-
22 cent of the total cost of the renewable energy project to
23 be funded by the grant.

1 (i) AUTHORIZATION.—There are authorized to be ap-
2 propriated such sums as are necessary to carry out this
3 section.

4 **SEC. 162. ADVANCED BIOFUELS.**

5 (a) DEFINITIONS.—In this section:

6 (1) ADVANCED BIOFUEL.—The term “advanced
7 biofuel” shall have such meaning as is given the
8 term by the Administrator in regulations promul-
9 gated under subsection (c).

10 (2) ELIGIBLE ENTITY.—The term “eligible enti-
11 ty” means an individual, corporate entity, unit of
12 State or local government, Indian tribe, farm cooper-
13 ative, institution of higher learning, rural electric co-
14 operative, or public utility.

15 (b) GRANTS.—The Administrator, in consultation
16 with the Secretary of Agriculture and the Secretary of En-
17 ergy, may provide grants to support research and develop-
18 ment of advanced biofuels.

19 (c) REGULATIONS.—

20 (1) IN GENERAL.—Not later than 18 months
21 after the date of enactment of this Act, the Adminis-
22 trator shall promulgate regulations to carry out this
23 section (including a definition of the term “advanced
24 biofuel” for the purpose of providing assistance
25 under this section).

1 (2) REQUIREMENTS.—The regulations promul-
2 gated under paragraph (1) shall—

3 (A) provide that the Administrator shall
4 make grants available to eligible entities to sup-
5 port—

6 (i) research regarding the production
7 of advanced biofuels;

8 (ii) the development of new advanced
9 biofuel production and capacity-building
10 technologies;

11 (iii) the development and construction
12 of commercial-scale advanced biofuel pro-
13 duction facilities; and

14 (iv) the expanded production of ad-
15 vanced biofuels;

16 (B) provide that, to receive a grant under
17 this section, an eligible entity shall submit to
18 the Administrator—

19 (i) a project proposal with detailed
20 project information, as determined by the
21 Administrator; and

22 (ii) such records as the Administrator
23 may require as evidence of the production
24 of advanced biofuels or the importance and

1 necessity of advanced biofuels research and
2 new technologies; and

3 (C) include appropriate cost-sharing re-
4 quirements developed by the Administrator for
5 grant awards for authorized uses of funds
6 under this section.

7 (3) PRIORITY.—The Administrator shall give
8 priority to eligible entities based on—

9 (A) technical and economic feasibility of a
10 project proposal;

11 (B) cost-effectiveness of a project proposal;

12 (C) the use of innovative technologies in a
13 project proposal;

14 (D) the availability of non-Federal re-
15 sources, including private resources, to fund the
16 project proposal; and

17 (E) whether the project proposed can be
18 replicated.

19 **SEC. 163. ENERGY EFFICIENCY IN BUILDING CODES.**

20 (a) ENERGY EFFICIENCY TARGETS.—

21 (1) RULEMAKING TO ESTABLISH TARGETS.—

22 The Administrator, or such other agency head or
23 heads as may be designated by the President, in
24 consultation with the Director of the National Insti-
25 tute of Standards and Technology, shall promulgate

1 regulations establishing building code energy effi-
2 ciency targets for the national average percentage
3 improvement of buildings' energy performance. Such
4 regulations shall establish a national building code
5 energy efficiency target for residential buildings and
6 commercial buildings when built to a code meeting
7 the target, beginning not later than January 1, 2014
8 and applicable each calendar year through December
9 31, 2030.

10 (b) NATIONAL ENERGY EFFICIENCY BUILDING
11 CODES.—

12 (1) RULEMAKING TO ESTABLISH NATIONAL
13 CODES.—The Administrator, or such other agency
14 head or heads as may be designated by the Presi-
15 dent, shall promulgate regulations establishing na-
16 tional energy efficiency building codes for residential
17 and commercial buildings. Such regulations shall be
18 sufficient to meet the national building code energy
19 efficiency targets established under subsection (a) in
20 the most cost-effective manner, and may include pro-
21 visions for State adoption of the national building
22 code standards and certification of State programs

23 (c) ANNUAL REPORTS.—The Administrator, or such
24 other agency head or heads as may be designated by the

1 President, shall annually submit to Congress, and publish
2 in the Federal Register, a report on—

3 (1) the status of national energy efficiency
4 building codes;

5 (2) the status of energy efficiency building code
6 adoption and compliance in the States;

7 (3) the implementation of and compliance with
8 regulations promulgated under this section;

9 (4) the status of Federal and State enforcement
10 of building codes; and

11 (5) impacts of action under this section, and
12 potential impacts of further action, on lifetime en-
13 ergy use by buildings, including resulting energy and
14 cost savings.

15 **SEC. 164. RETROFIT FOR ENERGY AND ENVIRONMENTAL**
16 **PERFORMANCE.**

17 (a) DEFINITIONS.—For purposes of this section:

18 (1) ASSISTED HOUSING.—The term “assisted
19 housing” means those properties receiving project-
20 based assistance pursuant to section 202 of the
21 Housing Act of 1959 (12 U.S.C. 1701q), section
22 811 of the Cranston-Gonzalez National Affordable
23 Housing Act (42 U.S.C. 8013), section 8 of the
24 United States Housing Act of 1937 (42 U.S.C.
25 1437f), or similar programs.

1 (2) NONRESIDENTIAL BUILDING.—The term
2 “nonresidential building” means a building with a
3 primary use or purpose other than residential hous-
4 ing, including any building used for commercial of-
5 fices, schools, academic and other public and private
6 institutions, nonprofit organizations including faith-
7 based organizations, hospitals, hotels, and other non-
8 residential purposes. Such buildings shall include
9 mixed-use properties used for both residential and
10 nonresidential purposes in which more than half of
11 building floor space is nonresidential.

12 (3) PERFORMANCE-BASED BUILDING RETROFIT
13 PROGRAM.—The term “performance-based building
14 retrofit program” means a program that determines
15 building energy efficiency success based on actual
16 measured savings after a retrofit is complete, as evi-
17 denced by energy invoices or evaluation protocols.

18 (4) PRESCRIPTIVE BUILDING RETROFIT PRO-
19 GRAM.—The term “prescriptive building retrofit pro-
20 gram” means a program that projects building ret-
21 rofit energy efficiency success based on the known
22 effectiveness of measures prescribed to be included
23 in a retrofit.

24 (5) PUBLIC HOUSING.—The term “public hous-
25 ing” means properties receiving assistance under

1 section 9 of the United States Housing Act of 1937
2 (42 U.S.C. 1437g).

3 (6) RECOMMISSIONING;
4 RETROCOMMISSIONING.—The terms “recommis-
5 sioning” and “retrocommissioning” have the mean-
6 ing given those terms in section 543(f)(1) of the Na-
7 tional Energy Conservation Policy Act (42 U.S.C.
8 8253(f)(1)).

9 (7) RESIDENTIAL BUILDING.—The term “resi-
10 dential building” means a building whose primary
11 use is residential. Such buildings shall include sin-
12 gle-family homes (both attached and detached),
13 owner-occupied units in larger buildings with their
14 own dedicated space-conditioning systems, apart-
15 ment buildings, multi-unit condominium buildings,
16 public housing, assisted housing, and buildings used
17 for both residential and nonresidential purposes in
18 which more than half of building floor space is resi-
19 dential.

20 (8) STATE ENERGY PROGRAM.—The term
21 “State Energy Program” means the program under
22 part D of title III of the Energy Policy and Con-
23 servation Act (42 U.S.C. 6321 et seq.).

24 (b) ESTABLISHMENT.—The Administrator shall de-
25 velop and implement, in consultation with the Secretary

1 of Energy, standards for a national energy and environ-
2 mental building retrofit policy for single-family and multi-
3 family residences. The Administrator shall develop and
4 implement, in consultation with the Secretary of Energy
5 and the Director of Commercial High-Performance Green
6 Buildings, standards for a national energy and environ-
7 mental building retrofit policy for nonresidential buildings.
8 The programs to implement the residential and nonresi-
9 dential policies based on the standards developed under
10 this section shall together be known as the Retrofit for
11 Energy and Environmental Performance (REEP) pro-
12 gram.

13 (c) PURPOSE.—The purpose of the REEP program
14 is to facilitate the retrofitting of existing buildings across
15 the United States to achieve maximum cost-effective en-
16 ergy efficiency improvements and significant improve-
17 ments in water use and other environmental attributes.

18 (d) FEDERAL ADMINISTRATION.—

19 (1) EXISTING PROGRAMS.—In creating and op-
20 erating the REEP program—

21 (A) the Administrator shall make appro-
22 priate use of existing programs, including the
23 Energy Star program and in particular the En-
24 vironmental Protection Agency Energy Star for
25 Buildings program; and

1 (B) the Administrator shall consult with
2 the Secretary of Energy regarding appropriate
3 use of existing programs, including delegating
4 authority to the Director of Commercial High-
5 Performance Green Buildings appointed under
6 section 421 of the Energy Independence and
7 Security Act of 2007 (42 U.S.C. 17081).

8 (2) CONSULTATION AND COORDINATION.—The
9 Administrator shall consult with and coordinate with
10 the and the Secretary of Energy and the Secretary
11 of Housing and Urban Development in carrying out
12 the REEP program with regard to retrofitting of
13 public housing and assisted housing. As a result of
14 such consultation, the Administrator shall establish
15 standards to ensure that retrofits of public housing
16 and assisted housing funded pursuant to this section
17 are cost-effective, including opportunities to address
18 the potential co-performance of repair and replace-
19 ment needs that may be supported with other forms
20 of Federal assistance. Owners of public housing or
21 assisted housing receiving funding through the
22 REEP program shall agree to continue to provide
23 affordable housing consistent with the provisions of
24 the authorizing legislation governing each program
25 for an additional period commensurate with the

1 funding received, as determined in accordance with
2 guidelines established by the Secretary of Housing
3 and Urban Development.

4 (3) ASSISTANCE.—The Administrator shall pro-
5 vide consultation and assistance to State and local
6 agencies for the establishment of revolving loan
7 funds, loan guarantees, or other forms of financial
8 assistance under this section.

9 (e) STATE AND LOCAL ADMINISTRATION.—

10 (1) DESIGNATION AND DELEGATION.—A State
11 may designate one or more agencies or entities, in-
12 cluding those regulated by the State, to carry out
13 the purposes of this section, but shall designate one
14 entity or individual as the principal point of contact
15 for the Administrator regarding the REEP Pro-
16 gram. The designated State agency, agencies, or en-
17 tities may delegate performance of appropriate ele-
18 ments of the REEP program, upon their request
19 and subject to State law, to counties, municipalities,
20 appropriate public agencies, and other divisions of
21 local government, as well as to entities regulated by
22 the State. In making any such designation or delega-
23 tion, a State shall give priority to entities that ad-
24 minister existing comprehensive retrofit programs,
25 including those under the supervision of State utility

1 regulators. States shall maintain responsibility for
2 meeting the standards and requirements of the
3 REEP program. In any State that elects not to ad-
4 minister the REEP program, a unit of local govern-
5 ment may propose to do so within its jurisdiction,
6 and if the Administrator finds that such local gov-
7 ernment is capable of administering the program,
8 the Administrator may provide assistance to that
9 local government, prorated according to the popu-
10 lation of the local jurisdiction relative to the popu-
11 lation of the State, for purposes of the REEP pro-
12 gram.

13 (2) EMPLOYMENT.—States and local govern-
14 ment entities may administer a REEP program in
15 a manner that authorizes public or regulated inves-
16 tor-owned utilities, building auditors and inspectors,
17 contractors, nonprofit organizations, for-profit com-
18 panies, and other entities to perform audits and ret-
19 rofit services under this section. A State may pro-
20 vide incentives for retrofits without direct participa-
21 tion by the State or its agents, so long as the result-
22 ing savings are measured and verified. A State or
23 local administrator of a REEP program shall seek
24 to ensure that sufficient qualified entities are avail-
25 able to support retrofit activities so that building

1 owners have a competitive choice among qualified
2 auditors, raters, contractors, and providers of serv-
3 ices related to retrofits. Nothing in this section is in-
4 tended to deny the right of a building owner to
5 choose the specific providers of retrofit services to
6 engage for a retrofit project in that owner's building.

7 (3) EQUAL INCENTIVES FOR EQUAL IMPROVE-
8 MENT.—In general, the States should strive to offer
9 the same levels of incentives for retrofits that meet
10 the same efficiency improvement goals, regardless of
11 whether the State, its agency or entity, or the build-
12 ing owner has conducted the retrofit achieving the
13 improvement, provided the improvement is measured
14 and verified.

15 (f) ELEMENTS OF REEP PROGRAM.—The Adminis-
16 trator, in consultation with the Secretary of Energy, shall
17 establish goals, guidelines, practices, and standards for ac-
18 complishing the purpose stated in subsection (c), and shall
19 annually review and, as appropriate, revise such goals,
20 guidelines, practices, and standards. The program under
21 this section shall include the following:

22 (1) Residential Energy Services Network
23 (RESNET) or Building Performance Institute
24 (BPI) analyst certification of residential building en-
25 ergy and environment auditors, inspectors, and rat-

1 ers, or an equivalent certification system as deter-
2 mined by the Administrator.

3 (2) BPI certification or licensing by States of
4 residential building energy and environmental ret-
5 rofit contractors, or an equivalent certification or li-
6 censing system as determined by the Administrator.

7 (3) Provision of BPI, RESNET, or other ap-
8 propriate information on equipment and procedures,
9 as determined by the Administrator, that contractors
10 can use to test the energy and environmental effi-
11 ciency of buildings effectively (such as infrared pho-
12 tography and pressurized testing, and tests for water
13 use and indoor air quality).

14 (4) Provision of clear and effective materials to
15 describe the testing and retrofit processes for typical
16 buildings.

17 (5) Guidelines for offering and managing pre-
18 scriptive building retrofit programs and perform-
19 ance-based building retrofit programs for residential
20 and nonresidential buildings.

21 (6) Guidelines for applying recommissioning
22 and retrocommissioning principles to improve a
23 building's operations and maintenance procedures.

24 (7) A requirement that building retrofits con-
25 ducted pursuant to a REEP program utilize, espe-

1 cially in all air-conditioned buildings, roofing mate-
2 rials with high solar energy reflectance, unless inap-
3 propriate due to green roof management, solar en-
4 ergy production, or for other reasons identified by
5 the Administrator, in order to reduce energy con-
6 sumption within the building, increase the albedo of
7 the building's roof, and decrease the heat island ef-
8 fect in the area of the building, without reduction of
9 otherwise applicable ceiling insulation standards.

10 (8) Determination of energy savings in a per-
11 formance-based building retrofit program through—

12 (A) for residential buildings, comparison of
13 before and after retrofit scores on the Home
14 Energy Rating System (HERS) Index, where
15 the final score is produced by an objective third
16 party;

17 (B) for nonresidential buildings, Environ-
18 mental Protection Agency Portfolio Manager
19 benchmarks; or

20 (C) for either residential or nonresidential
21 buildings, use of an Administrator-approved
22 simulation program by a contractor with the
23 appropriate certification, subject to appropriate
24 software standards and verification of at least

1 15 percent of all work done, or such other per-
2 centage as the Administrator may determine.

3 (9) Guidelines for utilizing the Energy Star
4 Portfolio Manager, the Home Energy Rating System
5 (HERS) rating system, Home Performance with En-
6 ergy Star program approvals, and any other tools
7 associated with the retrofit program.

8 (10) Requirements and guidelines for post-ret-
9 rofit inspection and confirmation of work and energy
10 savings.

11 (11) Detailed descriptions of funding options
12 for the benefit of State and local governments, along
13 with model forms, accounting aids, agreements, and
14 guides to best practices.

15 (12) Guidance on opportunities for—

16 (A) rating or certifying retrofitted build-
17 ings as Energy Star buildings, or as green
18 buildings under a recognized green building rat-
19 ing system;

20 (B) assigning Home Energy Rating Sys-
21 tem (HERS) or similar ratings; and

22 (C) completing any applicable building per-
23 formance labels.

1 (13) Sample materials for publicizing the pro-
2 gram to building owners, including public service an-
3 nouncements and advertisements.

4 (14) Processes for tracking the numbers and lo-
5 cations of buildings retrofitted under the REEP pro-
6 gram, with information on projected and actual sav-
7 ings of energy and its value over time.

8 (g) REQUIREMENTS.—As a condition of receiving as-
9 sistance for the REEP program pursuant to this Act, a
10 State or qualifying local government shall—

11 (1) adopt the standards for training, certifi-
12 cation of contractors, certification of buildings, and
13 post-retrofit inspection as developed by the Adminis-
14 trator for residential and nonresidential buildings,
15 respectively, except as necessary to match local con-
16 ditions, needs, efficiency opportunities, or other local
17 factors, or to accord with State laws or regulations,
18 and then only after the Administrator approves such
19 a variance;

20 (2) establish fiscal controls and accounting pro-
21 cedures (which conform to generally accepted gov-
22 ernment accounting principles) sufficient to ensure
23 proper accounting during appropriate accounting pe-
24 riods for payments received and disbursements, and
25 for fund balances; and

1 (3) agree to make 10 percent of assistance re-
2 ceived to carry out this section available on a pref-
3 erential basis for retrofit projects proposed for pub-
4 lic housing and assisted housing, provided that—

5 (A) none of such funds shall be used for
6 demolition of such housing;

7 (B) such retrofits not shall not be used to
8 justify any increase in rents charged to resi-
9 dents of such housing; and

10 (C) owners of such housing shall agree to
11 continue to provide affordable housing con-
12 sistent with the provisions of the authorizing
13 legislation governing each program for an addi-
14 tional period commensurate with the funding
15 received; and

16 (4) the Administrator shall conduct or require
17 each State to have such independent financial audits
18 of REEP-related funding as the Administrator con-
19 siders necessary or appropriate to carry out the pur-
20 poses of this section.

21 (h) **OPTIONS TO SUPPORT REEP PROGRAM.**—The as-
22 sistance provided under this section shall support the im-
23 plementation through State REEP programs of alternate
24 means of creating incentives for, or reducing financial bar-

1 riers to, improved energy and environmental performance
2 in buildings, consistent with this section, including—

3 (1) implementing prescriptive building retrofit
4 programs and performance-based building retrofit
5 programs;

6 (2) providing credit enhancement, interest rate
7 subsidies, loan guarantees, or other credit support;

8 (3) providing initial capital for public revolving
9 fund financing of retrofits;

10 (4) providing funds to support utility-operated
11 retrofit programs with repayments over time
12 through utility rates, calibrated to create net positive
13 cash flow to the building owner, and transferable
14 from one building owner to the next with the build-
15 ing's utility services;

16 (5) providing funds to local government pro-
17 grams to provide REEP services and financial as-
18 sistance; and

19 (6) other means proposed by State and local
20 agencies, subject to the approval of the Adminis-
21 trator.

22 (i) SUPPORT FOR PROGRAM.—

23 (1) INITIAL AWARD LIMITS.—Except as pro-
24 vided in paragraph (2), State and local REEP pro-
25 grams may make per-building direct expenditures

1 for retrofit improvements, or their equivalent in indi-
2 rect or other forms of financial support, from funds
3 made available to carry out this section, in amounts
4 not to exceed the following amounts per unit:

5 (A) RESIDENTIAL BUILDING PROGRAM.—

6 (i) AWARDS.—For residential build-
7 ings—

8 (I) support for a free or low-cost
9 detailed building energy audit that
10 prescribes measures sufficient to
11 achieve at least a 20 percent reduc-
12 tion in energy use, by providing an in-
13 centive equal to the documented cost
14 of such audit, but not more than
15 \$200, in addition to any earned by
16 achieving a 20 percent or greater effi-
17 ciency improvement;

18 (II) a total of \$1,000 for a com-
19 bination of measures, prescribed in an
20 audit conducted under subclause (I),
21 designed to reduce energy consump-
22 tion by more than 10 percent, and
23 \$2,000 for a combination of measures
24 prescribed in such an audit, designed

1 to reduce energy consumption by more
2 than 20 percent;

3 (III) \$3,000 for demonstrated
4 savings of 20 percent, pursuant to a
5 performance-based building retrofit
6 program; and

7 (IV) \$1,000 for each additional 5
8 percentage points of energy savings
9 achieved beyond savings for which
10 funding is provided under subclause
11 (II) or (III).

12 Funding shall not be provided under
13 clauses (II) and (III) for the same energy
14 savings.

15 (ii) MAXIMUM PERCENTAGE.—Awards
16 under clause (i) shall not exceed 50 per-
17 cent of retrofit costs for each building. For
18 buildings with multiple residential units,
19 awards under clause (i) shall not be great-
20 er than 50 percent of the total cost of ret-
21 rofitting the building, prorated among indi-
22 vidual residential units on the basis of rel-
23 ative costs of the retrofit. In the case of
24 public housing and assisted housing, the
25 50 percent contribution matching the con-

1 prescribes, as part of a energy-reduc-
2 ing measures sufficient to achieve at
3 least a 20 percent reduction in energy
4 use, by providing an incentive equal to
5 the documented cost of such audit,
6 but not more than \$500, in addition
7 to any award earned by achieving a
8 20 percent or greater efficiency im-
9 provement;

10 (II) \$0.15 per square foot of ret-
11 rofit area for demonstrated energy use
12 reductions from 20 percent to 30 per-
13 cent;

14 (III) \$0.75 per square foot for
15 demonstrated energy use reductions
16 from 30 percent to 40 percent;

17 (IV) \$1.60 per square foot for
18 demonstrated energy use reductions
19 from 40 percent to 50 percent; and

20 (V) \$2.50 per square foot for
21 demonstrated energy use reductions
22 exceeding 50 percent.

23 (ii) MAXIMUM PERCENTAGE.—

24 Amounts provided under subclauses (II)
25 through (V) of clause (i) combined shall

1 not exceed 50 percent of the total retrofit
2 cost of a building. In nonresidential build-
3 ings with multiple units, such awards shall
4 be prorated among individual units on the
5 basis of relative costs of the retrofit.

6 (iii) ADDITIONAL AWARDS.—Addi-
7 tional awards may be provided, for build-
8 ings achieving at least 20 percent energy
9 savings using funding provided under
10 clause (i), as follows:

11 (I) WATER.—For purposes of in-
12 creasing energy efficiency, grants may
13 be made for whole building potable
14 water use reduction (using an appro-
15 priate method approved by the Ad-
16 ministrator) for up to 50 percent of
17 the total retrofit cost, including
18 amounts up to—

19 (aa) \$24.00 per thousand
20 gallons per year of potable water
21 savings of 40 percent or more;

22 (bb) \$27.00 per thousand
23 gallons per year of potable water
24 savings of 50 percent or more;
25 and

1 (cc) \$30.00 per thousand
2 gallons per year of potable water
3 savings of 60 percent or more.

4 (II) ENVIRONMENTAL IMPROVE-
5 MENTS.—Additional awards of up to
6 \$1,000 may be granted for the inclu-
7 sion of other environmental attributes
8 that the Administrator, in consulta-
9 tion with the Secretary, identifies as
10 contributing to energy efficiency. Such
11 attributes may include, but are not
12 limited to waste diversion and the use
13 of environmentally preferable mate-
14 rials (including salvaged, renewable,
15 or recycled materials, and materials
16 with no or low-VOC content). The Ad-
17 ministrator may recommend that
18 States develop such standards as are
19 necessary to account for local or re-
20 gional conditions that may affect the
21 feasibility or availability of identified
22 resources and attributes.

23 (iv) INDOOR AIR QUALITY MINIMUM.—
24 Nonresidential buildings receiving incen-
25 tives under this section must satisfy at a

1 minimum the most recent version of
2 ASHRAE Standard 62.1 for ventilation, or
3 the equivalent as determined by the Ad-
4 ministrator. A State may issue a waiver
5 from this requirement to a building project
6 on a showing that such compliance is in-
7 feasible due to the physical constraints of
8 the building's existing ventilation system,
9 or such other limitations as may be speci-
10 fied by the Administrator.

11 (C) DISASTER DAMAGED BUILDINGS.—Any
12 source of funds, including Federal funds pro-
13 vided through the Robert T. Stafford Disaster
14 Relief and Emergency Assistance Act, shall
15 qualify as the building owner's 50 percent con-
16 tribution, in order to match the contribution of
17 REEP funds, so long as the REEP funds are
18 only used to improve the energy efficiency of
19 the buildings being reconstructed. In addition,
20 the appropriate Federal agencies providing as-
21 sistance to building owners through the Robert
22 T. Stafford Disaster Relief and Emergency As-
23 sistance Act shall make information available,
24 following a disaster, to building owners rebuild-
25 ing disaster damaged buildings with assistance

1 from the Act, that REEP funds may be used
2 for energy efficiency improvements.

3 (D) HISTORIC BUILDINGS.—Notwith-
4 standing subparagraphs (A) and (B), a building
5 in or eligible for the National Register of His-
6 toric Places shall be eligible for awards under
7 this paragraph in amounts up to 120 percent of
8 the amounts set forth in subparagraphs (A) and
9 (B).

10 (E) SUPPLEMENTAL SUPPORT.—State and
11 local governments may supplement the per-
12 building expenditures under this paragraph
13 with funding from other sources.

14 (2) ADJUSTMENT.—The Administrator may ad-
15 just the specific dollar amounts provided under para-
16 graph (1) in years subsequent to the second year
17 after the date of enactment of this Act, and every
18 2 years thereafter, as the Administrator determines
19 necessary to achieve optimum cost-effectiveness and
20 to maximize incentives to achieve energy efficiency
21 within the total building award amounts provided in
22 that paragraph, and shall publish and hold constant
23 such revised limits for at least 2 years.

24 (j) REPORT TO CONGRESS.—The Administrator shall
25 conduct an annual assessment of the achievements of the

1 REEP program in each State, shall prepare an annual re-
2 port of such achievements and any recommendations for
3 program modifications, and shall provide such report to
4 Congress at the end of each fiscal year during which fund-
5 ing or other resources were made available to the States
6 for the REEP Program.

7 **Subtitle G—Emission Reductions**
8 **From Public Transportation Ve-**
9 **hicles**

10 **SEC. 171. SHORT TITLE.**

11 This subtitle may be cited as the “Green Taxis Act
12 of 2009”.

13 **SEC. 172. STATE FUEL ECONOMY REGULATION FOR TAXI-**
14 **CABS.**

15 Section 32919 of title 49, United States Code, is
16 amended by adding at the end the following new sub-
17 section:

18 “(d) TAXICABS.—Notwithstanding subsection (a), a
19 State or political subdivision of a State may prescribe re-
20 quirements for fuel economy for taxicabs and other auto-
21 mobiles if such requirements are at least as stringent as
22 applicable Federal requirements and if such taxicabs and
23 other automobiles—

1 “(1) are automobiles that are capable of trans-
2 porting not more than 10 individuals, including the
3 driver;

4 “(2) are commercially available or are designed
5 and manufactured pursuant to a contract with such
6 State or political subdivision of such State;

7 “(3) are operated for hire pursuant to an oper-
8 ating or regulatory license, permit, or other author-
9 ization issued by such State or political subdivision
10 of such State;

11 “(4) provide local transportation for a fare de-
12 termined on the basis of the time or distance trav-
13 eled or a combination of time and distance traveled;
14 and

15 “(5) do not exclusively provide transportation to
16 and from airports.”.

17 **SEC. 173. STATE REGULATION OF MOTOR VEHICLE EMIS-**
18 **SIONS FOR TAXICABS.**

19 Section 209 of the Clean Air Act (42 U.S.C. 7543)
20 is amended by adding at the end the following new sub-
21 section:

22 “(f) TAXICABS.—(1) Notwithstanding subsection (a),
23 a State or political subdivision thereof may adopt and en-
24 force standards for the control of emissions from new
25 motor vehicles that are taxicabs and other vehicles if such

1 standards will be, in the aggregate, at least as protective
2 of public health and welfare as applicable Federal stand-
3 ards and if such taxicabs and other vehicles—

4 “(A) are passenger motor vehicles that are
5 capable of transporting not more than 10 indi-
6 viduals, including the driver;

7 “(B) are commercially available or are de-
8 signed and manufactured pursuant to a con-
9 tract with such State or political subdivision
10 thereof;

11 “(C) are operated for hire pursuant to an
12 operating or regulatory license, permit, or other
13 authorization issued by such State or political
14 subdivision thereof;

15 “(D) provide local transportation for a fare
16 determined on the basis of the time or distance
17 traveled or a combination of time and distance
18 traveled; and

19 “(E) do not exclusively provide transpor-
20 tation to and from airports.

21 “(2) If each standard of a State or political subdivi-
22 sion thereof is at least as stringent as the comparable ap-
23 plicable Federal standard, such standard of such State or
24 political subdivision thereof shall be deemed at least as

1 protective of health and welfare as such Federal standards
2 for purposes of this subsection.”.

3 **Subtitle H—Clean Energy and**
4 **Natural Gas**

5 **SEC. 181. CLEAN ENERGY AND ACCELERATED EMISSION**
6 **REDUCTION PROGRAM.**

7 (a) ESTABLISHMENT.—

8 (1) IN GENERAL.—The Administrator shall es-
9 tablish a program to promote dispatchable power
10 generation projects that can accelerate the reduction
11 of power sector carbon dioxide and other greenhouse
12 gas emissions.

13 (2) USE OF FUNDS.—Funds provided under
14 this section shall be used by the Administrator to
15 make incentive payments to owners or operators of
16 eligible projects.

17 (b) REGULATIONS.—Not later than 90 days after the
18 date of enactment of this Act, the Administrator shall pro-
19 mulgate regulations providing for incentives, pursuant to
20 the requirements of this section.

21 (c) GOAL.—Not later than 3 years after the date of
22 enactment of this Act, the Administrator shall provide in-
23 centives for eligible projects that generate 300,000
24 gigawatt-hours of electricity per year.

1 (d) CRITERIA FOR ELIGIBLE PROJECTS.—To be eli-
2 gible for funding under this section a project must—

3 (1) reduce emissions below the 2007 average
4 greenhouse gas emissions per megawatt-hour of the
5 United States electric power sector by the quantity
6 specified in subsection (f); and

7 (2) not receive an investment or production
8 credit in—

9 (A) the year in which the project is placed
10 in service; or

11 (B) calendar year 2009, notwithstanding
12 the year in which the project was placed in
13 service.

14 (e) PRIORITY.—The Administrator shall give priority
15 to eligible projects from the following categories:

16 (1) Power generation projects designed to inte-
17 grate intermittent renewable power into the bulk-
18 power system.

19 (2) Energy storage projects used to support re-
20 newable energy.

21 (3) Power generation projects with carbon cap-
22 ture and sequestration that are not eligible for other
23 assistance under this Act.

202

1 (4) Projects that achieve the greatest reduction
2 in greenhouse gas emissions per dollar of incentive
3 payment.

4 (f) EMISSION REDUCTION CRITERIA.—For the pur-
5 poses of subsection (d), the applicable emission reduction
6 quantity shall be determined in accordance with the fol-
7 lowing table:

Calendar years	Percentage below 2007 average green- house gas emissions per MWh of United States electric power sector
2010 through 2020	25 percent
2021 through 2025	40 percent
2026 through 2030	65 percent

8 (g) AUTHORIZATION OF APPROPRIATIONS.—There
9 are authorized to be appropriated to the Administrator
10 such sums as are necessary to carry out this section for
11 each of fiscal years 2010 through 2030.

12 **SEC. 182. ADVANCED NATURAL GAS TECHNOLOGIES.**

13 (a) DEFINITIONS.—In this section:

14 (1) CORPORATION.—

15 (A) IN GENERAL.—The term “corpora-
16 tion” means any corporation, joint-stock com-
17 pany, partnership, limited liability company, as-
18 sociation, business trust, or other organized
19 group of persons, regardless of incorporation.

20 (B) EXCLUSION.—The term “corporation”
21 does not include a municipality.

22 (2) ELIGIBLE ENTITY.—

1 (A) IN GENERAL.—The term “eligible enti-
2 ty” means an entity that is eligible to receive a
3 grant under subsection (b).

4 (B) INCLUSIONS.—The term “eligible enti-
5 ty” includes a corporation, an eligible research
6 entity, an industry entity, a municipality, a mu-
7 nicipal natural gas distribution system, and a
8 natural gas distribution company.

9 (3) ELIGIBLE RESEARCH ENTITY.—

10 (A) IN GENERAL.—The term “eligible re-
11 search entity” means an entity that is experi-
12 enced in planning, conducting, and imple-
13 menting natural gas research, development,
14 demonstration, and deployment projects.

15 (B) INCLUSIONS.—The term “eligible re-
16 search entity” includes a research institution
17 and an institution of higher education.

18 (4) INDUSTRY ENTITY.—

19 (A) IN GENERAL.—The term “industry en-
20 tity” means the persons and municipalities col-
21 lectively engaged in the delivery of natural gas
22 for consumption in the United States (such as
23 natural gas distribution companies and munic-
24 ipal natural gas distribution systems).

1 (B) EXCLUSION.—The term “industry en-
2 tity” does not include any natural gas cus-
3 tomer.

4 (5) MUNICIPALITY.—The term “municipality”
5 means a city, county, or other political subdivision or
6 agency of a State.

7 (6) MUNICIPAL NATURAL GAS DISTRIBUTION
8 SYSTEM.—The term “municipal natural gas distribu-
9 tion system” means a municipality engaged in the
10 business of delivering natural gas for consumption to
11 residential, commercial, industrial, and other natural
12 gas customers.

13 (7) NATURAL GAS.—

14 (A) IN GENERAL.—The term “natural
15 gas” means a mixture of hydrocarbon and non-
16 hydrocarbon gases, primarily methane, that
17 have been produced from geological formations
18 or by any other means.

19 (B) INCLUSION.—The term “natural gas”
20 includes renewable biogas.

21 (8) NATURAL GAS DISTRIBUTION COMPANY.—
22 The term “natural gas distribution company” means
23 a person engaged in the business of distributing nat-
24 ural gas for consumption to residential, commercial,
25 industrial, or other natural gas customers.

1 (b) GRANT PROGRAMS.—

2 (1) NATURAL GAS ELECTRICITY GENERATION
3 GRANTS.—The Administrator, in consultation with
4 Secretary of Energy, may provide to eligible entities
5 research and development grants to support the de-
6 ployment of low greenhouse-gas-emitting end-use
7 technologies, including carbon capture and seques-
8 tration technologies, for natural gas electricity gen-
9 eration.

10 (2) NATURAL GAS RESIDENTIAL AND COMMER-
11 CIAL TECHNOLOGY GRANTS.—The Administrator
12 shall establish a program to provide to eligible enti-
13 ties grants to advance the commercial demonstration
14 or early development of low greenhouse-gas-emitting
15 end-use technologies fueled by natural gas, including
16 carbon capture and storage, for residential and com-
17 mercial purposes, through research, development,
18 demonstration, and deployment of those tech-
19 nologies.

20 (c) REPORTING.—Not later than 180 days after the
21 date of enactment of this Act, and every 180 days there-
22 after, the Secretary of Energy shall submit to the Com-
23 mittee on Energy and Commerce of the House of Rep-
24 resentatives and the Senate Committees on Energy and
25 Natural Resources and Environment and Public Works of

1 the Senate a report that describes the status and results
2 of activities carried out under subsection (b).

3 (d) AUTHORIZATION.—There are authorized to be ap-
4 propriated such sums as are necessary to carry out this
5 section.

6 **TITLE II—RESEARCH**

7 **Subtitle A—Energy Research**

8 **SEC. 201. ADVANCED ENERGY RESEARCH.**

9 (a) IN GENERAL.—The Administrator shall establish
10 a program to provide grants for advanced energy research.

11 (b) DISTRIBUTION.—The Administrator shall dis-
12 tribute grants on a competitive basis to institutions of
13 higher education, companies, research foundations, trade
14 and industry research collaborations, or consortia of such
15 entities, or other appropriate research and development
16 entities.

17 (c) SELECTION OF PROPOSALS.—In selecting pro-
18 posals for funding under this section, the Administrator
19 shall prioritize applications that—

20 (1) enhance the economic and energy security
21 of the United States through the development of en-
22 ergy technologies that result in—

23 (A) reductions of imports of energy from
24 foreign sources;

1 (B) reductions of energy-related emissions,
2 including greenhouse gases; and

3 (C) improvements in the energy efficiency
4 of all economic sectors; and

5 (2) ensure that the United States maintains a
6 technological lead in developing and deploying ad-
7 vanced energy technologies.

8 (d) RESPONSIBILITIES.—The Administrator shall be
9 responsible for assessing the success of programs and ter-
10 minating programs carried out under this section that are
11 not achieving the goals of the programs.

12 (e) ASSISTANCE.—Assistance provided under this
13 section shall be used to supplement, and not to supplant,
14 any other Federal resources available to carry out activi-
15 ties described in this section.

16 (f) AUTHORIZATION.—There are authorized to be ap-
17 propriated such sums as are necessary to carry out this
18 section.

19 **Subtitle B—Drinking Water Adap-**
20 **tation, Technology, Education,**
21 **and Research**

22 **SEC. 211. EFFECTS OF CLIMATE CHANGE ON DRINKING**
23 **WATER UTILITIES.**

24 (a) FINDINGS.—Congress finds that—

1 (1) the consensus among climate scientists is
2 overwhelming that climate change is occurring more
3 rapidly than can be attributed to natural causes, and
4 that significant impacts to the water supply are al-
5 ready occurring;

6 (2) among the first and most critical of those
7 impacts will be change to patterns of precipitation
8 around the world, which will affect water availability
9 for the most basic drinking water and domestic
10 water needs of populations in many areas of the
11 United States;

12 (3) drinking water utilities throughout the
13 United States, as well as those in Europe, Australia,
14 and Asia, are concerned that extended changes in
15 precipitation will lead to extended droughts;

16 (4) supplying water is highly energy-intensive
17 and will become more so as climate change forces
18 more utilities to turn to alternative supplies;

19 (5) energy production consumes a significant
20 percentage of the fresh water resources of the
21 United States;

22 (6) since 2003, the drinking water industry of
23 the United States has sponsored, through a non-
24 profit water research foundation, various studies to

1 assess the impacts of climate change on drinking
2 water supplies;

3 (7) those studies demonstrate the need for a
4 comprehensive program of research into the full
5 range of impacts on drinking water utilities, includ-
6 ing impacts on water supplies, facilities, and cus-
7 tomers;

8 (8) that nonprofit water research foundation is
9 also coordinating internationally with other drinking
10 water utilities on shared research projects and has
11 hosted international workshops with counterpart Eu-
12 ropean and Asian water research organizations to
13 develop a unified research agenda for applied re-
14 search on adaptive strategies to address climate
15 change impacts;

16 (9) research data in existence as of the date of
17 enactment of this Act—

18 (A) summarize the best available scientific
19 evidence on climate change;

20 (B) identify the implications of climate
21 change for the water cycle and the availability
22 and quality of water resources; and

23 (C) provide general guidance on planning
24 and adaptation strategies for water utilities;
25 and

1 (10) given uncertainties about specific climate
2 changes in particular areas, drinking water utilities
3 need to prepare for a wider range of likely possibili-
4 ties in managing and delivery of water.

5 (b) IN GENERAL.—The Administrator, in cooperation
6 with the Secretary of Commerce, the Secretary of Energy,
7 and the Secretary of the Interior, shall establish and pro-
8 vide funding for a program of directed and applied re-
9 search, to be conducted through a nonprofit drinking
10 water research foundation and sponsored by water utili-
11 ties, to assist the utilities in adapting to the effects of cli-
12 mate change.

13 (c) RESEARCH AREAS.—The research conducted in
14 accordance with subsection (b) shall include research
15 into—

16 (1) water quality impacts and solutions, includ-
17 ing research—

18 (A) to address probable impacts on raw
19 water quality resulting from—

20 (i) erosion and turbidity from extreme
21 precipitation events;

22 (ii) watershed vegetation changes; and

23 (iii) increasing ranges of pathogens,
24 algae, and nuisance organisms resulting
25 from warmer temperatures; and

1 (B) on mitigating increasing damage to
2 watersheds and water quality by evaluating ex-
3 treme events, such as wildfires and hurricanes,
4 to learn and develop management approaches to
5 mitigate—

6 (i) permanent watershed damage;

7 (ii) quality and yield impacts on
8 source waters; and

9 (iii) increased costs of water treat-
10 ment;

11 (2) impacts on groundwater supplies from car-
12 bon sequestration, including research to evaluate po-
13 tential water quality consequences of carbon seques-
14 tration in various regional aquifers, soil conditions,
15 and mineral deposits;

16 (3) water quantity impacts and solutions, in-
17 cluding research—

18 (A) to evaluate climate change impacts on
19 water resources throughout hydrological basins
20 of the United States;

21 (B) to improve the accuracy and resolution
22 of climate change models at a regional level;

23 (C) to identify and explore options for in-
24 creasing conjunctive use of aboveground and
25 underground storage of water; and

1 (D) to optimize operation of existing and
2 new reservoirs in diminished and erratic periods
3 of precipitation and runoff;

4 (4) infrastructure impacts and solutions for
5 water treatment and wastewater treatment facilities
6 and underground pipelines, including research—

7 (A) to evaluate and mitigate the impacts of
8 sea level rise on—

9 (i) near-shore facilities;

10 (ii) soil drying and subsidence;

11 (iii) reduced flows in water and waste-
12 water pipelines; and

13 (iv) extreme flows in wastewater sys-
14 tems; and

15 (B) on ways of increasing the resilience of
16 existing infrastructure, planning cost-effective
17 responses to adapt to climate change, and de-
18 veloping new design standards for future infra-
19 structure that include the use of energy con-
20 servation measures and renewable energy in
21 new construction to the maximum extent prac-
22 ticable;

23 (5) desalination, water reuse, and alternative
24 supply technologies, including research—

1 (A) to improve and optimize existing mem-
2 brane technologies, and to identify and develop
3 breakthrough technologies, to enable the use of
4 seawater, brackish groundwater, treated waste-
5 water, and other impaired sources;

6 (B) into new sources of water through
7 more cost-effective water treatment practices in
8 recycling and desalination; and

9 (C) to improve technologies for use in—

10 (i) managing and minimizing the vol-
11 ume of desalination and reuse concentrate
12 streams; and

13 (ii) minimizing the environmental im-
14 pacts of seawater intake at desalination fa-
15 cilities;

16 (6) energy efficiency and greenhouse gas mini-
17 mization, including research—

18 (A) on optimizing the energy efficiency of
19 water supply and wastewater operations and
20 improving water efficiency in energy production
21 and management; and

22 (B) to identify and develop renewable, car-
23 bon-neutral energy options for the water supply
24 and wastewater industry;

1 (7) regional and hydrological basin cooperative
2 water management solutions, including research
3 into—

4 (A) institutional mechanisms for greater
5 regional cooperation and use of water ex-
6 changes, banking, and transfers; and

7 (B) the economic benefits of sharing risks
8 of shortage across wider areas;

9 (8) utility management, decision support sys-
10 tems, and water management models, including re-
11 search—

12 (A) into improved decision support systems
13 and modeling tools for use by water utility
14 managers to assist with increased water supply
15 uncertainty and adaptation strategies posed by
16 climate change;

17 (B) to provide financial tools, including
18 new rate structures, to manage financial re-
19 sources and investments, because increased con-
20 servation practices may diminish revenue and
21 increase investments in infrastructure; and

22 (C) to develop improved systems and mod-
23 els for use in evaluating—

1 (i) successful alternative methods for
2 conservation and demand management;
3 and

4 (ii) climate change impacts on
5 groundwater resources;

6 (9) reducing greenhouse gas emissions and im-
7 proving energy demand management, including re-
8 search to improve energy efficiency in water collec-
9 tion, production, transmission, treatment, distribu-
10 tion, and disposal to provide more sustainability and
11 means to assist drinking water utilities in reducing
12 the production of greenhouse gas emissions in the
13 collection, production, transmission, treatment, dis-
14 tribution, and disposal of drinking water;

15 (10) water conservation and demand manage-
16 ment, including research—

17 (A) to develop strategic approaches to
18 water demand management that offer the low-
19 est-cost, noninfrastructural options to serve
20 growing populations or manage declining sup-
21 plies, primarily through—

22 (i) efficiencies in water use and re-
23 allocation of the saved water;

24 (ii) demand management tools;

25 (iii) economic incentives; and

- 1 (iv) water-saving technologies; and
- 2 (B) into efficiencies in water management
- 3 through integrated water resource management
- 4 that incorporates—
- 5 (i) supply-side and demand-side proc-
- 6 esses;
- 7 (ii) continuous adaptive management;
- 8 and
- 9 (iii) the inclusion of stakeholders in
- 10 decisionmaking processes; and
- 11 (11) communications, education, and public ac-
- 12 ceptance, including research—
- 13 (A) into improved strategies and ap-
- 14 proaches for communicating with customers, de-
- 15 cisionmakers, and other stakeholders about the
- 16 implications of climate change on water supply
- 17 and water management;
- 18 (B) to develop effective communication ap-
- 19 proaches—
- 20 (i) to gain public acceptance of alter-
- 21 native water supplies and new policies and
- 22 practices, including conservation and de-
- 23 mand management; and
- 24 (ii) to gain public recognition and ac-
- 25 ceptance of increased costs; and

1 (C) to create and maintain a clearinghouse
2 of climate change information for water utili-
3 ties, academic researchers, stakeholders, gov-
4 ernment agencies, and research organizations.

5 (d) AUTHORIZATION OF APPROPRIATIONS.—There is
6 authorized to be appropriated to carry out this section
7 \$25,000,000 for each of fiscal years 2010 through 2020.

8 **TITLE III—TRANSITION AND**
9 **ADAPTATION**
10 **Subtitle A—Green Jobs and Worker**
11 **Transition**

12 **PART 1—GREEN JOBS**
13 **SEC. 301. CLEAN ENERGY CURRICULUM DEVELOPMENT**
14 **GRANTS.**

15 (a) AUTHORIZATION.—The Secretary of Education is
16 authorized to award grants, on a competitive basis, to eli-
17 gible partnerships to develop programs of study (con-
18 taining the information described in section 122(c)(1)(A)
19 of the Carl D. Perkins Career and Technical Education
20 Act of 2006 (20 U.S.C. 2342)), that are focused on emerg-
21 ing careers and jobs in the fields of clean energy, renew-
22 able energy, energy efficiency, climate change mitigation,
23 and climate change adaptation. The Secretary of Edu-
24 cation shall consult with the Secretary of Labor and the

1 Secretary of Energy prior to the issuance of a solicitation
2 for grant applications.

3 (b) ELIGIBLE PARTNERSHIPS.—For purposes of this
4 section, an eligible partnership shall include—

5 (1) at least 1 local educational agency eligible
6 for funding under section 131 of the Carl D. Per-
7 kins Career and Technical Education Act of 2006
8 (20 U.S.C. 2351) or an area career and technical
9 education school or education service agency de-
10 scribed in such section;

11 (2) at least 1 postsecondary institution eligible
12 for funding under section 132 of such Act (20
13 U.S.C. 2352); and

14 (3) representatives of the community including
15 business, labor organizations, and industry that have
16 experience in fields as described in subsection (a).

17 (c) APPLICATION.—An eligible partnership seeking a
18 grant under this section shall submit an application to the
19 Secretary at such time and in such manner as the Sec-
20 retary may require. Applications shall include—

21 (1) a description of the eligible partners and
22 partnership, the roles and responsibilities of each
23 partner, and a demonstration of each partner's ca-
24 pacity to support the program;

1 (2) a description of the career area or areas
2 within the fields as described in subsection (a) to be
3 developed, the reason for the choice, and evidence of
4 the labor market need to prepare students in that
5 area;

6 (3) a description of the new or existing program
7 of study and both secondary and postsecondary com-
8 ponents;

9 (4) a description of the students to be served by
10 the new program of study;

11 (5) a description of how the program of study
12 funded by the grant will be replicable and dissemi-
13 nated to schools outside of the partnership, including
14 urban and rural areas;

15 (6) a description of applied learning that will be
16 incorporated into the program of study and how it
17 will incorporate or reinforce academic learning;

18 (7) a description of how the program of study
19 will be delivered;

20 (8) a description of how the program will pro-
21 vide accessibility to students, especially economically
22 disadvantaged, low performing, and urban and rural
23 students;

24 (9) a description of how the program will ad-
25 dress placement of students in nontraditional fields

1 as described in section 3(20) of the Carl D. Perkins
2 Career and Technical Education Act of 2006 (20
3 U.S.C. 2302(20)); and

4 (10) a description of how the applicant proposes
5 to consult or has consulted with a labor organiza-
6 tion, labor management partnership, apprenticeship
7 program, or joint apprenticeship and training pro-
8 gram that provides education and training in the
9 field of study for which the applicant proposes to de-
10 velop a curriculum.

11 (d) PRIORITY.—The Secretary shall give priority to
12 applications that—

13 (1) use online learning or other innovative
14 means to deliver the program of study to students,
15 educators, and instructors outside of the partner-
16 ship; and

17 (2) focus on low performing students and spe-
18 cial populations as defined in section 3(29) of the
19 Carl D. Perkins Career and Technical Education
20 Act of 2006 (20 U.S.C. 2302(29)).

21 (e) PEER REVIEW.—The Secretary shall convene a
22 peer review process to review applications for grants under
23 this section and to make recommendations regarding the
24 selection of grantees. Members of the peer review com-
25 mittee shall include—

1 (1) educators who have experience imple-
2 menting curricula with comparable purposes; and

3 (2) business and industry experts in fields as
4 described in subsection (a).

5 (f) USES OF FUNDS.—Grants awarded under this
6 section shall be used for the development, implementation,
7 and dissemination of programs of study (as described in
8 section 122(c)(1)(A) of the Carl D. Perkins Career and
9 Technical Education Act (20 U.S.C. 2342(c)(1)(A))) in
10 career areas related to clean energy, renewable energy, en-
11 ergy efficiency, climate change mitigation, and climate
12 change adaptation.

13 **SEC. 302. DEVELOPMENT OF INFORMATION AND RE-**
14 **SOURCES CLEARINGHOUSE FOR VOCA-**
15 **TIONAL EDUCATION AND JOB TRAINING IN**
16 **RENEWABLE ENERGY SECTORS.**

17 (a) DEVELOPMENT OF CLEARINGHOUSE.—Not later
18 than 18 months after the date of enactment of this Act,
19 the Secretary of Labor, in collaboration with the Secretary
20 of Energy and the Secretary of Education, shall develop
21 an internet based information and resources clearinghouse
22 to aid career and technical education and job training pro-
23 grams for the renewable energy sectors. In establishing
24 the clearinghouse, the Secretary shall—

1 (1) collect and provide information that ad-
2 dresses the consequences of rapid changes in tech-
3 nology and regional disparities for renewable energy
4 training programs and provides best practices for
5 training and education in light of such changes and
6 disparities;

7 (2) place an emphasis on facilitating collabora-
8 tion between the renewable energy industry and job
9 training programs and on identifying industry and
10 technological trends and best practices, to better
11 help job training programs maintain quality and rel-
12 evance; and

13 (3) place an emphasis on assisting programs
14 that cater to high-demand middle-skill, trades, man-
15 ufacturing, contracting, and consulting careers.

16 (b) SOLICITATION AND CONSULTATION.—In devel-
17 oping the clearinghouse pursuant to subsection (a), the
18 Secretary shall solicit information and expertise from busi-
19 nesses and organizations in the renewable energy sector
20 and from institutions of higher education, career and tech-
21 nical schools, and community colleges that provide train-
22 ing in the renewable energy sectors. The Secretary shall
23 solicit a comprehensive peer review of the clearinghouse
24 by such entities not less than once every 2 years. Nothing

1 in this subsection should be interpreted to require the di-
2 vulgence of proprietary or competitive information.

3 (c) CONTENTS OF CLEARINGHOUSE.—

4 (1) SEPARATE SECTION FOR EACH RENEWABLE
5 ENERGY SECTOR.—The clearinghouse shall contain
6 separate sections developed for each of the following
7 renewable energy sectors:

8 (A) Solar energy systems.

9 (B) Wind energy systems.

10 (C) Energy transmission systems.

11 (D) Geothermal systems of energy and
12 heating.

13 (E) Energy efficiency technical training.

14 (2) ADDITIONAL REQUIREMENTS.—In addition
15 to the information required in subsection (a), each
16 section of the clearinghouse shall include information
17 on basic environmental science and processes needed
18 to understand renewable energy systems, Federal
19 government and industry resources, and points of
20 contact to aid institutions in the development of
21 placement programs for apprenticeships and post
22 graduation opportunities, and information and tips
23 about a green workplace, energy efficiency, and rel-
24 evant environmental topics and information on avail-
25 able industry recognized certifications in each area.

1 (d) DISSEMINATION.—The clearinghouse shall be
2 made available via the Internet to the general public. No-
3 tice of the completed clearinghouse and any major revi-
4 sions thereto shall also be provided—

5 (1) to each Member of Congress; and

6 (2) on the websites of the Departments of Edu-
7 cation, Energy, and Labor.

8 (e) REVISION.—The Secretary of Labor shall revise
9 and update the clearinghouse on a regular basis to ensure
10 its relevance.

11 **SEC. 303. GREEN CONSTRUCTION CAREERS DEMONSTRATION PROJECT.**
12

13 (a) ESTABLISHMENT AND AUTHORITY.—The Sec-
14 retary of Labor, in consultation with the Secretary of En-
15 ergy, shall, not later than 180 days after the enactment
16 of this Act, establish a Green Construction Careers dem-
17 onstration project by rules, regulations, and guidance in
18 accordance with the provisions of this section. The purpose
19 of the demonstration project shall be to promote middle
20 class careers and quality employment practices in the
21 green construction sector among targeted workers and to
22 advance efficiency and performance on construction
23 projects related to this Act. In order to advance these pur-
24 poses, the Secretary shall identify projects, including resi-
25 dential retrofitting projects, funded directly by or assisted

1 in whole or in part by or through the Federal Government
2 pursuant to this Act or by any other entity established
3 in accordance with this Act, to which all of the following
4 shall apply.

5 (b) REQUIREMENTS.—The Secretaries may establish
6 such terms and conditions for the demonstration projects
7 as the Secretaries determine are necessary to meet the
8 purposes of subsection (a), including establishing min-
9 imum proportions of hours to be worked by targeted work-
10 ers on such projects. The Secretaries may require the con-
11 tractors and subcontractors performing construction serv-
12 ices on the project to comply with the terms and conditions
13 as a condition of receiving funding or assistance from the
14 Federal Government under this Act.

15 (c) EVALUATION.—The Secretaries shall evaluate the
16 demonstration projects against the purposes of this section
17 at the end of 3 years from initiation of the demonstration
18 project. If the Secretaries determine that the demonstra-
19 tion projects have been successful, the Secretaries may
20 identify further projects to which of the provisions of this
21 section shall apply.

22 (d) GAO REPORT.—The Comptroller General shall
23 prepare and submit a report to the Committee on Health,
24 Education, Labor, and Pensions and the Committee on
25 Energy and Natural Resources of the Senate and the

1 Committee on Education and Labor and the Committee
2 on Energy and Commerce of the House of Representatives
3 not later than 5 years after the date of enactment of this
4 Act, which shall advise the committees of the results of
5 the demonstration projects and make appropriate rec-
6 ommendations.

7 (e) DEFINITION AND DESIGNATION OF TARGETED
8 WORKERS.—As used in this section, the term “targeted
9 worker” means an individual who resides in the same
10 labor market area (as defined in section 101(18) of the
11 Workforce Investment Act of 1998 (29 U.S.C. 2801(18)))
12 as the project and who—

13 (1) is a member of a targeted group, within the
14 meaning of section 51 of the Internal Revenue Code
15 of 1986, other than an individual described in sub-
16 section (d)(1)(C) of such section;

17 (2)(A) resides in a census tract in which not
18 less than 20 percent of the households have incomes
19 below the Federal poverty guidelines; or

20 (B) is a member of a family that received a
21 total family income that, during the 2-year period
22 prior to employment on the project or admission to
23 the pre-apprenticeship program, did not exceed 200
24 percent of the Federal poverty guidelines (exclusive
25 of unemployment compensation, child support pay-

1 ments, payments described in section 101(25)(A) of
2 the Workforce Investment Act (29 U.S.C.
3 2801(25)(A)), and old-age and survivors insurance
4 benefits received under section 202 of the Social Se-
5 curity Act (42 U.S.C. 402); or

6 (3) is a displaced homemaker, as such term is
7 defined in section 3(10) of the Carl D. Perkins Ca-
8 reer and Technical Education Act of 2006 (20
9 U.S.C. 2302(10)).

10 (f) QUALIFIED PRE-APPRENTICESHIP PROGRAM.—A
11 qualified pre-apprenticeship program is a pre-apprentice-
12 ship program that has demonstrated an ability to recruit,
13 train, and prepare for admission to apprenticeship pro-
14 grams individuals who are targeted workers.

15 (g) QUALIFIED APPRENTICESHIP AND OTHER
16 TRAINING PROGRAMS.—

17 (1) PARTICIPATION BY EACH CONTRACTOR RE-
18 QUIRED.—Each contractor and subcontractor that
19 seeks to provide construction services on projects
20 identified by the Secretaries pursuant to subsection
21 (a) shall submit adequate assurances with its bid or
22 proposal that it participates in a qualified appren-
23 ticeship or other training program, with a written
24 arrangement with a qualified pre-apprenticeship pro-
25 gram, for each craft or trade classification of worker

1 that it intends to employ to perform work on the
2 project.

3 (2) DEFINITION OF QUALIFIED APPRENTICE
4 SHIP OR OTHER TRAINING PROGRAM.—

5 (A) IN GENERAL.—For purposes of this
6 section, the term “qualified apprenticeship or
7 other training program” means an apprentice-
8 ship or other training program that qualifies as
9 an employee welfare benefit plan, as defined in
10 section 3(1) of the Employee Retirement In-
11 come Security Act of 1974 (29 U.S.C.
12 1002(1)).

13 (B) CERTIFICATION OF OTHER PROGRAMS
14 IN CERTAIN LOCALITIES.—In the event that the
15 Secretary of Labor certifies that a qualified ap-
16 prenticeship or other training program (as de-
17 fined in subparagraph (A)) for a craft or trade
18 classification of workers that a prospective con-
19 tractor or subcontractor intends to employ, is
20 not operated in the locality where the project
21 will be performed, an apprenticeship or other
22 training program that is not an employee wel-
23 fare benefit plan (as defined in such section)
24 may be certified by the Secretary as a qualified
25 apprenticeship or other training program pro-

1 vided it is registered with the Office of Appren-
2 ticeship of the Department of Labor, or a State
3 apprenticeship agency recognized by the Office
4 of Apprenticeship for Federal purposes.

5 (h) **FACILITATING COMPLIANCE.**—The Secretary
6 may require Federal contracting agencies, recipients of
7 Federal assistance, and any other entity established in ac-
8 cordance with this Act to require contractors to enter into
9 an agreement in a manner comparable with the standards
10 set forth in sections 3 and 4 of Executive Order 13502
11 in order to achieve the purposes of this section, including
12 any requirements established by subsection (b).

13 (i) **LIMITATION.**—The requirements of this section
14 shall not apply to any project funded under this Act in
15 American Samoa, Guam, the Commonwealth of the North-
16 ern Mariana Islands, the Commonwealth of Puerto Rico,
17 or the United States Virgin Islands, unless participation
18 is requested by the governor of such territories within 1
19 year of the promulgation of rules under this Act.

20 **PART 2—CLIMATE CHANGE WORKER**

21 **ADJUSTMENT ASSISTANCE**

22 **SEC. 311. PETITIONS, ELIGIBILITY REQUIREMENTS, AND**
23 **DETERMINATIONS.**

24 (a) **PETITIONS.**—

1 (1) FILING.—A petition for certification of eli-
2 gibility to apply for adjustment assistance for a
3 group of workers under this part may be filed by
4 any of the following:

5 (A) The group of workers.

6 (B) The certified or recognized union or
7 other duly authorized representative of such
8 workers.

9 (C) Employers of such workers, one-stop
10 operators or one-stop partners (as defined in
11 section 101 of the Workforce Investment Act of
12 1998 (29 U.S.C. 2801)), including State em-
13 ployment security agencies, or the State dis-
14 located worker unit established under title I of
15 such Act, on behalf of such workers.

16 The petition shall be filed simultaneously with the
17 Secretary of Labor and with the Governor of the
18 State in which such workers' employment site is lo-
19 cated.

20 (2) ACTION BY GOVERNORS.—Upon receipt of a
21 petition filed under paragraph (1), the Governor
22 shall—

23 (A) ensure that rapid response activities
24 and appropriate core and intensive services (as
25 described in section 134 of the Workforce In-

1 vestment Act of 1998 (29 U.S.C. 2864)) au-
2 thorized under other Federal laws are made
3 available to the workers covered by the petition
4 to the extent authorized under such laws; and

5 (B) assist the Secretary in the review of
6 the petition by verifying such information and
7 providing such other assistance as the Secretary
8 may request.

9 (3) ACTION BY THE SECRETARY.—Upon receipt
10 of the petition, the Secretary shall promptly publish
11 notice in the Federal Register and on the website of
12 the Department of Labor that the Secretary has re-
13 ceived the petition and initiated an investigation.

14 (4) HEARINGS.—If the petitioner, or any other
15 person found by the Secretary to have a substantial
16 interest in the proceedings, submits not later than
17 10 days after the date of the Secretary's publication
18 under paragraph (3) a request for a hearing, the
19 Secretary shall provide for a public hearing and af-
20 ford such interested persons an opportunity to be
21 present, to produce evidence, and to be heard.

22 (b) ELIGIBILITY.—

23 (1) IN GENERAL.—A group of workers shall be
24 certified by the Secretary as eligible to apply for ad-

1 justment assistance under this part pursuant to a
2 petition filed under subsection (a) if—

3 (A) the group of workers is employed in—

4 (i) energy producing and transforming
5 industries;

6 (ii) industries dependent upon energy
7 industries;

8 (iii) energy-intensive manufacturing
9 industries;

10 (iv) consumer goods manufacturing;

11 or

12 (v) other industries whose employment
13 the Secretary determines has been ad-
14 versely affected by any requirement of title
15 VII of the Clean Air Act;

16 (B) the Secretary determines that a sig-
17 nificant number or proportion of the workers in
18 such workers' employment site have become to-
19 tally or partially separated, or are threatened to
20 become totally or partially separated from em-
21 ployment; and

22 (C) the sales, production, or delivery of
23 goods or services have decreased as a result of
24 any requirement of title VII of the Clean Air
25 Act, including—

1 (i) the shift from reliance upon fossil
2 fuels to other sources of energy, including
3 renewable energy, that results in the clos-
4 ing of a facility or layoff of employees at
5 a facility that mines, produces, processes,
6 or utilizes fossil fuels to generate elec-
7 tricity;

8 (ii) a substantial increase in the cost
9 of energy required for a manufacturing fa-
10 cility to produce items whose prices are
11 competitive in the marketplace, to the ex-
12 tent the cost is not offset by assistance
13 provided to the facility pursuant to title
14 VII of the Clean Air Act; or

15 (iii) other documented occurrences
16 that the Secretary determines are indica-
17 tors of an adverse impact on an industry
18 described in subparagraph (A) as a result
19 of any requirement of title VII of the
20 Clean Air Act.

21 (2) WORKERS IN PUBLIC AGENCIES.—A group
22 of workers in a public agency shall be certified by
23 the Secretary as eligible to apply for climate change
24 adjustment assistance pursuant to a petition filed if
25 the Secretary determines that a significant number

1 or proportion of the workers in the public agency
2 have become totally or partially separated from em-
3 ployment, or are threatened to become totally or
4 partially separated as a result of any requirement of
5 title VII of the Clean Air Act.

6 (3) ADVERSELY AFFECTED SERVICE WORK-
7 ERS.—A group of workers shall be certified as eligi-
8 ble to apply for climate change adjustment assist-
9 ance pursuant to a petition filed if the Secretary de-
10 termines that—

11 (A) a significant number or proportion of
12 the service workers at an employment site
13 where a group of workers has been certified by
14 the Secretary as eligible to apply for adjustment
15 assistance under this part pursuant to para-
16 graph (1) have become totally or partially sepa-
17 rated from employment, or are threatened to
18 become totally or partially separated; and

19 (B) a loss of business in the firm providing
20 service workers to an employment site is di-
21 rectly attributable to one or more of the docu-
22 mented occurrences listed in paragraph (1)(C).

23 (c) AUTHORITY TO INVESTIGATE AND COLLECT IN-
24 FORMATION.—

1 (1) IN GENERAL.—The Secretary shall, in de-
2 termining whether to certify a group of workers
3 under subsection (d), obtain information the Sec-
4 retary determines to be necessary to make the cer-
5 tification, through questionnaires and in such other
6 manner as the Secretary determines appropriate
7 from—

8 (A) the workers' employer;

9 (B) officials of certified or recognized
10 unions or other duly authorized representatives
11 of the group of workers; or

12 (C) one-stop operators or one-stop partners
13 (as defined in section 101 of the Workforce In-
14 vestment Act of 1998 (29 U.S.C. 2801)).

15 (2) VERIFICATION OF INFORMATION.—The Sec-
16 retary shall require an employer, union, or one-stop
17 operator or partner to certify all information ob-
18 tained under paragraph (1) from the employer,
19 union, or one-stop operator or partner (as the case
20 may be) on which the Secretary relies in making a
21 determination under subsection (d), unless the Sec-
22 retary has a reasonable basis for determining that
23 such information is accurate and complete without
24 being certified.

1 (3) PROTECTION OF CONFIDENTIAL INFORMA-
2 TION.—The Secretary may not release information
3 obtained under paragraph (1) that the Secretary
4 considers to be confidential business information un-
5 less the employer submitting the confidential busi-
6 ness information had notice, at the time of submis-
7 sion, that the information would be released by the
8 Secretary, or the employer subsequently consents to
9 the release of the information. Nothing in this para-
10 graph shall be construed to prohibit the Secretary
11 from providing such confidential business informa-
12 tion to a court in camera or to another party under
13 a protective order issued by a court.

14 (d) DETERMINATION BY THE SECRETARY OF
15 LABOR.—

16 (1) IN GENERAL.—As soon as possible after the
17 date on which a petition is filed under subsection
18 (a), but in any event not later than 40 days after
19 that date, the Secretary, in consultation with the
20 Secretary of Energy and the Administrator, as nec-
21 essary, shall determine whether the petitioning
22 group meets the requirements of subsection (b) and
23 shall issue a certification of eligibility to apply for
24 assistance under this part covering workers in any
25 group which meets such requirements. Each certifi-

1 cation shall specify the date on which the total or
2 partial separation began or threatened to begin.
3 Upon reaching a determination on a petition, the
4 Secretary shall promptly publish a summary of the
5 determination in the Federal Register and on the
6 website of the Department of Labor, together with
7 the Secretary's reasons for making such determina-
8 tion.

9 (2) ONE YEAR LIMITATION.—A certification
10 under this section shall not apply to any worker
11 whose last total or partial separation from the em-
12 ployment site before the worker's application under
13 section 312(a) occurred more than 1 year before the
14 date of the petition on which such certification was
15 granted.

16 (3) REVOCATION OF CERTIFICATION.—When-
17 ever the Secretary determines, with respect to any
18 certification of eligibility of the workers of an em-
19 ployment site, that total or partial separations from
20 such site are no longer a result of the factors speci-
21 fied in subsection (b)(1), the Secretary shall termi-
22 nate such certification and promptly have notice of
23 such termination published in the Federal Register
24 and on the website of the Department of Labor, to-
25 gether with the Secretary's reasons for making such

1 determination. Such termination shall apply only
2 with respect to total or partial separations occurring
3 after the termination date specified by the Secretary.

4 (e) INDUSTRY NOTIFICATION OF ASSISTANCE.—

5 Upon receiving a notification of a determination under
6 subsection (d) with respect to a domestic industry the Sec-
7 retary of Labor shall notify the representatives of the do-
8 mestic industry affected by the determination, employers
9 publicly identified by name during the course of the pro-
10 ceeding relating to the determination, and any certified
11 or recognized union or, to the extent practicable, other
12 duly authorized representative of workers employed by
13 such representatives of the domestic industry, of—

14 (1) the adjustment assistance, training, and
15 other benefits available under this part;

16 (2) the manner in which to file a petition and
17 apply for such benefits;

18 (3) the availability of assistance in filing such
19 petitions;

20 (4) notify the Governor of each State in which
21 one or more employers in such industry are located
22 of the Secretary's determination and the identity of
23 the employers; and

24 (5) upon request, provide any assistance that is
25 necessary to file a petition under subsection (a).

1 (f) BENEFIT INFORMATION TO WORKERS, PRO-
2 VIDERS OF TRAINING.—

3 (1) IN GENERAL.—The Secretary shall provide
4 full information to workers about the adjustment as-
5 sistance, training, and other benefits available under
6 this part and about the petition and application pro-
7 cedures, and the appropriate filing dates, for such
8 assistance, training and services. The Secretary shall
9 provide whatever assistance is necessary to enable
10 groups of workers to prepare petitions or applica-
11 tions for program benefits. The Secretary shall make
12 every effort to insure that cooperating State agen-
13 cies fully comply with the agreements entered into
14 under section 312(a) and shall periodically review
15 such compliance. The Secretary shall inform the
16 State Board for Vocational Education or equivalent
17 agency, the one-stop operators or one-stop partners
18 (as defined in section 101 of the Workforce Invest-
19 ment Act of 1998 (29 U.S.C. 2801)), and other pub-
20 lic or private agencies, institutions, and employers,
21 as appropriate, of each certification issued under
22 subsection (d) and of projections, if available, of the
23 needs for training under as a result of such certifi-
24 cation.

1 (2) NOTICE BY MAIL.—The Secretary shall pro-
2 vide written notice through the mail of the benefits
3 available under this part to each worker whom the
4 Secretary has reason to believe is covered by a cer-
5 tification made under subsection (d)—

6 (A) at the time such certification is made,
7 if the worker was partially or totally separated
8 from the adversely affected employment before
9 such certification; or

10 (B) at the time of the total or partial sepa-
11 ration of the worker from the adversely affected
12 employment, if subparagraph (A) does not
13 apply.

14 (3) NEWSPAPERS; WEBSITE.—The Secretary
15 shall publish notice of the benefits available under
16 this part to workers covered by each certification
17 made under subsection (d) in newspapers of general
18 circulation in the areas in which such workers reside
19 and shall make such information available on the
20 website of the Department of Labor.

21 **SEC. 312. PROGRAM BENEFITS.**

22 (a) CLIMATE CHANGE ADJUSTMENT ASSISTANCE.—

23 (1) ELIGIBILITY.—Payment of climate change
24 adjustment assistance shall be made to an adversely
25 affected worker covered by a certification under sec-

1 tion 311(b) who files an application for such assist-
2 ance for any week of unemployment which begins on
3 or after the date of such certification, if the fol-
4 lowing conditions are met:

5 (A) Such worker's total or partial separa-
6 tion before the worker's application under this
7 part occurred—

8 (i) on or after the date, as specified in
9 the certification under which the worker is
10 covered, on which total or partial separa-
11 tion began or threatened to begin in the
12 adversely affected employment;

13 (ii) before the expiration of the 2-year
14 period beginning on the date on which the
15 determination under section 311(d) was
16 made; and

17 (iii) before the termination date, if
18 any, determined pursuant to section
19 311(d)(3).

20 (B) Such worker had, in the 52-week pe-
21 riod ending with the week in which such total
22 or partial separation occurred, at least 26
23 weeks of full-time employment or 1,040 hours
24 of part time employment in adversely affected
25 employment, or, if data with respect to weeks of

1 employment are not available, equivalent
2 amounts of employment computed under regu-
3 lations prescribed by the Secretary. For the
4 purposes of this paragraph, any week in which
5 such worker—

6 (i) is on employer-authorized leave for
7 purposes of vacation, sickness, injury, ma-
8 ternity, or inactive duty or active duty
9 military service for training;

10 (ii) does not work because of a dis-
11 ability that is compensable under a work-
12 men's compensation law or plan of a State
13 or the United States;

14 (iii) had his employment interrupted
15 in order to serve as a full-time representa-
16 tive of a labor organization in such firm; or

17 (iv) is on call-up for purposes of active
18 duty in a reserve status in the Armed
19 Forces of the United States, provided such
20 active duty is "Federal service" as defined
21 in section 8521(a)(1) of title 5, United
22 States Code,

23 shall be treated as a week of employment.

1 (C) Such worker is enrolled in a training
2 program approved by the Secretary under sub-
3 section (b)(2).

4 (2) INELIGIBILITY FOR CERTAIN OTHER BENE-
5 FITS.—An adversely affected worker receiving a pay-
6 ment under this section shall be ineligible to receive
7 any other form of unemployment insurance for the
8 period in which such worker is receiving climate
9 change adjustment assistance under this section.

10 (3) REVOCATION.—If—

11 (A) the Secretary determines that—

12 (i) the adversely affected worker—

13 (I) has failed to begin participa-
14 tion in the training program the en-
15 rollment in which meets the require-
16 ment of paragraph (1)(C); or

17 (II) has ceased to participate in
18 such training program before com-
19 pleting such training program; and

20 (ii) there is no justifiable cause for
21 such failure or cessation; or

22 (B) the certification made with respect to
23 such worker under section 311(d) is revoked
24 under paragraph (3) of such section,

1 no adjustment assistance may be paid to the ad-
2 versely affected worker under this part for the week
3 in which such failure, cessation, or revocation oc-
4 curred, or any succeeding week, until the adversely
5 affected worker begins or resumes participation in a
6 training program approved by the Secretary under
7 subsection (b)(2).

8 (4) WAIVERS OF TRAINING REQUIREMENTS.—
9 The Secretary may issue a written statement to an
10 adversely affected worker waiving the requirement to
11 be enrolled in training described in subsection (b)(2)
12 if the Secretary determines that it is not feasible or
13 appropriate for the worker, because of 1 or more of
14 the following reasons:

15 (A) RECALL.—The worker has been noti-
16 fied that the worker will be recalled by the em-
17 ployer from which the separation occurred.

18 (B) MARKETABLE SKILLS.—

19 (i) IN GENERAL.—The worker pos-
20 sesses marketable skills for suitable em-
21 ployment (as determined pursuant to an
22 assessment of the worker, which may in-
23 clude the profiling system under section
24 303(j) of the Social Security Act (42
25 U.S.C. 503(j)), carried out in accordance

1 with guidelines issued by the Secretary)
2 and there is a reasonable expectation of
3 employment at equivalent wages in the
4 foreseeable future.

5 (ii) MARKETABLE SKILLS DEFINED.—

6 For purposes of clause (i), the term “mar-
7 ketable skills” may include the possession
8 of a postgraduate degree from an institu-
9 tion of higher education (as defined in sec-
10 tion 102 of the Higher Education Act of
11 1965 (20 U.S.C. 1002)) or an equivalent
12 institution, or the possession of an equiva-
13 lent postgraduate certification in a special-
14 ized field.

15 (C) RETIREMENT.—The worker is within 2
16 years of meeting all requirements for entitle-
17 ment to either—

18 (i) old-age insurance benefits under
19 title II of the Social Security Act (42
20 U.S.C. 401 et seq.) (except for application
21 therefor); or

22 (ii) a private pension sponsored by an
23 employer or labor organization.

24 (D) HEALTH.—The worker is unable to
25 participate in training due to the health of the

1 worker, except that a waiver under this sub-
2 paragraph shall not be construed to exempt a
3 worker from requirements relating to the avail-
4 ability for work, active search for work, or re-
5 fusals to accept work under Federal or State un-
6 employment compensation laws.

7 (E) ENROLLMENT UNAVAILABLE.—The
8 first available enrollment date for the training
9 of the worker is within 60 days after the date
10 of the determination made under this para-
11 graph, or, if later, there are extenuating cir-
12 cumstances for the delay in enrollment, as de-
13 termined pursuant to guidelines issued by the
14 Secretary.

15 (F) TRAINING NOT AVAILABLE.—Training
16 described in subsection (b)(2) is not reasonably
17 available to the worker from either govern-
18 mental agencies or private sources (which may
19 include area career and technical education
20 schools, as defined in section 3 of the Carl D.
21 Perkins Career and Technical Education Act of
22 2006 (20 U.S.C. 2302), and employers), no
23 training that is suitable for the worker is avail-
24 able at a reasonable cost, or no training funds
25 are available.

1 (5) WEEKLY AMOUNTS.—The climate change
2 adjustment assistance payable to an adversely af-
3 fected worker for a week of unemployment shall be
4 an amount equal to 70 percent of the average weekly
5 wage of such worker, but in no case shall such
6 amount exceed the average weekly wage for all work-
7 ers in the State where the adversely affected worker
8 resides.

9 (6) MAXIMUM DURATION OF BENEFITS.—An el-
10 igible worker may receive a climate change adjust-
11 ment assistance under this subsection for a period of
12 not longer than 156 weeks.

13 (b) EMPLOYMENT SERVICES AND TRAINING.—

14 (1) INFORMATION AND EMPLOYMENT SERV-
15 ICES.—The Secretary shall make available, directly
16 or through agreements with the States under section
17 313(a) to adversely affected workers covered by a
18 certification under section 311(a) the following in-
19 formation and employment services:

20 (A) Comprehensive and specialized assess-
21 ment of skill levels and service needs, including
22 through—

23 (i) diagnostic testing and use of other
24 assessment tools; and

1 (ii) in-depth interviewing and evalua-
2 tion to identify employment barriers and
3 appropriate employment goals.

4 (B) Development of an individual employ-
5 ment plan to identify employment goals and ob-
6 jectives, and appropriate training to achieve
7 those goals and objectives.

8 (C) Information on training available in
9 local and regional areas, information on indi-
10 vidual counseling to determine which training is
11 suitable training, and information on how to
12 apply for such training.

13 (D) Information on training programs and
14 other services provided by a State pursuant to
15 title I of the Workforce Investment Act of 1998
16 (29 U.S.C. 2801 et seq.) and available in local
17 and regional areas, information on individual
18 counseling to determine which training is suit-
19 able training, and information on how to apply
20 for such training.

21 (E) Information on how to apply for finan-
22 cial aid, including referring workers to edu-
23 cational opportunity centers described in section
24 402F of the Higher Education Act of 1965 (20
25 U.S.C. 1070a-16), where applicable, and noti-

1 fying workers that the workers may request fi-
2 nancial aid administrators at institutions of
3 higher education (as defined in section 102 of
4 such Act (20 U.S.C. 1002)) to use the adminis-
5 trators' discretion under section 479A of such
6 Act (20 U.S.C. 1087tt) to use current year in-
7 come data, rather than preceding year income
8 data, for determining the amount of need of the
9 workers for Federal financial assistance under
10 title IV of such Act (20 U.S.C. 1070 et seq.).

11 (F) Short-term prevocational services, in-
12 cluding development of learning skills, commu-
13 nications skills, interviewing skills, punctuality,
14 personal maintenance skills, and professional
15 conduct to prepare individuals for employment
16 or training.

17 (G) Individual career counseling, including
18 job search and placement counseling, during the
19 period in which the individual is receiving cli-
20 mate change adjustment assistance or training
21 under this part, and after receiving such train-
22 ing for purposes of job placement.

23 (H) Provision of employment statistics in-
24 formation, including the provision of accurate

1 information relating to local, regional, and na-
2 tional labor market areas, including—

3 (i) job vacancy listings in such labor
4 market areas;

5 (ii) information on jobs skills nec-
6 essary to obtain jobs identified in job va-
7 cancy listings described in subparagraph
8 (A);

9 (iii) information relating to local occu-
10 pations that are in demand and earnings
11 potential of such occupations; and

12 (iv) skills requirements for local occu-
13 pations described in subparagraph (C).

14 (I) Information relating to the availability
15 of supportive services, including services relat-
16 ing to child care, transportation, dependent
17 care, housing assistance, and need-related pay-
18 ments that are necessary to enable an indi-
19 vidual to participate in training.

20 (2) TRAINING.—

21 (A) APPROVAL OF AND PAYMENT FOR
22 TRAINING.—If the Secretary determines, with
23 respect to an adversely affected worker that—

24 (i) there is no suitable employment
25 (which may include technical and profes-

1 sional employment) available for an ad-
2 versely affected worker;

3 (ii) the worker would benefit from ap-
4 propriate training;

5 (iii) there is a reasonable expectation
6 of employment following completion of
7 such training;

8 (iv) training approved by the Sec-
9 retary is reasonably available to the worker
10 from either governmental agencies or pri-
11 vate sources (including area career and
12 technical education schools, as defined in
13 section 3 of the Carl D. Perkins Career
14 and Technical Education Act of 2006 (20
15 U.S.C. 2302), and employers);

16 (v) the worker is qualified to under-
17 take and complete such training; and

18 (vi) such training is suitable for the
19 worker and available at a reasonable cost,
20 the Secretary shall approve such training for
21 the worker. Upon such approval, the worker
22 shall be entitled to have payment of the costs
23 of such training (subject to the limitations im-
24 posed by this section) paid on the worker's be-

1 half by the Secretary directly or through a
2 voucher system.

3 (B) DISTRIBUTION.—The Secretary shall
4 establish procedures for the distribution of the
5 funds to States to carry out the training pro-
6 grams approved under this paragraph, and shall
7 make an initial distribution of the funds made
8 available as soon as practicable after the begin-
9 ning of each fiscal year.

10 (C) ADDITIONAL RULES REGARDING AP-
11 PROVAL OF AND PAYMENT FOR TRAINING.—

12 (i) For purposes of applying subpara-
13 graph (A)(iii), a reasonable expectation of
14 employment does not require that employ-
15 ment opportunities for a worker be avail-
16 able, or offered, immediately upon the
17 completion of training approved under
18 such subparagraph.

19 (ii) If the costs of training an ad-
20 versely affected worker are paid by the
21 Secretary under subparagraph (A), no
22 other payment for such costs may be made
23 under any other provision of Federal law.
24 No payment may be made under subpara-
25 graph (A) of the costs of training an ad-

1 versely affected worker or an adversely af-
2 fected incumbent worker if such costs—

3 (I) have already been paid under
4 any other provision of Federal law; or

5 (II) are reimbursable under any
6 other provision of Federal law and a
7 portion of such costs have already
8 been paid under such other provision
9 of Federal law.

10 The provisions of this clause shall not
11 apply to, or take into account, any funds
12 provided under any other provision of Fed-
13 eral law which are used for any purpose
14 other than the direct payment of the costs
15 incurred in training a particular adversely
16 affected worker, even if such use has the
17 effect of indirectly paying or reducing any
18 portion of the costs involved in training the
19 adversely affected worker.

20 (D) TRAINING PROGRAMS.—The training
21 programs that may be approved under subpara-
22 graph (A) include—

23 (i) employer-based training, includ-
24 ing—

1 (I) on-the-job training if ap-
2 proved by the Secretary under sub-
3 section (c); and

4 (II) joint labor-management ap-
5 prenticeship programs;

6 (ii) any training program provided by
7 a State pursuant to title I of the Work-
8 force Investment Act of 1998 (29 U.S.C.
9 2801 et seq.);

10 (iii) any programs in career and tech-
11 nical education described in section 3(5) of
12 the Carl D. Perkins Career and Technical
13 Education Act of 2006 (20 U.S.C.
14 2302(5));

15 (iv) any program of remedial edu-
16 cation;

17 (v) any program of prerequisite edu-
18 cation or coursework required to enroll in
19 training that may be approved under this
20 paragraph;

21 (vi) any training program for which
22 all, or any portion, of the costs of training
23 the worker are paid—

24 (I) under any Federal or State
25 program other than this part; or

1 (II) from any source other than
2 this part;

3 (vii) any training program or
4 coursework at an accredited institution of
5 higher education (described in section 102
6 of the Higher Education Act of 1965 (20
7 U.S.C. 1002)), including a training pro-
8 gram or coursework for the purpose of—

9 (I) obtaining a degree or certifi-
10 cation; or

11 (II) completing a degree or cer-
12 tification that the worker had pre-
13 viously begun at an accredited institu-
14 tion of higher education; and

15 (viii) any other training program ap-
16 proved by the Secretary.

17 (3) SUPPLEMENTAL ASSISTANCE.—The Sec-
18 retary may, as appropriate, authorize supplemental
19 assistance that is necessary to defray reasonable
20 transportation and subsistence expenses for separate
21 maintenance in a case in which training for a worker
22 is provided in a facility that is not within commuting
23 distance of the regular place of residence of the
24 worker.

25 (c) ON-THE-JOB TRAINING REQUIREMENTS.—

1 (1) IN GENERAL.—The Secretary may approve
2 on-the-job training for any adversely affected worker
3 if—

4 (A) the Secretary determines that on-the-
5 job training—

6 (i) can reasonably be expected to lead
7 to suitable employment with the employer
8 offering the on-the-job training;

9 (ii) is compatible with the skills of the
10 worker;

11 (iii) includes a curriculum through
12 which the worker will gain the knowledge
13 or skills to become proficient in the job for
14 which the worker is being trained; and

15 (iv) can be measured by benchmarks
16 that indicate that the worker is gaining
17 such knowledge or skills; and

18 (B) the State determines that the on-the-
19 job training program meets the requirements of
20 clauses (iii) and (iv) of subparagraph (A).

21 (2) MONTHLY PAYMENTS.—The Secretary shall
22 pay the costs of on-the-job training approved under
23 paragraph (1) in monthly installments.

24 (3) CONTRACTS FOR ON-THE-JOB TRAINING.—

1 (A) IN GENERAL.—The Secretary shall en-
2 sure, in entering into a contract with an em-
3 ployer to provide on-the-job training to a work-
4 er under this subsection, that the skill require-
5 ments of the job for which the worker is being
6 trained, the academic and occupational skill
7 level of the worker, and the work experience of
8 the worker are taken into consideration.

9 (B) TERM OF CONTRACT.—Training under
10 any such contract shall be limited to the period
11 of time required for the worker receiving on-
12 the-job training to become proficient in the job
13 for which the worker is being trained, but may
14 not exceed 156 weeks in any case.

15 (4) EXCLUSION OF CERTAIN EMPLOYERS.—The
16 Secretary shall not enter into a contract for on-the-
17 job training with an employer that exhibits a pattern
18 of failing to provide workers receiving on-the-job
19 training from the employer with—

20 (A) continued, long-term employment as
21 regular employees; and

22 (B) wages, benefits, and working condi-
23 tions that are equivalent to the wages, benefits,
24 and working conditions provided to regular em-
25 ployees who have worked a similar period of

1 time and are doing the same type of work as
2 workers receiving on-the-job training from the
3 employer.

4 (d) ADMINISTRATIVE AND EMPLOYMENT SERVICES
5 FUNDING.—

6 (1) ADMINISTRATIVE FUNDING.—In addition to
7 any funds made available to a State to carry out this
8 section for a fiscal year, the State shall receive for
9 the fiscal year a payment in an amount that is equal
10 to 15 percent of the amount of such funds and
11 shall—

12 (A) use not more than $\frac{2}{3}$ of such payment
13 for the administration of the climate change ad-
14 justment assistance for workers program under
15 this part, including for—

16 (i) processing waivers of training re-
17 quirements under subsection (a)(4); and

18 (ii) collecting, validating, and report-
19 ing data required under this part; and

20 (B) use not less than $\frac{1}{3}$ of such payment
21 for information and employment services under
22 subsection (b)(1).

23 (2) EMPLOYMENT SERVICES FUNDING.—

24 (A) IN GENERAL.—In addition to any
25 funds made available to a State to carry out

1 subsection (b)(2) and the payment under para-
2 graph (1) for a fiscal year, the Secretary shall
3 provide to the State for the fiscal year a reason-
4 able payment for the purpose of providing em-
5 ployment and services under subsection (b)(1).

6 (B) VOLUNTARY RETURN OF FUNDS.—A
7 State that receives a payment under subpara-
8 graph (A) may decline or otherwise return such
9 payment to the Secretary.

10 (e) JOB SEARCH ASSISTANCE.—The Secretary of
11 Labor may provide adversely affected workers one-time
12 job search assistance in accordance with regulations pre-
13 scribed by the Secretary. Any job search assistance pro-
14 vided shall be available only under the following cir-
15 cumstances and conditions:

16 (1) The worker is no longer eligible for the cli-
17 mate change adjustment assistance under subsection
18 (a) and has completed the training program required
19 by subsection (b)(1)(E).

20 (2) The Secretary determines that the worker
21 cannot reasonably be expected to secure suitable em-
22 ployment in the commuting area in which the worker
23 resides.

24 (3) Assistance granted shall provide reimburse-
25 ment to the worker of all necessary job search ex-

1 penses as prescribed by the Secretary in regulations.
2 Such reimbursement under this subsection may not
3 exceed \$1,500 for any worker.

4 (f) RELOCATION ASSISTANCE AUTHORIZED.—

5 (1) IN GENERAL.—Any adversely affected work-
6 er covered by a certification issued under section
7 311 may file an application for relocation assistance
8 with the Secretary, and the Secretary may grant the
9 relocation assistance, subject to the terms and condi-
10 tions of this subsection.

11 (2) CONDITIONS FOR GRANTING ASSISTANCE.—
12 Relocation assistance may be granted if all of the
13 following terms and conditions are met:

14 (A) ASSIST AN ADVERSELY AFFECTED
15 WORKER.—The relocation assistance will assist
16 an adversely affected worker in relocating with-
17 in the United States.

18 (B) LOCAL EMPLOYMENT NOT AVAIL-
19 ABLE.—The Secretary determines that the
20 worker cannot reasonably be expected to secure
21 suitable employment in the commuting area in
22 which the worker resides.

23 (C) TOTAL SEPARATION.—The worker is
24 totally separated from employment at the time
25 relocation commences.

1 (D) SUITABLE EMPLOYMENT OBTAINED.—

2 The worker—

3 (i) has obtained suitable employment
4 affording a reasonable expectation of long-
5 term duration in the area in which the
6 worker wishes to relocate; or

7 (ii) has obtained a bona fide offer of
8 such employment.

9 (E) APPLICATION.—The worker filed an
10 application with the Secretary at such time and
11 in such manner as the Secretary shall specify
12 by regulation.

13 (3) AMOUNT OF ASSISTANCE.—Relocation as-
14 sistance granted to a worker under paragraph (1)
15 includes—

16 (A) all reasonable and necessary expenses
17 (including, subsistence and transportation ex-
18 penses at levels not exceeding amounts pre-
19 scribed by the Secretary in regulations) in-
20 curred in transporting the worker, the worker's
21 family, and household effects; and

22 (B) a lump sum equivalent to 3 times the
23 worker's average weekly wage, up to a max-
24 imum payment of \$1,500.

1 (4) LIMITATIONS.—Relocation assistance may
2 not be granted to a worker unless—

3 (A) the relocation occurs within 182 days
4 after the filing of the application for relocation
5 assistance; or

6 (B) the relocation occurs within 182 days
7 after the conclusion of training, if the worker
8 entered a training program approved by the
9 Secretary under subsection (b)(2).

10 (g) HEALTH INSURANCE CONTINUATION.—Not later
11 than 1 year after the date of enactment of this Act, the
12 Secretary of Labor shall prescribe regulations to provide,
13 for the period in which an adversely affected worker is
14 participating in a training program described in sub-
15 section (b)(2), 80 percent of the monthly premium of any
16 health insurance coverage that an adversely affected work-
17 er was receiving from such worker’s employer prior to the
18 separation from employment described in section 311(b),
19 to be paid to any health care insurance plan designated
20 by the adversely affected worker receiving assistance
21 under this section.

22 **SEC. 313. GENERAL PROVISIONS.**

23 (a) AGREEMENTS WITH STATES.—

24 (1) IN GENERAL.—The Secretary is authorized
25 on behalf of the United States to enter into an

1 agreement with any State, or with any State agency
2 (referred to in this section as “cooperating States”
3 and “cooperating State agencies” respectively).
4 Under such an agreement, the cooperating State or
5 cooperating State agency—

6 (A) as agent of the United States, shall re-
7 ceive applications for, and shall provide, pay-
8 ments on the basis provided in this part;

9 (B) in accordance with paragraph (6),
10 shall make available to adversely affected work-
11 ers covered by a certification under section
12 311(d) the employment services described in
13 section 312(b)(1);

14 (C) shall make any certifications required
15 under section 311(d); and

16 (D) shall otherwise cooperate with the Sec-
17 retary and with other State and Federal agen-
18 cies in providing payments and services under
19 this part.

20 Each agreement under this section shall provide the
21 terms and conditions upon which the agreement may
22 be amended, suspended, or terminated.

23 (2) FORM AND MANNER OF DATA.—Each
24 agreement under this section shall—

1 (A) provide the Secretary with the author-
2 ity to collect any data the Secretary determines
3 necessary to meet the requirements of this part;
4 and

5 (B) specify the form and manner in which
6 any such data requested by the Secretary shall
7 be reported.

8 (3) RELATIONSHIP TO UNEMPLOYMENT INSUR-
9 ANCE.—Each agreement under this section shall
10 provide that an adversely affected worker receiving
11 climate change adjustment assistance under this
12 part shall not be eligible for unemployment insur-
13 ance otherwise payable to such worker under the
14 laws of the State.

15 (4) REVIEW.—A determination by a cooper-
16 ating State agency with respect to entitlement to
17 program benefits under an agreement is subject to
18 review in the same manner and to the same extent
19 as determinations under the applicable State law
20 and only in that manner and to that extent.

21 (5) COORDINATION.—Any agreement entered
22 into under this section shall provide for the coordi-
23 nation of the administration of the provisions for
24 employment services, training, and supplemental as-
25 sistance under section 312 and under title I of the

1 Workforce Investment Act of 1998 (29 U.S.C. 2801
2 et seq.) upon such terms and conditions as are es-
3 tablished by the Secretary in consultation with the
4 States and set forth in such agreement. Any agency
5 of the State jointly administering such provisions
6 under such agreement shall be considered to be a co-
7 operating State agency for purposes of this part.

8 (6) RESPONSIBILITIES OF COOPERATING AGEN-
9 CIES.—Each cooperating State agency shall, in car-
10 rying out paragraph (1)(B)—

11 (A) advise each worker who applies for un-
12 employment insurance of the benefits under this
13 part and the procedures and deadlines for ap-
14 plying for such benefits;

15 (B) facilitate the early filing of petitions
16 under section 311(a) for any workers that the
17 agency considers are likely to be eligible for
18 benefits under this part;

19 (C) advise each adversely affected worker
20 to apply for training under section 312(b) be-
21 fore, or at the same time, the worker applies for
22 climate change adjustment assistance under
23 section 312(a);

24 (D) perform outreach to, intake of, and
25 orientation for adversely affected workers and

1 adversely affected incumbent workers covered
2 by a certification under section 312(a) with re-
3 spect to assistance and benefits available under
4 this part;

5 (E) make employment services described in
6 section 312(b)(1) available to adversely affected
7 workers and adversely affected incumbent work-
8 ers covered by a certification under section
9 311(d) and, if funds provided to carry out this
10 part are insufficient to make such services
11 available, make arrangements to make such
12 services available through other Federal pro-
13 grams; and

14 (F) provide the benefits and reemployment
15 services under this part in a manner that is
16 necessary for the proper and efficient adminis-
17 tration of this part, including the use of state
18 agency personnel employed in accordance with a
19 merit system of personnel administration stand-
20 ards, including—

21 (i) making determinations of eligibility
22 for, and payment of, climate change read-
23 justment assistance and health care benefit
24 replacement amounts;

1 (ii) developing recommendations re-
2 garding payments as a bridge to retire-
3 ment and lump sum payments to pension
4 plans in accordance with this subsection;
5 and

6 (iii) the provision of reemployment
7 services to eligible workers, including refer-
8 ral to training services.

9 (7) SUBMISSION OF CERTAIN INFORMATION.—

10 In order to promote the coordination of workforce
11 investment activities in each State with activities
12 carried out under this part, any agreement entered
13 into under this section shall provide that the State
14 shall submit to the Secretary, in such form as the
15 Secretary may require, the description and informa-
16 tion described in paragraphs (8) and (14) of section
17 112(b) of the Workforce Investment Act of 1998 (29
18 U.S.C. 2822(b)) and a description of the State's
19 rapid response activities under section 134(a)(2)(A)
20 of that Act (29 U.S.C. 2864(a)(2)(A)).

21 (8) CONTROL MEASURES.—

22 (A) IN GENERAL.—The Secretary shall re-
23 quire each cooperating State and cooperating
24 State agency to implement effective control
25 measures and to effectively oversee the oper-

1 ation and administration of the climate change
2 adjustment assistance program under this part,
3 including by means of monitoring the operation
4 of control measures to improve the accuracy
5 and timeliness of the data being collected and
6 reported.

7 (B) DEFINITION.—For purposes of sub-
8 paragraph (A), the term “control measures”
9 means measures that—

10 (i) are internal to a system used by a
11 State to collect data; and

12 (ii) are designed to ensure the accu-
13 racy and verifiability of such data.

14 (9) DATA REPORTING.—

15 (A) IN GENERAL.—Any agreement entered
16 into under this section shall require the cooper-
17 ating State or cooperating State agency to re-
18 port to the Secretary on a quarterly basis com-
19 prehensive performance accountability data, to
20 consist of—

21 (i) the core indicators of performance
22 described in subparagraph (B)(i);

23 (ii) the additional indicators of per-
24 formance described in subparagraph
25 (B)(ii), if any; and

1 (iii) a description of efforts made to
2 improve outcomes for workers under the
3 climate change adjustment assistance pro-
4 gram.

5 (B) CORE INDICATORS DESCRIBED.—

6 (i) IN GENERAL.—The core indicators
7 of performance described in this subpara-
8 graph are—

9 (I) the percentage of workers re-
10 ceiving benefits under this part who
11 are employed during the second cal-
12 endar quarter following the calendar
13 quarter in which the workers cease re-
14 ceiving such benefits;

15 (II) the percentage of such work-
16 ers who are employed in each of the
17 third and fourth calendar quarters fol-
18 lowing the calendar quarter in which
19 the workers cease receiving such bene-
20 fits; and

21 (III) the earnings of such work-
22 ers in each of the third and fourth
23 calendar quarters following the cal-
24 endar quarter in which the workers
25 cease receiving such benefits.

1 (ii) ADDITIONAL INDICATORS.—The
2 Secretary and a cooperating State or co-
3 operating State agency may agree upon
4 additional indicators of performance for
5 the climate change adjustment assistance
6 program under this part, as appropriate.

7 (C) STANDARDS WITH RESPECT TO RELI-
8 ABILITY OF DATA.—In preparing the quarterly
9 report required by subparagraph (A), each co-
10 operating State or cooperating State agency
11 shall establish procedures that are consistent
12 with guidelines to be issued by the Secretary to
13 ensure that the data reported are valid and reli-
14 able.

15 (10) VERIFICATION OF ELIGIBILITY FOR PRO-
16 GRAM BENEFITS.—

17 (A) IN GENERAL.—An agreement under
18 this section shall provide that the State shall
19 periodically redetermine that a worker receiving
20 benefits under this part who is not a citizen or
21 national of the United States remains in a sat-
22 isfactory immigration status. Once satisfactory
23 immigration status has been initially verified
24 through the immigration status verification sys-
25 tem described in section 1137(d) of the Social

1 Security Act (42 U.S.C. 1320b–7(d)) for pur-
2 poses of establishing a worker’s eligibility for
3 unemployment compensation, the State shall
4 reverify the worker’s immigration status if the
5 documentation provided during initial
6 verification will expire during the period in
7 which that worker is potentially eligible to re-
8 ceive benefits under this part. The State shall
9 conduct such redetermination in a timely man-
10 ner, utilizing the immigration status verification
11 system described in section 1137(d) of the So-
12 cial Security Act (42 U.S.C. 1320b–7(d)).

13 (B) PROCEDURES.—The Secretary shall
14 establish procedures to ensure the uniform ap-
15 plication by the States of the requirements of
16 this paragraph.

17 (b) ADMINISTRATION ABSENT STATE AGREE-
18 MENT.—

19 (1) In any State where there is no agreement
20 in force between a State or its agency under sub-
21 section (a), the Secretary shall promulgate regula-
22 tions for the performance of all necessary functions
23 under section 312, including provision for a fair
24 hearing for any worker whose application for pay-
25 ments is denied.

1 (2) A final determination under paragraph (1)
2 with respect to entitlement to program benefits
3 under section 312 is subject to review by the courts
4 in the same manner and to the same extent as is
5 provided by section 205(g) of the Social Security Act
6 (42 U.S.C. 405(g)).

7 (c) PROHIBITION ON CONTRACTING WITH PRIVATE
8 ENTITIES.—Neither the Secretary nor a State may con-
9 tract with any private for-profit or nonprofit entity for the
10 administration of the climate change adjustment assist-
11 ance program under this part.

12 (d) PAYMENT TO THE STATES.—

13 (1) IN GENERAL.—The Secretary shall from
14 time to time certify to the Secretary of the Treasury
15 for payment to each cooperating State the sums nec-
16 essary to enable such State as agent of the United
17 States to make payments provided for by this part.

18 (2) RESTRICTION.—All money paid a State
19 under this subsection shall be used solely for the
20 purposes for which it is paid; and money so paid
21 which is not used for such purposes shall be re-
22 turned, at the time specified in the agreement under
23 this section, to the Secretary of the Treasury.

24 (3) BONDS.—Any agreement under this section
25 may require any officer or employee of the State cer-

1 tifying payments or disbursing funds under the
2 agreement or otherwise participating in the perform-
3 ance of the agreement, to give a surety bond to the
4 United States in such amount as the Secretary may
5 deem necessary, and may provide for the payment of
6 the cost of such bond from funds for carrying out
7 the purposes of this part.

8 (e) LABOR STANDARDS.—

9 (1) PROHIBITION ON DISPLACEMENT.—An indi-
10 vidual in an apprenticeship program or on-the-job
11 training program under this part shall not displace
12 (including a partial displacement, such as a reduc-
13 tion in the hours of non-overtime work, wages, or
14 employment benefits) any employed employee.

15 (2) PROHIBITION ON IMPAIRMENT OF CON-
16 TRACTS.—An apprenticeship program or on-the-job
17 training program under this Act shall not impair an
18 existing contract for services or collective bargaining
19 agreement, and no such activity that would be incon-
20 sistent with the terms of a collective bargaining
21 agreement shall be undertaken without the written
22 concurrence of the labor organization and employer
23 concerned.

24 (3) ADDITIONAL STANDARDS.—The Secretary,
25 or a State acting under an agreement described in

1 subsection (a) may pay the costs of on-the-job train-
2 ing, notwithstanding any other provision of this sec-
3 tion, only if—

4 (A) in the case of training which would be
5 inconsistent with the terms of a collective bar-
6 gaining agreement, the written concurrence of
7 the labor organization concerned has been ob-
8 tained;

9 (B) the job for which such adversely af-
10 fected worker is being trained is not being cre-
11 ated in a promotional line that will infringe in
12 any way upon the promotional opportunities of
13 currently employed individuals;

14 (C) such training is not for the same occu-
15 pation from which the worker was separated
16 and with respect to which such worker's group
17 was certified pursuant to section 311(d);

18 (D) the employer is provided reimburse-
19 ment of not more than 50 percent of the wage
20 rate of the participant, for the cost of providing
21 the training and additional supervision related
22 to the training; and

23 (E) the employer has not received payment
24 under with respect to any other on-the-job
25 training provided by such employer which failed

1 to meet the requirements of subparagraphs (A)
2 through (D).

3 (f) DEFINITIONS.—As used in this part the following
4 definitions apply:

5 (1) The term “adversely affected employment”
6 means employment at an employment site, if work-
7 ers at such site are eligible to apply for adjustment
8 assistance under this part.

9 (2) The term “adversely affected worker”
10 means an individual who has been totally or partially
11 separated from employment and is eligible to apply
12 for adjustment assistance under this part.

13 (3) The term “average weekly wage” means $\frac{1}{13}$
14 of the total wages paid to an individual in the quar-
15 ter in which the individual’s total wages were highest
16 among the first 4 of the last 5 completed calendar
17 quarters immediately before the quarter in which oc-
18 curs the week with respect to which the computation
19 is made. Such week shall be the week in which total
20 separation occurred, or, in cases where partial sepa-
21 ration is claimed, an appropriate week, as defined in
22 regulations prescribed by the Secretary.

23 (4) The term “average weekly hours” means
24 the average hours worked by the individual (exclud-
25 ing overtime) in the employment from which he has

1 been or claims to have been separated in the 52
2 weeks (excluding weeks during which the individual
3 was sick or on vacation) preceding the week speci-
4 fied in the last sentence of paragraph (4).

5 (5) The term “benefit period” means, with re-
6 spect to an individual—

7 (A) the benefit year and any ensuing pe-
8 riod, as determined under applicable State law,
9 during which the individual is eligible for reg-
10 ular compensation, additional compensation, or
11 extended compensation; or

12 (B) the equivalent to such a benefit year
13 or ensuing period provided for under the appli-
14 cable Federal unemployment insurance law.

15 (6) The term “consumer goods manufacturing”
16 means the electrical equipment, appliance, and com-
17 ponent manufacturing industry and transportation
18 equipment manufacturing.

19 (7) The term “employment site” means a single
20 facility or site of employment.

21 (8) The term “energy-intensive manufacturing
22 industries” means all industrial sectors, entities, or
23 groups of entities that meet the energy or green-
24 house gas intensity criteria in section 763(b)(2)(A)

1 of the Clean Air Act based on the most recent data
2 available.

3 (9) The term “energy producing and trans-
4 forming industries” means the coal mining industry,
5 oil and gas extraction, electricity power generation,
6 transmission and distribution, and natural gas dis-
7 tribution.

8 (10) The term “on-the-job training” means
9 training provided by an employer to an individual
10 who is employed by the employer.

11 (11) The terms “partial separation” and “par-
12 tially separated” refer, with respect to an individual
13 who has not been totally separated, that such indi-
14 vidual has had—

15 (A) his or her hours of work reduced to 80
16 percent or less of his average weekly hours in
17 adversely affected employment; and

18 (B) his or her wages reduced to 80 percent
19 or less of his average weekly wage in such ad-
20 versely affected employment.

21 (12) The term “public agency” means a depart-
22 ment or agency of a State or political subdivision of
23 a State or of the Federal Government.

24 (13) The term “Secretary” means the Secretary
25 of Labor.

1 (14) The term “service workers” means work-
2 ers supplying support or auxiliary services to an em-
3 ployment site.

4 (15) The term “State” includes the District of
5 Columbia and the Commonwealth of Puerto Rico;
6 and the term “United States” when used in the geo-
7 graphical sense includes such Commonwealth.

8 (16) The term “State agency” means the agen-
9 cy of the State which administers the State law.

10 (17) The term “State law” means the unem-
11 ployment insurance law of the State approved by the
12 Secretary of Labor under section 3304 of the Inter-
13 nal Revenue Code of 1986.

14 (18) The terms “total separation” and “totally
15 separated” refer to the layoff or severance of an in-
16 dividual from employment with an employer in which
17 adversely affected employment exists.

18 (19) The term “unemployment insurance”
19 means the unemployment compensation payable to
20 an individual under any State law or Federal unem-
21 ployment compensation law, including chapter 85 of
22 title 5, United States Code, and the Railroad Unem-
23 ployment Insurance Act (45 U.S.C. 351 et seq.).
24 The terms “regular compensation”, “additional com-
25 pensation”, and “extended compensation” have the

1 same respective meanings that are given them in
2 section 205(2), (3), and (4) of the Federal-State Ex-
3 tended Unemployment Compensation Act of 1970
4 (26 U.S.C. 3304 note; Public Law 91–373).

5 (20) The term “week” means a week as defined
6 in the applicable State law.

7 (21) The term “week of unemployment” means
8 a week of total, part-total, or partial unemployment
9 as determined under the applicable State law or
10 Federal unemployment insurance law.

11 (g) SPECIAL RULE WITH RESPECT TO MILITARY
12 SERVICE.—

13 (1) IN GENERAL.—Notwithstanding any other
14 provision of this part, the Secretary may waive any
15 requirement of this part that the Secretary deter-
16 mines is necessary to ensure that an adversely af-
17 fected worker who is a member of a reserve compo-
18 nent of the Armed Forces and serves a period of
19 duty described in paragraph (2) is eligible to receive
20 climate change adjustment assistance, training, and
21 other benefits under this part in the same manner
22 and to the same extent as if the worker had not
23 served the period of duty.

24 (2) PERIOD OF DUTY DESCRIBED.—An ad-
25 versely affected worker serves a period of duty de-

1 scribed in this paragraph if, before completing train-
2 ing under this part, the worker—

3 (A) serves on active duty for a period of
4 more than 30 days under a call or order to ac-
5 tive duty of more than 30 days; or

6 (B) in the case of a member of the Army
7 National Guard of the United States or Air Na-
8 tional Guard of the United States, performs
9 full-time National Guard duty under section
10 502(f) of title 32, United States Code, for 30
11 consecutive days or more when authorized by
12 the President or the Secretary of Defense for
13 the purpose of responding to a national emer-
14 gency declared by the President and supported
15 by Federal funds.

16 (h) FRAUD AND RECOVERY OF OVERPAYMENTS.—

17 (1) RECOVERY OF PAYMENTS TO WHICH AN IN-
18 DIVIDUAL WAS NOT ENTITLED.—If the Secretary or
19 a court of competent jurisdiction determines that
20 any person has received any payment under this
21 part to which the individual was not entitled, such
22 individual shall be liable to repay such amount to
23 the Secretary, as the case may be, except that the
24 Secretary shall waive such repayment if such agency
25 or the Secretary determines that—

1 (A) the payment was made without fault
2 on the part of such individual; and

3 (B) requiring such repayment would cause
4 a financial hardship for the individual (or the
5 individual's household, if applicable) when tak-
6 ing into consideration the income and resources
7 reasonably available to the individual (or house-
8 hold) and other ordinary living expenses of the
9 individual (or household).

10 (2) MEANS OF RECOVERY.—Unless an overpay-
11 ment is otherwise recovered, or waived under para-
12 graph (1), the Secretary shall recover the overpay-
13 ment by deductions from any sums payable to such
14 person under this part, under any Federal unem-
15 ployment compensation law or other Federal law ad-
16 ministered by the Secretary which provides for the
17 payment of assistance with respect to unemploy-
18 ment. Any amount recovered under this section shall
19 be returned to the Treasury of the United States.

20 (3) PENALTIES FOR FRAUD.—Any person
21 who—

22 (A) makes a false statement of a material
23 fact knowing it to be false, or knowingly fails
24 to disclose a material fact, for the purpose of
25 obtaining or increasing for that person or for

1 any other person any payment authorized to be
2 furnished under this part; or

3 (B) makes a false statement of a material
4 fact knowing it to be false, or knowingly fails
5 to disclose a material fact, when providing in-
6 formation to the Secretary during an investiga-
7 tion of a petition under section 311(c);

8 shall be imprisoned for not more than one year, or fined
9 under title 18, United States Code, or both, and be ineli-
10 gible for any further payments under this part.

11 (i) REGULATIONS.—The Secretary shall prescribe
12 such regulations as may be necessary to carry out the pro-
13 visions of this part.

14 (j) STUDY ON OLDER WORKERS.—The Secretary
15 shall conduct a study examine the circumstances of older
16 adversely affected workers and the ability of such workers
17 to access their retirement benefits. The Secretary shall
18 transmit a report to Congress not later than 2 years after
19 the date of enactment of this Act on the findings of the
20 study and the Secretary's recommendations on how to en-
21 sure that adversely affected workers within 2 years of re-
22 tirement are able to access their retirement benefits.

1 **Subtitle B—International Climate**
2 **Change Programs**

3 **SEC. 321. STRATEGIC INTERAGENCY BOARD ON INTER-**
4 **NATIONAL CLIMATE INVESTMENT.**

5 (a) ESTABLISHMENT.—

6 (1) IN GENERAL.—Not later than 90 days after
7 the date of the enactment of this Act, the President
8 shall establish the “Strategic Interagency Board on
9 International Climate Investment” (referred to in
10 this subtitle as the “Board”).

11 (2) COMPOSITION.—The Board shall be com-
12 posed of—

13 (A) the Secretary of State;

14 (B) the Administrator of United States
15 Agency for International Development;

16 (C) the Secretary of Energy;

17 (D) the Secretary of the Treasury;

18 (E) the Secretary of Commerce;

19 (F) the Secretary of Agriculture;

20 (G) the Administrator; and

21 (H) such other relevant officials as the
22 President may designate.

23 (b) DUTIES.—The duties of the Board shall include
24 assessing, monitoring, and evaluating the progress and
25 contributions of relevant departments and agencies of the

1 Federal Government in supporting financing for inter-
2 national climate change activities.

3 **SEC. 322. EMISSION REDUCTIONS FROM REDUCED DEFOR-**
4 **ESTATION.**

5 Title VII of the Clean Air Act (as amended by section
6 101 of division B) is amended by adding at the end the
7 following:

8 **“PART E—SUPPLEMENTAL EMISSION**
9 **REDUCTIONS**

10 **“SEC. 751. DEFINITIONS.**

11 “In this part:

12 “(1) ADMINISTRATOR.—The term ‘Adminis-
13 trator’ means the Administrator of the United
14 States Agency for International Development.

15 “(2) DEFORESTATION.—The term ‘deforest-
16 ation’ means a change in land use from a forest to
17 any other land use.

18 “(3) DEGRADATION.—The term ‘degradation’,
19 with respect to a forest, is any reduction in the car-
20 bon stock of a forest due to the impact of human
21 land-use activities.

22 “(4) EMISSION REDUCTIONS.—The term ‘emis-
23 sion reductions’ means greenhouse gas emission re-
24 ductions achieved from reduced or avoided deforest-
25 ation under this title.

1 “(5) LEAKAGE PREVENTION ACTIVITIES.—The
2 term ‘leakage prevention activities’ means activities
3 in developing countries that are directed at pre-
4 serving existing forest carbon stocks, including for-
5 ested wetlands and peatlands, that might, absent
6 such activities, be lost through leakage.

7 **“SEC. 752. PURPOSES.**

8 “The purposes of this part are to provide United
9 States assistance to developing countries—

10 “(1) to develop, implement and improve nation-
11 ally appropriate greenhouse gas mitigation policies
12 and actions that reduce deforestation and forest deg-
13 radation or conserve or restore forest ecosystems, in
14 a measurable, reportable, and verifiable manner; and

15 “(2) in a manner that is consistent with and
16 enhances the implementation of complementary
17 United States policies that support the good govern-
18 ance of forests, biodiversity conservation, and envi-
19 ronmentally sustainable development, while taking
20 local communities, most vulnerable populations and
21 communities, particularly forest-dependent commu-
22 nities and indigenous peoples into consideration.

1 **“SEC. 753. EMISSION REDUCTIONS FROM REDUCED DEFOR-**
2 **ESTATION.**

3 “(a) IN GENERAL.—Not later than 2 years after the
4 date of the enactment of this part, the Administrator, in
5 consultation with the Administrator of the Environmental
6 Protection Agency, the Secretary of Agriculture, and the
7 head of any other appropriate agency, shall establish a
8 program to provide assistance to reduce greenhouse gas
9 emissions from deforestation in developing countries, in
10 accordance with this title.

11 “(b) OBJECTIVES.—The objectives of the program es-
12 tablished under this section shall be—

13 “(1) to reduce greenhouse gas emissions from
14 deforestation in developing countries by at least
15 720,000,000 tons of carbon dioxide equivalent in
16 2020, and a cumulative quantity of at least
17 6,000,000,000 tons of carbon dioxide equivalent by
18 December 31, 2025, with additional reductions in
19 subsequent years;

20 “(2) to assist developing countries in preparing
21 to participate in international markets for inter-
22 national offset credits for reduced emissions from
23 deforestation; and

24 “(3) to preserve existing forest carbon stocks in
25 countries where such forest carbon may be vulner-
26 able to international leakage.”

1 **SEC. 323. INTERNATIONAL CLEAN ENERGY DEPLOYMENT**
2 **PROGRAM.**

3 (a) PURPOSES.—The purposes of this section are—

4 (1) to assist developing countries in activities
5 that reduce, sequester, or avoid greenhouse gas
6 emissions;

7 (2) to encourage those countries to shift toward
8 low-carbon development, and promote a successful
9 global agreement under the United Nations Frame-
10 work Convention on Climate Change, done at New
11 York on May 9, 1992 (or a successor agreement)
12 (referred to in this subtitle as the “Convention”);
13 and

14 (3) to promote robust compliance with and en-
15 forcement of existing international legal require-
16 ments for the protection of intellectual property
17 rights.

18 (b) ESTABLISHMENT OF INTERNATIONAL CLEAN EN-
19 ERGY DEPLOYMENT PROGRAM.—

20 (1) ESTABLISHMENT.—The Secretary of State,
21 in consultation with an interagency group designated
22 by the President, shall establish an International
23 Clean Energy Deployment Program in accordance
24 with this section.

25 (2) DISTRIBUTION OF ASSISTANCE.—The Sec-
26 retary of State, or the head of such other Federal

1 agency as the President may designate, shall direct
2 the distribution of funding to carry out the Clean
3 Energy Technology Program—

4 (A) in the form of bilateral assistance;

5 (B) to multilateral funds or international
6 institutions pursuant to the Convention or an
7 agreement negotiated under the Convention; or

8 (C) through a combination of the mecha-
9 nisms identified under subparagraphs (A) and
10 (B).

11 (c) DETERMINATION OF QUALIFYING ACTIVITIES.—

12 Assistance under this subtitle may be provided only to
13 qualifying entities for clean technology activities (includ-
14 ing building relevant technical and institutional capacity)
15 that contribute to substantial, measurable, reportable, and
16 verifiable reductions, sequestration, or avoidance of green-
17 house gas emissions.

18 **SEC. 324. INTERNATIONAL CLIMATE CHANGE ADAPTATION**

19 **AND GLOBAL SECURITY PROGRAM.**

20 (a) PURPOSES.—The purposes of this section are—

21 (1) to provide assistance to the most vulnerable
22 developing countries, particularly to the most vulner-
23 able communities and populations in those countries;
24 and

1 (2) to support the development and implemen-
2 tation of climate change adaptation programs in a
3 way that protects and promotes interests of the
4 United States, to the extent those interests may be
5 advanced by minimizing, averting, or increasing re-
6 silience to climate change impacts.

7 (b) INTERNATIONAL CLIMATE CHANGE ADAPTATION
8 AND GLOBAL SECURITY PROGRAM.—

9 (1) ESTABLISHMENT.—The Secretary of State,
10 in consultation with the Administrator of the United
11 States Agency for International Development, the
12 Secretary of the Treasury, and the Administrator,
13 shall establish an International Climate Change Ad-
14 aptation and Global Security Program in accordance
15 with this section.

16 (2) DISTRIBUTION OF ASSISTANCE.—The Sec-
17 retary of State, or the head of such other Federal
18 agency as the President may designate, after con-
19 sultation with the Secretary of the Treasury, the Ad-
20 ministrator of the United States Agency for Inter-
21 national Development, and the Administrator, shall
22 direct the distribution of funding to carry out the
23 International Climate Change Adaptation and Global
24 Security Program—

25 (A) in the form of bilateral assistance;

1 (B) to multilateral funds or international
2 institutions pursuant to the Convention or an
3 agreement negotiated under the Convention; or
4 (C) through a combination of the mecha-
5 nisms identified under subparagraphs (A) and
6 (B).

7 **SEC. 325. EVALUATION AND REPORTS.**

8 (a) **MONITORING, EVALUATION, AND ENFORCE-**
9 **MENT.**—The Board shall establish and implement a sys-
10 tem to monitor and evaluate the effectiveness and effi-
11 ciency of assistance provided under this subtitle by includ-
12 ing evaluation criteria, such as performance indicators.

13 (b) **REPORTS AND REVIEW.**—

14 (1) **ANNUAL REPORT.**—Not later than 1 year
15 after the date of enactment of this Act, and annually
16 thereafter, the Board shall submit to the appropriate
17 committees of Congress a report that describes—

18 (A) the steps Federal agencies have taken,
19 and the progress made, toward accomplishing
20 the objectives of this section; and

21 (B) the ramifications of any potentially de-
22 stabilizing impacts climate change may have on
23 the interests of the United States.

24 (2) **REVIEWS.**—Not later than 3 years after the
25 date of enactment of this Act, and triennially there-

1 after, the Board, in cooperation with the National
2 Academy of Sciences and other appropriate research
3 and development institutions, shall—

4 (A) review the global needs and opportuni-
5 ties for climate change investment in developing
6 countries; and

7 (B) submit to Congress a report that de-
8 scribes the findings of the review.

9 **SEC. 326. REPORT ON CLIMATE ACTIONS OF MAJOR**
10 **ECONOMIES.**

11 (a) IN GENERAL.—The Secretary of State, in co-
12 operation with the Board, shall prepare an interagency re-
13 port on climate change and energy policy of the 5 coun-
14 tries that, of the countries that are not members of the
15 Organisation for Economic Co-Operation and Develop-
16 ment, emit the greatest annual quantity of greenhouse
17 gases.

18 (b) PURPOSES.—The purposes of the report shall
19 be—

20 (1) to provide to Congress and the public of the
21 United States—

22 (A) a better understanding of the actions
23 the countries described in subsection (a) are
24 taking to reduce greenhouse gas emissions; and

1 (B) an assessment of the climate change
2 and energy policy commitments and actions of
3 those countries; and

4 (2) to identify the means by which the United
5 States can assist those countries in achieving such
6 a reduction.

7 (c) SUBMISSION TO CONGRESS.—Not later than 15
8 months after the date of enactment of this Act, the Sec-
9 retary of State shall submit to the appropriate committees
10 of Congress the report prepared under this section.

11 **Subtitle C—Adapting to Climate** 12 **Change**

13 **PART 1—DOMESTIC ADAPTATION**

14 **Subpart A—National Climate Change Adaptation** 15 **Program**

16 **SEC. 341. NATIONAL CLIMATE CHANGE ADAPTATION PRO-** 17 **GRAM.**

18 The President shall establish within the United
19 States Global Change Research Program a National Cli-
20 mate Change Adaptation Program for the purpose of in-
21 creasing the overall effectiveness of Federal climate
22 change adaptation efforts.

23 **SEC. 342. CLIMATE SERVICES.**

24 The Secretary of Commerce, acting through the Ad-
25 ministrator of the National Oceanic and Atmospheric Ad-

1 ministration (NOAA), shall establish within NOAA a Na-
2 tional Climate Service to develop climate information,
3 data, forecasts, and warnings at national and regional
4 scales, and to distribute information related to climate im-
5 pacts to State, local, and tribal governments and the pub-
6 lic to facilitate the development and implementation of
7 strategies to reduce society's vulnerability to climate varia-
8 bility and change.

9 **Subpart B—Public Health and Climate Change**

10 **SEC. 351. SENSE OF CONGRESS ON PUBLIC HEALTH AND**
11 **CLIMATE CHANGE.**

12 It is the sense of the Congress that the Federal Gov-
13 ernment, in cooperation with international, State, tribal,
14 and local governments, Indian tribes, concerned public and
15 private organizations, and citizens, should use all prac-
16 ticable means and measures—

17 (1) to assist the efforts of public health and
18 health care professionals, first responders, States,
19 Indian tribes, municipalities, and local communities
20 to incorporate measures to prepare health systems to
21 respond to the impacts of climate change;

22 (2) to ensure—

23 (A) that the Nation's health professionals
24 have sufficient information to prepare for and

1 respond to the adverse health impacts of cli-
2 mate change;

3 (B) the utility and value of scientific re-
4 search in advancing understanding of—

5 (i) the health impacts of climate
6 change; and

7 (ii) strategies to prepare for and re-
8 spond to the health impacts of climate
9 change;

10 (C) the identification of communities vul-
11 nerable to the health effects of climate change
12 and the development of strategic response plans
13 to be carried out by health professionals for
14 those communities;

15 (D) the improvement of health status and
16 health equity through efforts to prepare for and
17 respond to climate change; and

18 (E) the inclusion of health policy in the de-
19 velopment of climate change responses;

20 (3) to encourage further research, interdiscipli-
21 nary partnership, and collaboration among stake-
22 holders in order to—

23 (A) understand and monitor the health im-
24 pacts of climate change; and

1 (B) improve public health knowledge and
2 response strategies to climate change;

3 (4) to enhance preparedness activities, and pub-
4 lic health infrastructure, relating to climate change
5 and health;

6 (5) to encourage each and every American to
7 learn about the impacts of climate change on health;
8 and

9 (6) to assist the efforts of developing nations to
10 incorporate measures to prepare health systems to
11 respond to the impacts of climate change.

12 **SEC. 352. RELATIONSHIP TO OTHER LAWS.**

13 Nothing in this subpart in any manner limits the au-
14 thority provided to or responsibility conferred on any Fed-
15 eral department or agency by any provision of any law
16 (including regulations) or authorizes any violation of any
17 provision of any law (including regulations), including any
18 health, energy, environmental, transportation, or any
19 other law or regulation.

20 **SEC. 353. NATIONAL STRATEGIC ACTION PLAN.**

21 (a) REQUIREMENT.—

22 (1) IN GENERAL.—The Secretary of Health and
23 Human Services, within 2 years after the date of the
24 enactment of this Act, on the basis of the best avail-
25 able science, and in consultation pursuant to para-

1 graph (2), shall publish a strategic action plan to as-
2 sist health professionals in preparing for and re-
3 sponding to the impacts of climate change on public
4 health in the United States and other nations, par-
5 ticularly developing nations.

6 (2) CONSULTATION.—In developing or making
7 any revision to the national strategic action plan, the
8 Secretary shall—

9 (A) consult with the Director of the Cen-
10 ters for Disease Control and Prevention, the
11 Administrator of the Environmental Protection
12 Agency, the Director of the National Institutes
13 of Health, the Director of the Indian Health
14 Service, the Secretary of Energy, other appro-
15 priate Federal agencies, Indian tribes, State
16 and local governments, public health organiza-
17 tions, scientists, and other interested stake-
18 holders; and

19 (B) provide opportunity for public input.

20 (b) CONTENTS.—

21 (1) IN GENERAL.—The Secretary shall assist
22 health professionals in preparing for and responding
23 effectively and efficiently to the health effects of cli-
24 mate change through measures including—

- 1 (A) developing, improving, integrating, and
2 maintaining domestic and international disease
3 surveillance systems and monitoring capacity to
4 respond to health-related effects of climate
5 change, including on topics addressing—
- 6 (i) water, food, and vector borne infec-
7 tious diseases and climate change;
 - 8 (ii) pulmonary effects, including re-
9 sponses to aeroallergens;
 - 10 (iii) cardiovascular effects, including
11 impacts of temperature extremes;
 - 12 (iv) air pollution health effects, includ-
13 ing heightened sensitivity to air pollution;
 - 14 (v) hazardous algal blooms;
 - 15 (vi) mental and behavioral health im-
16 pacts of climate change;
 - 17 (vii) the health of refugees, displaced
18 persons, and vulnerable communities;
 - 19 (viii) the implications for communities
20 vulnerable to health effects of climate
21 change, as well as strategies for responding
22 to climate change within these commu-
23 nities; and

1 (ix) local and community-based health
2 interventions for climate-related health im-
3 pacts;

4 (B) creating tools for predicting and moni-
5 toring the public health effects of climate
6 change on the international, national, regional,
7 State, tribal, and local levels, and providing
8 technical support to assist in their implementa-
9 tion;

10 (C) developing public health communica-
11 tions strategies and interventions for extreme
12 weather events and disaster response situations;

13 (D) identifying and prioritizing commu-
14 nities and populations vulnerable to the health
15 effects of climate change, and determining ac-
16 tions and communication strategies that should
17 be taken to inform and protect these commu-
18 nities and populations from the health effects of
19 climate change;

20 (E) developing health communication, pub-
21 lic education, and outreach programs aimed at
22 public health and health care professionals, as
23 well as the general public, to promote prepared-
24 ness and response strategies relating to climate
25 change and public health, including the identi-

1 fication of greenhouse gas reduction behaviors
2 that are health-promoting; and

3 (F) developing academic and regional cen-
4 ters of excellence devoted to—

5 (i) researching relationships between
6 climate change and health;

7 (ii) expanding and training the public
8 health workforce to strengthen the capacity
9 of such workforce to respond to and pre-
10 pare for the health effects of climate
11 change;

12 (iii) creating and supporting academic
13 fellowships focusing on the health effects
14 of climate change; and

15 (iv) training senior health ministry of-
16 ficials from developing nations to strength-
17 en the capacity of such nations to—

18 (I) prepare for and respond to
19 the health effects of climate change;
20 and

21 (II) build an international net-
22 work of public health professionals
23 with the necessary climate change
24 knowledge base;

1 (G) using techniques, including health im-
2 pact assessments, to assess various climate
3 change public health preparedness and response
4 strategies on international, national, State, re-
5 gional, tribal, and local levels, and make rec-
6 ommendations as to those strategies that best
7 protect the public health;

8 (H)(i) assisting in the development, imple-
9 mentation, and support of State, regional, trib-
10 al, and local preparedness, communication, and
11 response plans (including with respect to the
12 health departments of such entities) to antici-
13 pate and reduce the health threats of climate
14 change; and

15 (ii) pursuing collaborative efforts to de-
16 velop, integrate, and implement such plans;

17 (I) creating a program to advance research
18 as it relates to the effects of climate change on
19 public health across Federal agencies, including
20 research to—

21 (i) identify and assess climate change
22 health effects preparedness and response
23 strategies;

24 (ii) prioritize critical public health in-
25 frastructure projects related to potential

1 climate change impacts that affect public
2 health; and

3 (iii) coordinate preparedness for cli-
4 mate change health impacts, including the
5 development of modeling and forecasting
6 tools;

7 (J) providing technical assistance for the
8 development, implementation, and support of
9 preparedness and response plans to anticipate
10 and reduce the health threats of climate change
11 in developing nations; and

12 (K) carrying out other activities deter-
13 mined appropriate by the Secretary to plan for
14 and respond to the impacts of climate change
15 on public health.

16 (c) REVISION.—The Secretary shall revise the na-
17 tional strategic action plan not later than July 1, 2014,
18 and every 4 years thereafter, to reflect new information
19 collected pursuant to implementation of the national stra-
20 tegic action plan and otherwise, including information
21 on—

22 (1) the status of critical environmental health
23 parameters and related human health impacts;

24 (2) the impacts of climate change on public
25 health; and

1 (3) advances in the development of strategies
2 for preparing for and responding to the impacts of
3 climate change on public health.

4 (d) IMPLEMENTATION.—

5 (1) IMPLEMENTATION THROUGH HHS.—The
6 Secretary shall exercise the Secretary's authority
7 under this subpart and other provisions of Federal
8 law to achieve the goals and measures of the na-
9 tional strategic action plan.

10 (2) OTHER PUBLIC HEALTH PROGRAMS AND
11 INITIATIVES.—The Secretary and Federal officials of
12 other relevant Federal agencies shall administer
13 public health programs and initiatives authorized by
14 provisions of law other than this subpart, subject to
15 the requirements of such statutes, in a manner de-
16 signed to achieve the goals of the national strategic
17 action plan.

18 (3) SPECIFIC ACTIVITIES.—In furtherance of
19 the national strategic action plan, the Secretary
20 shall—

21 (A) conduct scientific research to assist
22 health professionals in preparing for and re-
23 sponding to the impacts of climate change on
24 public health; and

25 (B) provide funding for—

1 (i) research on the health effects of
2 climate change; and

3 (ii) preparedness planning on the
4 international, national, State, tribal, re-
5 gional, and local levels to respond to or re-
6 duce the burden of health effects of climate
7 change; and

8 (C) carry out other activities determined
9 appropriate by the Secretary to prepare for and
10 respond to the impacts of climate change on
11 public health.

12 **SEC. 354. ADVISORY BOARD.**

13 (a) ESTABLISHMENT.—The Secretary shall establish
14 a permanent science advisory board comprised of not less
15 than 10 and not more than 20 members.

16 (b) APPOINTMENT OF MEMBERS.—The Secretary
17 shall appoint the members of the science advisory board
18 from among individuals—

19 (1) who have expertise in public health and
20 human services, climate change, and other relevant
21 disciplines; and

22 (2) at least ½ of whom are recommended by
23 the President of the National Academy of Sciences.

24 (c) FUNCTIONS.—The science advisory board shall—

1 (1) provide scientific and technical advice and
2 recommendations to the Secretary on the domestic
3 and international impacts of climate change on pub-
4 lic health, populations and regions particularly vul-
5 nerable to the effects of climate change, and strate-
6 gies and mechanisms to prepare for and respond to
7 the impacts of climate change on public health; and

8 (2) advise the Secretary regarding the best
9 science available for purposes of issuing the national
10 strategic action plan.

11 **SEC. 355. REPORTS.**

12 (a) NEEDS ASSESSMENT.—

13 (1) IN GENERAL.—The Secretary shall seek to
14 enter into, by not later than 6 months after the date
15 of the enactment of this Act, an agreement with the
16 National Research Council and the Institute of Med-
17 icine to complete a report that—

18 (A) assesses the needs for health profes-
19 sionals to prepare for and respond to climate
20 change impacts on public health; and

21 (B) recommends programs to meet those
22 needs.

23 (2) SUBMISSION.—The agreement under para-
24 graph (1) shall require the completed report to be
25 submitted to the Congress and the Secretary and

1 made publicly available not later than 1 year after
2 the date of the agreement.

3 (b) CLIMATE CHANGE HEALTH PROTECTION AND
4 PROMOTION REPORTS.—

5 (1) IN GENERAL.—The Secretary, in consulta-
6 tion with the advisory board established under sec-
7 tion 354, shall ensure the issuance of reports to aid
8 health professionals in preparing for and responding
9 to the adverse health effects of climate change
10 that—

11 (A) review scientific developments on
12 health impacts of climate change; and

13 (B) recommend changes to the national
14 strategic action plan.

15 (2) SUBMISSION.—The Secretary shall submit
16 the reports required by paragraph (1) to the Con-
17 gress and make such reports publicly available not
18 later than July 1, 2013, and every 4 years there-
19 after.

20 **SEC. 356. DEFINITIONS.**

21 In this subpart:

22 (1) HEALTH IMPACT ASSESSMENT.—The term
23 “health impact assessment” means a combination of
24 procedures, methods, and tools by which a policy,
25 program, or project may be judged as to its potential

1 effects on the health of a population, and the dis-
2 tribution of those effects within the population.

3 (2) NATIONAL STRATEGIC ACTION PLAN.—The
4 term “national strategic action plan” means the
5 plan issued and revised under section 353.

6 (3) SECRETARY.—Unless otherwise specified,
7 the term “Secretary” means the Secretary of Health
8 and Human Services.

9 **Subpart C—Climate Change Safeguards for Natural**
10 **Resources Conservation**

11 **SEC. 361. PURPOSES.**

12 The purposes of this subpart are—

13 (1) to establish an integrated Federal program
14 that responds to ongoing and expected impacts of
15 climate change, including, where applicable, ocean
16 acidification, drought, flooding, and wildfire, by pro-
17 tecting, restoring, and conserving the natural re-
18 sources of the United States; and

19 (2) to provide financial support and incentives
20 for programs, strategies, and activities that respond
21 to threats of climate change, including, where appli-
22 cable, ocean acidification, drought, flooding, and
23 wildfire, by protecting, restoring, and conserving the
24 natural resources of the United States.

1 **SEC. 362. NATURAL RESOURCES CLIMATE CHANGE ADAP-**
2 **TATION POLICY.**

3 It is the policy of the Federal Government, in co-
4 operation with State and local governments, Indian tribes,
5 and other interested stakeholders, to use all practicable
6 means to protect, restore, and conserve natural resources
7 so that natural resources become more resilient, adapt to,
8 and withstand the ongoing and expected impacts of cli-
9 mate change, including, where applicable, ocean acidifica-
10 tion, drought, flooding, and wildfire.

11 **SEC. 363. DEFINITIONS.**

12 In this subpart:

13 (1) ACCOUNT.—The term “Account” means the
14 Natural Resources Climate Change Adaption Ac-
15 count established by section 370(a).

16 (2) ADMINISTRATORS.—The term “Administra-
17 tors” means—

18 (A) the Administrator of the National Oce-
19 anic and Atmospheric Administration; and

20 (B) the Director of the United States Geo-
21 logical Survey.

22 (3) BOARD.—The term “Board” means the
23 Science Advisory Board established by section
24 367(f)(1).

1 (4) CENTER.—The term “Center” means the
2 National Climate Change and Wildlife Science Cen-
3 ter described by section 367(e)(1).

4 (5) COASTAL STATE.—The term “coastal
5 State” has the meaning given the term “coastal
6 state” in section 304 of the Coastal Zone Manage-
7 ment Act of 1972 (16 U.S.C. 1453).

8 (6) CORRIDORS.—The term “corridors” means
9 areas that—

10 (A) provide connectivity, over different
11 time scales, of habitats or potential habitats;
12 and

13 (B) facilitate terrestrial, marine, estuarine,
14 and freshwater fish, wildlife, or plant movement
15 necessary for migration, gene flow, or dispersal,
16 or to respond to the ongoing and expected im-
17 pacts of climate change, including, where appli-
18 cable, ocean acidification, drought, flooding,
19 and wildfire.

20 (7) ECOLOGICAL PROCESSES.—The term “eco-
21 logical processes” means biological, chemical, or
22 physical interaction between the biotic and abiotic
23 components of an ecosystem, including—

24 (A) nutrient cycling;

25 (B) pollination;

- 1 (C) predator-prey relationships;
2 (D) soil formation;
3 (E) gene flow;
4 (F) disease epizootiology;
5 (G) larval dispersal and settlement;
6 (H) hydrological cycling;
7 (I) decomposition; and
8 (J) disturbance regimes, such as fire and
9 flooding.

10 (8) HABITAT.—The term “habitat” means the
11 physical, chemical, and biological properties that
12 fish, wildlife, or plants use for growth, reproduction,
13 survival, food, water, or cover (whether on land, in
14 water, or in an area or region).

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

19 (10) NATURAL RESOURCES.—The term “nat-
20 ural resources” means land, wildlife, fish, air, water,
21 estuaries, plants, habitats, and ecosystems of the
22 United States.

23 (11) NATURAL RESOURCES ADAPTATION.—The
24 term “natural resources adaptation” means the pro-
25 tection, restoration, and conservation of natural re-

1 sources so that natural resources become more resil-
2 ient, adapt to, and withstand the ongoing and ex-
3 pected impacts of climate change, including, where
4 applicable, ocean acidification, drought, flooding,
5 and wildfire.

6 (12) PANEL.—The term “Panel” means the
7 Natural Resources Climate Change Adaptation
8 Panel established under section 365(a).

9 (13) RESILIENCE; RESILIENT.—The terms “re-
10 silience” and “resilient” mean—

11 (A) the ability to resist or recover from
12 disturbance; and

13 (B) the ability to preserve diversity, pro-
14 ductivity, and sustainability.

15 (14) STATE.—The term “State” means—

16 (A) a State of the United States;

17 (B) the District of Columbia;

18 (C) American Samoa;

19 (D) Guam;

20 (E) the Commonwealth of the Northern
21 Mariana Islands;

22 (F) the Commonwealth of Puerto Rico;

23 and

24 (G) the United States Virgin Islands.

1 (15) STRATEGY.—The term “Strategy” means
2 the Natural Resources Climate Change Adaptation
3 Strategy developed under section 366(a).

4 **SEC. 364. COUNCIL ON ENVIRONMENTAL QUALITY.**

5 The Chair of the Council on Environmental Quality
6 shall—

7 (1) advise the President on implementing and
8 developing—

9 (A) the Strategy; and

10 (B) the Federal natural resource agency
11 adaptation plans required by section 368;

12 (2) serve as the Chair of the Panel established
13 under section 365; and

14 (3) coordinate Federal agency strategies, plans,
15 programs, and activities relating to protecting, re-
16 storing, and maintaining natural resources so that
17 natural resources become more resilient, adapt to,
18 and withstand the ongoing and expected impacts of
19 climate change.

20 **SEC. 365. NATURAL RESOURCES CLIMATE CHANGE ADAP-**
21 **TATION PANEL.**

22 (a) ESTABLISHMENT.—Not later than 90 days after
23 the date of enactment of this Act, the President shall es-
24 tablish a Natural Resources Climate Change Adaptation
25 Panel.

1 (b) DUTIES.—The Panel shall serve as a forum for
2 interagency consultation on, and the coordination of, the
3 development and implementation of the Strategy.

4 (c) MEMBERSHIP.—The Panel shall be composed
5 of—

6 (1) the Administrator of the National Oceanic
7 and Atmospheric Administration (or a designee);

8 (2) the Chief of the Forest Service (or a des-
9 ignee);

10 (3) the Director of the National Park Service
11 (or a designee);

12 (4) the Director of the United States Fish and
13 Wildlife Service (or a designee);

14 (5) the Director of the Bureau of Land Man-
15 agement (or a designee);

16 (6) the Director of the United States Geological
17 Survey (or a designee);

18 (7) the Commissioner of Reclamation (or a des-
19 ignee); and

20 (8) the Director of the Bureau of Indian Affairs
21 (or a designee);

22 (9) the Administrator of the Environmental
23 Protection Agency (or a designee);

24 (10) the Chief of Engineers (or a designee);

1 (11) the Chair of the Council on Environmental
2 Quality (or a designee);

3 (12) the Administrator of the Federal Emer-
4 gency Management Agency (or a designee); and

5 (13) the heads of such other Federal agencies
6 or departments with jurisdiction over natural re-
7 sources of the United States, as determined by the
8 President.

9 (d) CHAIRPERSON.—The Chair of the Council on En-
10 vironmental Quality shall serve as the Chairperson of the
11 Panel.

12 **SEC. 366. NATURAL RESOURCES CLIMATE CHANGE ADAP-**
13 **TATION STRATEGY.**

14 (a) IN GENERAL.—Not later than 1 year after the
15 date of enactment of this Act, the Panel shall develop a
16 Natural Resources Climate Change Adaptation Strategy—

17 (1) to protect, restore, and conserve natural re-
18 sources so that natural resources become more resil-
19 ient, adapt to, and withstand the ongoing and ex-
20 pected impacts of climate change; and

21 (2) to identify opportunities to mitigate the on-
22 going and expected impacts of climate change.

23 (b) DEVELOPMENT.—In developing and revising the
24 Strategy, the Panel shall—

1 (1) base the strategy on the best available
2 science;

3 (2) develop the strategy in close cooperation
4 with States and Indian tribes;

5 (3) coordinate with other Federal agencies, as
6 appropriate;

7 (4) consult with local governments, conservation
8 organizations, scientists, and other interested stake-
9 holders; and

10 (5) provide public notice and opportunity for
11 comment.

12 (c) REVISION.—After the Panel adopts the initial
13 Strategy, the Panel shall review and revise the Strategy
14 every 5 years to incorporate—

15 (1) new information regarding the ongoing and
16 expected impacts of climate change on natural re-
17 sources; and

18 (2) new advances in the development of strate-
19 gies that make natural resources more resilient or
20 able to adapt to the ongoing and expected impacts
21 of climate change.

22 (d) CONTENTS.—The Strategy shall—

23 (1) assess the vulnerability of natural resources
24 to climate change, including short-term, medium-

1 term, long-term, cumulative, and synergistic im-
2 pacts;

3 (2) describe current research, observation, and
4 monitoring activities at the Federal, State, tribal,
5 and local level related to the ongoing and expected
6 impacts of climate change on natural resources;

7 (3) identify and prioritize research and data
8 needs;

9 (4) identify natural resources likely to have the
10 greatest need for protection, restoration, and con-
11 servation due to the ongoing and expanding impacts
12 of climate change;

13 (5) include specific protocols for integrating
14 natural resources adaptation strategies and activities
15 into the conservation and management of natural re-
16 sources by Federal departments and agencies to en-
17 sure consistency across agency jurisdictions;

18 (6) include specific actions that Federal depart-
19 ments and agencies shall take to protect, conserve,
20 and restore natural resources to become more resil-
21 ient, adapt to, and withstand the ongoing and ex-
22 pected impacts of climate change, including a
23 timeline to implement those actions;

24 (7) include specific mechanisms for ensuring
25 communication and coordination—

1 (A) among Federal departments and agen-
2 cies; and

3 (B) between Federal departments and
4 agencies and State natural resource agencies,
5 United States territories, Indian tribes, private
6 landowners, conservation organizations, and
7 other countries that share jurisdiction over nat-
8 ural resources with the United States;

9 (8) include specific actions to develop and im-
10 plement consistent natural resources inventory and
11 monitoring protocols through interagency coordina-
12 tion and collaboration; and

13 (9) include procedures for guiding the develop-
14 ment of detailed agency- and department-specific ad-
15 aptation plans required under section 368.

16 (e) IMPLEMENTATION.—Consistent with other laws
17 and Federal trust responsibilities concerning Indian land,
18 each Federal department or agency represented on the
19 Panel shall integrate the elements of the Strategy that re-
20 late to conservation, restoration, and management of nat-
21 ural resources into agency plans, environmental reviews,
22 programs, and activities.

1 **SEC. 367. NATURAL RESOURCES ADAPTATION SCIENCE**
2 **AND INFORMATION.**

3 (a) COORDINATION.—Not later than 90 days after
4 the date of enactment of this Act, the Administrators shall
5 establish coordinated procedures for developing and pro-
6 viding science and information necessary to address the
7 ongoing and expected impacts of climate change on nat-
8 ural resources.

9 (b) OVERSIGHT.—The National Climate Change and
10 Wildlife Science Center established under subsection (e)
11 and the National Climate Service of the National Oceanic
12 and Atmospheric Administration shall oversee develop-
13 ment of the procedures.

14 (c) FUNCTIONS.—The Administrators shall—

15 (1) ensure that the procedures required under
16 subsection (a) avoid duplication; and

17 (2) ensure that the National Oceanic and At-
18 mospheric Administration and the United States Ge-
19 ological Survey—

20 (A) provide technical assistance to Federal
21 departments and agencies, State and local gov-
22 ernments, Indian tribes, and interested private
23 landowners that are pursuing the goals of ad-
24 dressing the ongoing and expected impacts of
25 climate change on natural resources;

1 (B) conduct and sponsor research to de-
2 velop strategies that increase the ability of nat-
3 ural resources to become more resilient, adapt
4 to, and withstand the ongoing and expected im-
5 pacts of climate change;

6 (C) provide Federal departments and agen-
7 cies, State and local governments, Indian tribes,
8 and interested private landowners with research
9 products, decision and monitoring tools, and in-
10 formation to develop strategies that increase
11 the ability of natural resources to become more
12 resilient, adapt to, and withstand the ongoing
13 and expected impacts of climate change; and

14 (D) assist Federal departments and agen-
15 cies in the development of adaptation plans re-
16 quired by section 368.

17 (d) SURVEY.—Not later than 1 year after the date
18 of enactment of this Act, and every 5 years thereafter,
19 the Secretary of Commerce and the Secretary of the Inte-
20 rior shall conduct a climate change impact survey that—

21 (1) identifies natural resources considered likely
22 to be adversely affected by climate change;

23 (2) includes baseline monitoring and ongoing
24 trend analysis;

1 (3) with input from stakeholders, identifies and
2 prioritizes necessary monitoring and research that is
3 most relevant to the needs of natural resource man-
4 agers to address the ongoing and expected impacts
5 of climate change and to promote resilience; and

6 (4) identifies the decision tools necessary to de-
7 velop strategies that increase the ability of natural
8 resources to become more resilient, adapt to, and
9 withstand the ongoing and expected impacts of cli-
10 mate change.

11 (e) NATIONAL CLIMATE CHANGE AND WILDLIFE
12 SCIENCE CENTER.—

13 (1) ESTABLISHMENT.—The Secretary of the In-
14 terior shall establish the National Climate Change
15 and Wildlife Science Center within the United States
16 Geological Survey.

17 (2) FUNCTIONS.—In collaboration with Federal
18 and State natural resources agencies and depart-
19 ments, Indian tribes, universities, and other partner
20 organizations, the Center shall—

21 (A) assess and synthesize current physical
22 and biological knowledge;

23 (B) prioritize scientific gaps in such knowl-
24 edge in order to forecast the ecological impacts
25 of climate change, including, where applicable,

1 ocean acidification, drought, flooding, and wild-
2 fire on fish and wildlife at the ecosystem, habi-
3 tat, community, population, and species levels;

4 (C) develop and improve tools to identify,
5 evaluate, and link scientific approaches and
6 models that forecast the impacts of climate
7 change, including, where applicable, ocean acidi-
8 fication, drought, flooding, and wildfire on fish,
9 wildlife, plants, and associated habitats, includ-
10 ing—

11 (i) monitoring;

12 (ii) predictive models;

13 (iii) vulnerability analyses;

14 (iv) risk assessments; and

15 (v) decision support systems that help
16 managers make informed decisions;

17 (D) develop and evaluate tools to adapt-
18 ively manage and monitor the effects of climate
19 change (including tools for the collection of
20 data) on fish and wildlife on the national, re-
21 gional, and local level; and

22 (E) develop capacities for sharing stand-
23 arized data and the synthesis of the data de-
24 scribed in subparagraph (D).

25 (f) SCIENCE ADVISORY BOARD.—

1 (1) ESTABLISHMENT.—Not later than 180 days
2 after the date of enactment of this Act, the Sec-
3 retary of Commerce and the Secretary of the Inte-
4 rior shall establish and appoint the members of the
5 Science Advisory Board.

6 (2) MEMBERSHIP.—The Board shall be com-
7 prised of not fewer than 10 and not more than 20
8 members—

9 (A) who have expertise in fish, wildlife,
10 plant, aquatic, and coastal and marine biology,
11 ecology, climate change, including, where appli-
12 cable, ocean acidification, drought, flooding,
13 and wildfire, and other relevant scientific dis-
14 ciplines;

15 (B) who represent a balanced membership
16 among Federal, State, tribal, and local rep-
17 resentatives, universities, and conservation or-
18 ganizations; and

19 (C) at least $\frac{1}{2}$ of whom are recommended
20 by the President of the National Academy of
21 Sciences.

22 (3) DUTIES.—The Board shall—

23 (A) advise the Secretary of Commerce and
24 the Secretary of the Interior on the state of the
25 science regarding—

1 (i) the ongoing and expected impacts
2 of climate change, including, where appli-
3 cable, ocean acidification, drought, flood-
4 ing, and wildfire on natural resources; and

5 (ii) scientific strategies and mecha-
6 nisms for protecting, restoring, and con-
7 serving natural resources so natural re-
8 sources become more resilient, adapt to,
9 and withstand the ongoing and expected
10 impacts of climate change, including,
11 where applicable, ocean acidification,
12 drought, flooding, and wildfire; and

13 (B) identify and recommend priorities for
14 ongoing research needs on the issues described
15 in subparagraph (A).

16 (4) COLLABORATION.—The Board shall collabo-
17 rate with climate change and ecosystem research en-
18 tities in other Federal agencies and departments.

19 (5) AVAILABILITY TO PUBLIC.—The advice and
20 recommendations of the Board shall be made avail-
21 able to the public.

1 **SEC. 368. FEDERAL NATURAL RESOURCE AGENCY ADAPTA-**
2 **TION PLANS.**

3 (a) DEVELOPMENT.—Not later than 1 year after the
4 date of development of the Strategy, each department or
5 agency with representation on the Panel shall—

6 (1) complete an adaptation plan for that de-
7 partment or agency that—

8 (A) implements the Strategy and is con-
9 sistent with the natural resources climate
10 change adaptation policy required by section
11 362;

12 (B) details the ongoing and expanding ac-
13 tions of the department or agency, and any
14 changes in decisionmaking processes necessary
15 to increase the ability of resources under the ju-
16 risdiction of the department or agency and, to
17 the maximum extent practicable, resources
18 under the jurisdiction of other departments and
19 agencies that may be significantly affected by
20 decisions of the department or agency, to be-
21 come more resilient, adapt to, and withstand
22 the ongoing and expected impacts of climate
23 change, including, where applicable, ocean acidi-
24 fication, drought, flooding, and wildfire; and

25 (C) includes a timeline for implementation;

1 (2) provide opportunities for public review and
2 comment on the adaptation plan, and in the case of
3 a plan by the Bureau of Indian Affairs, review by
4 Indian tribes; and

5 (3) submit the plan to the President for ap-
6 proval.

7 (b) REVIEW BY PRESIDENT AND SUBMISSION TO
8 CONGRESS.—

9 (1) REVIEW BY PRESIDENT.—The President
10 shall—

11 (A) approve an adaptation plan submitted
12 under subsection (a)(3) if the plan meets the
13 requirements of subsection (c) and is consistent
14 with the Strategy; and

15 (B) decide whether to approve the plan
16 within 60 days of submission.

17 (2) DISAPPROVAL.—If the President dis-
18 approves an adaptation plan, the President shall di-
19 rect the department or agency to submit a revised
20 plan within 60 days of that disapproval.

21 (3) SUBMISSION TO CONGRESS.—Not later than
22 30 days after the date of approval of an adaptation
23 plan by the President, the department or agency
24 shall submit the plan to—

1 (A) the Committee on Natural Resources
2 of the House of Representatives;

3 (B) the Committee on Energy and Natural
4 Resources of the Senate;

5 (C) the Committee on Environment and
6 Public Works of the Senate; and

7 (D) any other committees of the House of
8 Representatives or the Senate with principal ju-
9 risdiction over the department or agency.

10 (c) REQUIREMENTS.—Each adaptation plan shall—

11 (1) establish programs for assessing the ongo-
12 ing and expected impacts of climate change, includ-
13 ing, where applicable, ocean acidification, drought,
14 flooding, and wildfire on natural resources under the
15 jurisdiction of the department or agency preparing
16 the plan, including—

17 (A) assessment of cumulative and syner-
18 gistic effects; and

19 (B) programs that identify and monitor
20 natural resources likely to be adversely affected
21 and that have need for conservation;

22 (2) identify and prioritize—

23 (A) the strategies of the department or
24 agency preparing the plan;

1 (B) the specific conservation actions that
2 address the ongoing and expected impacts of
3 climate change, including, where applicable,
4 ocean acidification, drought, flooding, and wild-
5 fire on natural resources under jurisdiction of
6 the department or agency preparing the plan;

7 (C) strategies to protect, restore, and con-
8 serve such resources to become more resilient,
9 adapt to, and better withstand those impacts,
10 including—

11 (i) protection, restoration, and con-
12 servation of terrestrial, marine, estuarine,
13 and freshwater habitats and ecosystems;

14 (ii) establishment of terrestrial, ma-
15 rine, estuarine, and freshwater habitat
16 linkages and corridors;

17 (iii) restoration and conservation of
18 ecological processes;

19 (iv) protection of a broad diversity of
20 native species of fish, wildlife, and plant
21 populations across the ranges of those spe-
22 cies; and

23 (v) protection of fish, wildlife, and
24 plant health, recognizing that climate can

1 alter the distribution and ecology of
2 parasites, pathogens, and vectors;

3 (3) describe how the department or agency
4 will—

5 (A) integrate the strategies and conserva-
6 tion activities into plans, programs, activities,
7 and actions of the department or agency relat-
8 ing to the conservation and management of nat-
9 ural resources; and

10 (B) establish new plans, programs, activi-
11 ties, and actions, if necessary;

12 (4) establish methods—

13 (A) to assess the effectiveness of strategies
14 and conservation actions the department or
15 agency takes to protect, restore, and conserve
16 natural resources so natural resources become
17 more resilient, adapt to, and withstand the on-
18 going and expected impacts of climate change;
19 and

20 (B) to update those strategies and actions
21 to respond to new information and changing
22 conditions;

23 (5) describe current and proposed mechanisms
24 to enhance cooperation and coordination of natural
25 resources adaptation efforts with other Federal

1 agencies, State and local governments, Indian tribes,
2 and nongovernmental stakeholders;

3 (6) include written guidance to resource man-
4 agers that—

5 (A) explains how managers are expected to
6 address the ongoing and expected effects of cli-
7 mate change, including, where applicable, ocean
8 acidification, drought, flooding, and wildfire;

9 (B) identifies how managers shall obtain
10 any necessary site-specific information; and

11 (C) reflects best practices shared among
12 relevant agencies, but recognizes the unique
13 missions, objectives, and responsibilities of each
14 agency;

15 (7) identify and assess data and information
16 gaps necessary to develop natural resources adapta-
17 tion plans and strategies; and

18 (8) consider strategies that engage youth and
19 young adults (including youth and young adults
20 working in full-time or part-time youth service or
21 conservation corps programs) to provide the youth
22 and young adults with opportunities for meaningful
23 conservation and community service and to encour-
24 age opportunities for employment in the private sec-
25 tor through partnerships with employers.

1 (d) IMPLEMENTATION.—

2 (1) IN GENERAL.—Upon approval by the Presi-
3 dent, each department or agency with representation
4 on the Panel shall, consistent with existing author-
5 ity, implement the adaptation plan of the depart-
6 ment or agency through existing and new plans,
7 policies, programs, activities, and actions.

8 (2) CONSIDERATION OF IMPACTS.—

9 (A) IN GENERAL.—To the maximum ex-
10 tent practicable and consistent with existing au-
11 thority, natural resource management decisions
12 made by the department or agency shall—

13 (i) consider the ongoing and expected
14 impacts of climate change, including,
15 where applicable, ocean acidification,
16 drought, flooding, and wildfire on natural
17 resources; and

18 (ii) choose alternatives that will avoid
19 and minimize those impacts and promote
20 resilience.

21 (B) GUIDANCE.—The Council on Environ-
22 mental Quality shall provide guidance for Fed-
23 eral departments and agencies considering those
24 impacts and choosing alternatives that will

1 (2) APPROVAL OR DISAPPROVAL.—The Sec-
2 retary of the Interior and, as applicable, the Sec-
3 retary of Commerce shall approve or disapprove the
4 plan by written notice not later than 180 days after
5 the date of submission of the plan (or a revised
6 plan).

7 (3) RESUBMISSION.—Not later than 90 days
8 after the date of resubmission of an adaptation plan
9 that has been disapproved under paragraph (2), the
10 Secretary of the Interior and, as applicable, the Sec-
11 retary of Commerce, shall approve or disapprove the
12 plan by written notice.

13 (c) CONTENTS.—A State natural resources adapta-
14 tion plan shall—

15 (1) include strategies for addressing the ongoing
16 and expected impacts of climate change, including,
17 where applicable, ocean acidification, drought,
18 flooding, and wildfire on terrestrial, marine, estua-
19 rine, and freshwater fish, wildlife, plants, habitats,
20 ecosystems, wildlife health, and ecological processes
21 that—

22 (A) describe the ongoing and expected im-
23 pacts of climate change, including, where appli-
24 cable, ocean acidification, drought, flooding,
25 and wildfire on the diversity and health of fish,

1 wildlife and plant populations, habitats, eco-
2 systems, and associated ecological processes;

3 (B) establish programs for monitoring the
4 ongoing and expected impacts of climate
5 change, including, where applicable, ocean acidi-
6 fication, drought, flooding, and wildfire on fish,
7 wildlife, and plant populations, habitats, eco-
8 systems, and associated ecological processes;

9 (C) describe and prioritize proposed con-
10 servation actions that increase the ability of
11 fish, wildlife, plant populations, habitats, eco-
12 systems, and associated ecological processes to
13 become more resilient, adapt to, and better
14 withstand those impacts;

15 (D) consider strategies that engage youth
16 and young adults (including youth and young
17 adults working in full-time or part-time youth
18 service or conservation corps programs) to pro-
19 vide the youth and young adults with opportu-
20 nities for meaningful conservation and commu-
21 nity service and to encourage opportunities for
22 employment in the private sector through part-
23 nerships with employers;

1 (E) integrate protection and restoration of
2 resource resilience into agency decision making
3 and specific conservation actions;

4 (F) include a time frame for implementing
5 conservation actions for fish, wildlife, and plant
6 populations, habitats, ecosystems, and associ-
7 ated ecological processes;

8 (G) establish methods—

9 (i) for assessing the effectiveness of
10 strategies and conservation actions taken
11 to increase the ability of fish, wildlife, and
12 plant populations, habitats, ecosystems,
13 and associated ecological processes to be-
14 come more resilient, adapt to, and better
15 withstand the ongoing and expected im-
16 pacts of climate changes, including, where
17 applicable, ocean acidification, drought,
18 flooding, and wildfire; and

19 (ii) for updating strategies and ac-
20 tions to respond appropriately to new in-
21 formation or changing conditions;

22 (H) are incorporated into a revision of the
23 State wildlife action plan (also known as the
24 State comprehensive wildlife strategy) that has
25 been—

1 (i) submitted to the United States
2 Fish and Wildlife Service; and

3 (ii) approved, or is pending approval,
4 by the United States Fish and Wildlife
5 Service; and

6 (I) are developed—

7 (i) with the participation of the State
8 fish and wildlife agency, the State coastal
9 agency, the State agency responsible for
10 administration of Land and Water Con-
11 servation Fund grants, the State Forest
12 Legacy program coordinator, and other
13 State agencies considered appropriate by
14 the Governor of the State;

15 (ii) in coordination with the Secretary
16 of the Interior, and where applicable, the
17 Secretary of Commerce; and

18 (iii) in coordination with other States
19 that share jurisdiction over natural re-
20 sources with the State; and

21 (2) in the case of a coastal State, include strat-
22 egies for addressing the ongoing and expected im-
23 pacts of climate change, including, where applicable,
24 ocean acidification, drought, flooding, and wildfire
25 on a coastal zone that—

1 (A) identify natural resources likely to be
2 impacted by climate change, and describe the
3 impacts;

4 (B) identify and prioritize continuing re-
5 search and data collection needed to address
6 the impacts, including—

7 (i) acquisition of high-resolution
8 coastal elevation and nearshore bathymetry
9 data;

10 (ii) historic shoreline position maps,
11 erosion rates, and inventories of shoreline
12 features and structures;

13 (iii) measures and models of relative
14 rates of sea level rise or lake level changes,
15 including effects on flooding, storm surge,
16 inundation, and coastal geological proc-
17 esses;

18 (iv) measures and models of habitat
19 loss, including projected losses of coastal
20 wetlands and potentials for inland migra-
21 tion of natural shoreline habitats;

22 (v) measures and models of ocean and
23 coastal species and ecosystem migrations,
24 and changes in species population dynam-
25 ics;

1 (vi) changes in storm frequency, in-
2 tensity, or rainfall patterns;

3 (vii) measures and models of saltwater
4 intrusion into coastal rivers and aquifers;

5 (viii) changes in chemical or physical
6 characteristics of marine and estuarine
7 systems, including the presence, extent,
8 and timing of hypoxic and anoxic condi-
9 tions;

10 (ix) measures and models of increased
11 harmful algal blooms; and

12 (x) measures and models of the
13 spread of invasive species;

14 (C) identify and prioritize adaptation strat-
15 egies to protect, restore, and conserve natural
16 resources to enable natural resources to become
17 more resilient, adapt to, and withstand the on-
18 going and expected impacts of climate change,
19 including, where applicable, ocean acidification,
20 drought, flooding, and wildfire, including—

21 (i) protection, maintenance, and res-
22 toration of ecologically important coastal
23 lands, coastal and ocean ecosystems, and
24 species biodiversity and the establishment

1 of habitat buffer zones, migration cor-
2 ridors, and climate refugia; and

3 (ii) improved planning, siting policies,
4 hazard mitigation strategies, and State
5 property insurance programs;

6 (D) establish programs—

7 (i) for the long-term monitoring of the
8 ongoing and expected impacts of climate
9 change, including, where applicable, ocean
10 acidification, drought, flooding, and wild-
11 fire on the ocean and coastal zone; and

12 (ii) assess and adjust, when necessary,
13 the adaptive management strategies;

14 (E) establish performance measures that—

15 (i) assess the effectiveness of adapta-
16 tion strategies intended to improve resil-
17 ience and the ability of natural resources
18 to adapt to and withstand the ongoing and
19 expected impacts of climate change, includ-
20 ing, where applicable, ocean acidification,
21 drought, flooding, and wildfire;

22 (ii) assess the effectiveness of adapta-
23 tion strategies intended to minimize those
24 impacts on the coastal zone; and

1 (iii) update the strategies to respond
2 to new information or changing conditions;
3 and

4 (F) are developed—

5 (i) with the participation of the State
6 coastal agency and other appropriate State
7 agencies; and

8 (ii) in coordination with the Secretary
9 of Commerce and other appropriate Fed-
10 eral agencies.

11 (d) PUBLIC INPUT.—In developing the adaptation
12 plan, a State shall provide for solicitation and consider-
13 ation of public input and independent scientific input.

14 (e) COORDINATION WITH OTHER PLANS.—The State
15 adaptation plan shall review research and information
16 and, where appropriate, integrate the goals and measures
17 set forth in other natural resources conservation strate-
18 gies, including—

19 (1) the National Fish Habitat Action Plan;

20 (2) plans under the North American Wetlands
21 Conservation Act (16 U.S.C. 4401 et seq.);

22 (3) the Federal, State, and local partnership
23 known as “Partners in Flight”;

1 (4) federally approved coastal zone management
2 plans under the Coastal Zone Management Act of
3 1972 (16 U.S.C. 1451 et seq.);

4 (5) federally approved regional fishery manage-
5 ment plans and habitat conservation activities
6 under the Magnuson-Stevens Fishery Conservation
7 and Management Act (16 U.S.C. 1801 et seq.);

8 (6) the National Coral Reef Action Plan;

9 (7) recovery plans for threatened species and
10 endangered species under section 4(f) of the Endan-
11 gered Species Act of 1973 (16 U.S.C. 1533(f));

12 (8) habitat conservation plans under section 10
13 of that Act (16 U.S.C. 1539);

14 (9) other Federal, State, and tribal plans for
15 imperiled species;

16 (10) State or tribal hazard mitigation plans;

17 (11) State or tribal water management plans;

18 (12) State property insurance programs; and

19 (13) other State-based strategies that com-
20 prehensively implement adaptation activities to re-
21 mediate the ongoing and expected effects of climate
22 change, including, where applicable, ocean acidifica-
23 tion, drought, flooding, and wildfire, on terrestrial,
24 marine, and freshwater fish, wildlife, plants, and
25 other natural resources.

1 (f) UPDATING.—Each State plan shall be updated at
2 least every 5 years.

3 (g) FUNDING.—

4 (1) IN GENERAL.—Funds allocated to States
5 under section 370 shall be used only for activities
6 consistent with a State natural resources adaptation
7 plan approved by the Secretary of the Interior and,
8 as appropriate, the Secretary of Commerce.

9 (2) FUNDING PRIOR TO THE APPROVAL OF A
10 STATE PLAN.—Until the earlier of the date that is
11 3 years after the date of enactment of this Act or
12 the date on which a State adaptation plan is ap-
13 proved, a State shall be eligible to receive funding
14 under section 370 for adaptation activities that
15 are—

16 (A) consistent with the comprehensive
17 wildlife strategy of the State and, where appro-
18 priate, other natural resources conservation
19 strategies; and

20 (B) in accordance with a work plan devel-
21 oped in coordination with—

22 (i) the Secretary of the Interior; and

23 (ii) the Secretary of Commerce.

24 (3) COASTAL STATE.—In developing a work
25 plan under paragraph (2)(B), a coastal State shall

1 coordinate with the Secretary of Commerce only for
2 those portions of the strategy relating to activities
3 affecting the coastal zone.

4 (4) PENDING APPROVAL.—During the period
5 for which approval by the applicable Secretary is
6 pending, the State may continue to receive funds
7 under section 370 pursuant to the work plan de-
8 scribed in paragraph (2)(B).

9 **SEC. 370. NATURAL RESOURCES CLIMATE CHANGE ADAP-**
10 **TATION ACCOUNT.**

11 (a) DISTRIBUTION OF AMOUNTS.—

12 (1) STATES.—Of the amounts made available
13 for each fiscal year to carry out this subpart, 38.5
14 percent shall be provided to States to carry out nat-
15 ural resources adaptation activities in accordance
16 with adaptation plans approved under section 369,
17 and shall be distributed as follows:

18 (A) 32.5 percent shall be available to State
19 wildlife agencies in accordance with the appor-
20 tionment formula established under the second
21 subsection (c) (relating to the apportionment of
22 the Wildlife Conservation and Restoration Ac-
23 count) of section 4 of the Pittman-Robertson
24 Wildlife Restoration Act (16 U.S.C. 669c); and

1 (B) 6 percent shall be available to State
2 coastal agencies pursuant to the formula estab-
3 lished by the Secretary of Commerce under sec-
4 tion 306(c) of the Coastal Management Act of
5 1972 (16 U.S.C. 1455(c)).

6 (2) NATURAL RESOURCE ADAPTATION.—Of the
7 amounts made available for each fiscal year to carry
8 out this subpart—

9 (A) 17 percent shall be allocated to the
10 Secretary of the Interior for use in funding—

11 (i) natural resources adaptation activi-
12 ties carried out—

13 (I) under endangered species, mi-
14 gratory species, and other fish and
15 wildlife programs administered by the
16 National Park Service, the United
17 States Fish and Wildlife Service, the
18 Bureau of Indian Affairs, and the Bu-
19 reau of Land Management;

20 (II) on wildlife refuges, National
21 Park Service land, and other public
22 land under the jurisdiction of the
23 United States Fish and Wildlife Serv-
24 ice, the Bureau of Land Management,

1 the Bureau of Indian Affairs, or the
2 National Park Service; and

3 (III) within Federal water man-
4 aged by the Bureau of Reclamation
5 and the National Park Service; and

6 (ii) the implementation of the Na-
7 tional Fish and Wildlife Habitat and Cor-
8 ridors Information Program required by
9 section 371;

10 (B) 5 percent shall be allocated to the Sec-
11 retary of the Interior for natural resources ad-
12 aptation activities carried out under cooperative
13 grant programs, including—

14 (i) the cooperative endangered species
15 conservation fund authorized under section
16 6 of the Endangered Species Act of 1973
17 (16 U.S.C. 1535);

18 (ii) programs under the North Amer-
19 ican Wetlands Conservation Act (16
20 U.S.C. 4401 et seq.);

21 (iii) the Neotropical Migratory Bird
22 Conservation Fund established by section
23 9(a) of the Neotropical Migratory Bird
24 Conservation Act (16 U.S.C. 6108(a));

1 (iv) the Coastal Program of the
2 United States Fish and Wildlife Service;

3 (v) the National Fish Habitat Action
4 Plan;

5 (vi) the Partners for Fish and Wildlife
6 Program;

7 (vii) the Landowner Incentive Pro-
8 gram;

9 (viii) the Wildlife Without Borders
10 Program of the United States Fish and
11 Wildlife Service; and

12 (ix) the Migratory Species Program
13 and Park Flight Migratory Bird Program
14 of the National Park Service; and

15 (C) 3 percent shall be allocated to the Sec-
16 retary of the Interior to provide financial assist-
17 ance to Indian tribes to carry out natural re-
18 sources adaptation activities through the Tribal
19 Wildlife Grants Program of the United States
20 Fish and Wildlife Service.

21 (3) LAND AND WATER CONSERVATION.—

22 (A) DEPOSITS.—

23 (i) IN GENERAL.—Of the amounts
24 made available for each fiscal year to carry
25 out this subpart, 12 percent shall be de-

1 posited in the Land and Water Conserva-
2 tion Fund established under section 2 of
3 the Land and Water Conservation Fund
4 Act of 1965 (16 U.S.C. 460l-5).

5 (ii) USE OF DEPOSITS.—Deposits in
6 the Land and Water Conservation Fund
7 under this paragraph shall—

8 (I) be supplemental to authoriza-
9 tions provided under section 3 of the
10 Land and Water Conservation Fund
11 Act of 1965 (16 U.S.C. 460l-6),
12 which shall remain available for non-
13 adaptation needs; and

14 (II) be available to carry out this
15 subpart without further appropriation
16 or fiscal year limitation.

17 (B) DISTRIBUTION OF AMOUNTS.—Of the
18 amounts deposited under this paragraph in the
19 Land and Water Conservation Fund—

20 (i) for the purposes of carrying out
21 the natural resources adaptation activities
22 through the acquisition of land and inter-
23 ests in land under section 6 of the Land
24 and Water Conservation Fund Act of 1965
25 (16 U.S.C. 460l-8), $\frac{1}{6}$ shall be allocated

1 to the Secretary of the Interior and made
2 available on a competitive basis—

3 (I) to States, in accordance with
4 the natural resources adaptation plans
5 of States, and to Indian tribes;

6 (II) notwithstanding section 5 of
7 that Act (16 U.S.C. 460~~l~~-7); and

8 (III) in addition to any funds
9 provided pursuant to annual appro-
10 priations Acts, the Energy Policy Act
11 of 2005 (42 U.S.C. 15801 et seq.), or
12 any other authorization for non-
13 adaptation needs;

14 (ii) $\frac{1}{3}$ shall be allocated to the Sec-
15 retary of the Interior to carry out natural
16 resources adaptation activities through the
17 acquisition of lands and interests in land
18 under section 7 of the Land and Water
19 Conservation Fund Act of 1965 (16 U.S.C.
20 460~~l~~-9);

21 (iii) $\frac{1}{6}$ shall be allocated to the Sec-
22 retary of Agriculture and made available to
23 the States and Indian tribes to carry out
24 natural resources adaptation activities
25 through the acquisition of land and inter-

1 ests in land under section 7 of the Cooper-
2 ative Forestry Assistance Act of 1978 (16
3 U.S.C. 2103c); and

4 (iv) $\frac{1}{3}$ shall be allocated to the Sec-
5 retary of Agriculture to carry out natural
6 resources adaptation activities through the
7 acquisition of land and interests in land
8 under section 7 of the Land and Water
9 Conservation Fund Act of 1965 (16 U.S.C.
10 460l-9).

11 (C) EXPENDITURE OF FUNDS.—In allo-
12 cating funds under subparagraph (B), the Sec-
13 retary of the Interior and the Secretary of Agri-
14 culture shall take into consideration factors in-
15 cluding—

16 (i) the availability of non-Federal con-
17 tributions from State, local, or private
18 sources;

19 (ii) opportunities to protect fish and
20 wildlife corridors or otherwise to link or
21 consolidate fragmented habitats;

22 (iii) opportunities to reduce the risk of
23 catastrophic wildfires, drought, extreme
24 flooding, or other climate-related events

1 that are harmful to fish and wildlife and
2 people; and

3 (iv) the potential for conservation of
4 species or habitat types at serious risk due
5 to climate change, including, where appli-
6 cable, ocean acidification, drought, flood-
7 ing, and wildfire, or other stressors.

8 (4) NATIONAL FOREST AND GRASSLAND ADAP-
9 TATION.—Of the amounts made available for each
10 fiscal year to carry out this subpart, 5 percent shall
11 be allocated to the Forest Service, through the Sec-
12 retary of Agriculture—

13 (A) to fund natural resources adaptation
14 activities carried out in national forests and na-
15 tional grasslands under the jurisdiction of the
16 Forest Service; and

17 (B) to carry out natural resource adapta-
18 tion activities on State and private forest land
19 carried out under the Cooperative Forestry As-
20 sistance Act of 1978 (16 U.S.C. 2101 et seq.).

21 (5) COASTAL AND MARINE SYSTEM ADAPTA-
22 TION.—Of the amounts made available for each fis-
23 cal year to carry out this subpart, 7 percent shall be
24 allocated to the Secretary of Commerce to fund nat-
25 ural resources adaptation activities that protect,

1 maintain, and restore coastal, estuarine, and marine
2 resources, habitats, and ecosystems, including such
3 activities carried out under—

4 (A) the coastal and estuarine land con-
5 servation program administered by the National
6 Oceanic and Atmospheric Administration;

7 (B) the community-based restoration pro-
8 gram for fishery and coastal habitats estab-
9 lished under section 117 of the Magnuson-Ste-
10 vens Fishery Conservation and Management
11 Reauthorization Act of 2006 (16 U.S.C.
12 1891a);

13 (C) the Coastal Zone Management Act of
14 1972 (16 U.S.C. 1451 et seq.) that are specifi-
15 cally designed to strengthen the ability of coast-
16 al, estuarine, and marine resources, habitats,
17 and ecosystems to adapt to and withstand the
18 ongoing and expected impacts of climate
19 change, including, where applicable, ocean acidi-
20 fication, drought, flooding, and wildfire;

21 (D) the Open Rivers Initiative;

22 (E) the Magnuson-Stevens Fishery Con-
23 servation and Management Act (16 U.S.C.
24 1801 et seq.);

1 (F) the Marine Mammal Protection Act of
2 1972 (16 U.S.C. 1361 et seq.);

3 (G) the Endangered Species Act of 1973
4 (16 U.S.C. 1531 et seq.);

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

8 (I) the Coral Reef Conservation Act of
9 2000 (16 U.S.C. 6401 et seq.); and

10 (J) the Estuary Restoration Act of 2000
11 (33 U.S.C. 2901 et seq.).

12 (6) ESTUARINE AND FRESHWATER ECOSYSTEM
13 ADAPTATION.—Of the amounts made available for
14 each fiscal year to carry out this subpart, 7.5 per-
15 cent shall be allocated to the Administrator of the
16 Environmental Protection Agency and 5 percent
17 shall be available to the Secretary of the Army for
18 use by the Corps of Engineers for use in natural re-
19 sources adaptation activities restoring and pro-
20 tecting—

21 (A) large-scale freshwater aquatic eco-
22 systems, such as the Everglades, the Great
23 Lakes, Flathead Lake, the Missouri River, the
24 Mississippi River, the Colorado River, the Sac-
25 ramento-San Joaquin Rivers, the Ohio River,

1 the Columbia-Snake River System, the Apa-
2 lachicola, Chattahoochee, and Flint River Sys-
3 tem, the Connecticut River, and the Yellowstone
4 River;

5 (B) large-scale estuarine ecosystems, such
6 as Chesapeake Bay, Long Island Sound, Puget
7 Sound, the Mississippi River Delta, the San
8 Francisco Bay Delta, Narragansett Bay, and
9 Albemarle-Pamlico Sound;

10 (C) freshwater and estuarine ecosystems,
11 watersheds, and basins identified and
12 prioritized by the Administrator of the Environ-
13 mental Protection Agency or the Corps of Engi-
14 neers, working in cooperation with other Fed-
15 eral agencies, States, tribal governments, local
16 governments, scientists, and other conservation
17 partners; and

18 (D)(i) habitats and ecosystems through es-
19 tuary habitat restoration projects authorized by
20 the Estuary Restoration Act of 2000 (33
21 U.S.C. 2901 et seq.);

22 (ii) project modifications for improvement
23 of the environment;

24 (iii) aquatic restoration and protection
25 projects authorized by section 206 of the Water

1 Resources Development Act of 1996 (33 U.S.C.
2 2330); and

3 (iv) other appropriate programs and activi-
4 ties.

5 (b) USE OF FUNDS BY FEDERAL DEPARTMENTS AND
6 AGENCIES.—Funds allocated to Federal departments and
7 agencies under this section shall only be used for natural
8 resources adaptation activities consistent with an adapta-
9 tion plan approved under section 368.

10 (c) STATE COST-SHARING.—Notwithstanding any
11 other provision of law, a State that receives a grant under
12 this section shall use funds from non-Federal sources to
13 pay 10 percent of the costs of each activity carried out
14 under the grant.

15 **SEC. 371. NATIONAL FISH AND WILDLIFE HABITAT AND**
16 **CORRIDORS INFORMATION PROGRAM.**

17 (a) DEFINITIONS.—In this section:

18 (1) GEOSPATIAL INTEROPERABILITY FRAME-
19 WORK.—The term “Geospatial Interoperability
20 Framework” means the strategy used by the Na-
21 tional Biological Information Infrastructure (based
22 on accepted standards, specifications, and protocols
23 adopted through the International Standards Orga-
24 nization, the Open Geospatial Consortium, and the
25 Federal Geographic Data Committee) to manage, ar-

1 chive, integrate, analyze, and make geospatial and
2 biological data and metadata accessible.

3 (2) PROGRAM.—The term “Program” means
4 the National Fish and Wildlife Habitat and Cor-
5 ridors Information Program established under sub-
6 section (b).

7 (3) SECRETARY.—The term “Secretary” means
8 the Secretary of the Interior.

9 (4) SYSTEM.—The term “System” means the
10 Habitat and Corridors Information System estab-
11 lished under subsection (d)(1).

12 (b) ESTABLISHMENT.—Not later than 180 days after
13 the date of enactment of this Act, the Secretary, in co-
14 operation with the States and Indian tribes, shall establish
15 a National Fish and Wildlife Habitat and Corridors Infor-
16 mation Program.

17 (c) PURPOSE.—The purposes of the Program are—

18 (1) to support States and Indian tribes in devel-
19 oping geographical information system databases of
20 fish and wildlife habitats and corridors that—

21 (A) inform planning and development deci-
22 sions within each State;

23 (B) enable each State to model climate im-
24 pacts and adaptation; and

1 (C) provide geographically specific en-
2 hancements of State wildlife action plans;

3 (2) to ensure the collaborative development of a
4 comprehensive national geographic information sys-
5 tem database of maps, models, data, surveys, infor-
6 mational products, and other geospatial information
7 regarding fish and wildlife habitat and corridors
8 that—

9 (A) is based on consistent protocols for
10 sampling and mapping across landscapes;

11 (B) takes into account regional differences;

12 and

13 (C) uses—

14 (i) existing and planned State- and
15 tribal-based geographical information sys-
16 tem databases; and

17 (ii) existing databases, analytical
18 tools, metadata activities, and other infor-
19 mation products available through the Na-
20 tional Biological Information Infrastruc-
21 ture maintained by the Secretary and non-
22 governmental organizations; and

23 (3) to facilitate the use of those databases by
24 Federal, State, local, and tribal decisionmakers to
25 incorporate qualitative information on fish and wild-

1 life habitats and corridors at the earliest practicable
2 stage for use in—

3 (A) prioritizing and targeting natural re-
4 sources adaptation strategies and activities;

5 (B) avoiding, minimizing, and mitigating
6 the impacts on fish and wildlife habitat and cor-
7 ridors when locating energy development, water,
8 transmission, transportation, and other land
9 use projects;

10 (C) assessing the impacts of existing devel-
11 opment on habitats and corridors; and

12 (D) developing management strategies that
13 enhance the ability of fish, wildlife, and plant
14 species to migrate or respond to shifting habi-
15 tats within existing habitats and corridors.

16 (d) HABITAT AND CORRIDORS INFORMATION SYS-
17 TEM.—

18 (1) IN GENERAL.—The Secretary, in coopera-
19 tion with States and Indian tribes, shall establish a
20 Habitat and Corridors Information System.

21 (2) CONTENTS.—The System shall—

22 (A) include maps, data, and descriptions of
23 fish and wildlife habitat and corridors that—

24 (i) have been developed by Federal
25 agencies, State wildlife agencies, and nat-

1 ural heritage programs, Indian tribes, local
2 governments, nongovernmental organiza-
3 tions, and industry; and

4 (ii) meet accepted geospatial inter-
5 operability framework data and metadata
6 protocols and standards;

7 (B) include maps and descriptions of pro-
8 jected shifts in habitats and corridors of fish
9 and wildlife species in response to climate
10 change;

11 (C) ensure data quality;

12 (D) at scales useful to decisionmakers,
13 make data, models, and analyses included in
14 the System available—

15 (i) to prioritize and target natural re-
16 sources adaptation strategies and activi-
17 ties;

18 (ii) to assess the impacts of existing
19 development on habitats and corridors;

20 (iii) to assess the impacts of proposed
21 energy development, water, transmission,
22 transportation, and other land use projects
23 and to avoid, minimize, or mitigate those
24 impacts on habitats and corridors; and

1 (iv) to develop management strategies
2 that enhance the ability of fish, wildlife,
3 and plant species to migrate or respond to
4 shifting habitats within existing habitats
5 and corridors;

6 (E) update maps and other information as
7 landscapes, habitats, corridors, and wildlife pop-
8 ulations change, or as new information becomes
9 available;

10 (F) encourage development of collaborative
11 plans by Federal and State agencies and Indian
12 tribes that monitor and evaluate the ability of
13 the System to meet the needs of decision-
14 makers;

15 (G) identify gaps in habitat and corridor
16 information, mapping, and research needed to
17 fully assess current data and metadata;

18 (H) prioritize research and future data col-
19 lection activities for use in updating the System
20 and provide support for those activities;

21 (I) include mechanisms to support collabo-
22 rative research, mapping, and planning of habi-
23 tats and corridors by Federal and State agen-
24 cies, Indian tribes, and other interested stake-
25 holders;

1 (J) incorporate biological and geospatial
2 data on species and corridors found in energy
3 development and transmission plans, including
4 renewable energy initiatives, transportation, and
5 other land use plans;

6 (K) identify, prioritize, and describe key
7 parcels of non-Federal land that—

8 (i) are located within units of the Na-
9 tional Park System, National Wildlife Ref-
10 uge System, National Forest System, or
11 National Grassland System; and

12 (ii) are critical to maintenance of
13 wildlife habitat and migration corridors;
14 and

15 (L) be based on the best scientific informa-
16 tion available.

17 (e) FINANCIAL AND OTHER SUPPORT.—The Sec-
18 retary may provide support to the States and Indian
19 tribes, including financial and technical assistance, for ac-
20 tivities that support the development and implementation
21 of the System.

22 (f) COORDINATION.—In cooperation with States and
23 Indian tribes, the Secretary shall recommend how the in-
24 formation in the System may be incorporated into relevant

1 State and Federal plans that affect fish and wildlife, in-
2 cluding—

3 (1) land management plans;

4 (2) the State Comprehensive Wildlife Conserva-
5 tion Strategies; and

6 (3) appropriate tribal conservation plans.

7 (g) PURPOSE OF INCORPORATION.—The Secretary
8 shall make the recommendations required by subsection
9 (f) to ensure that relevant State and Federal plans that
10 affect fish and wildlife—

11 (1) prevent unnecessary habitat fragmentation
12 and disruption of corridors;

13 (2) promote the landscape connectivity nec-
14 essary to allow wildlife to move as necessary to meet
15 biological needs, adjust to shifts in habitat, and
16 adapt to climate change; and

17 (3) minimize the impacts of energy, develop-
18 ment, water, transportation, and transmission
19 projects and other activities expected to impact habi-
20 tat and corridors.

21 **SEC. 372. ADDITIONAL PROVISIONS REGARDING INDIAN**
22 **TRIBES.**

23 (a) FEDERAL TRUST RESPONSIBILITY.—Nothing in
24 this subpart amends, alters, or gives priority over the Fed-
25 eral trust responsibility to any Indian tribe.

1 (b) EXEMPTION FROM FOIA.—If a Federal depart-
2 ment or agency receives any information relating to sacred
3 sites or cultural activities identified by an Indian tribe as
4 confidential, such information shall be exempt from disclo-
5 sure under section 552 of title 5, United States Code
6 (commonly referred to as the Freedom of Information
7 Act).

8 (c) APPLICATION OF OTHER LAW.—The Secretary of
9 the Interior may apply the provisions of the Indian Self-
10 Determination and Education Assistance Act (25 U.S.C.
11 450 et seq.) in the implementation of this subpart.

12 **Subpart D—Additional Climate Change Adaptation**
13 **Programs**

14 **SEC. 381. WATER SYSTEM MITIGATION AND ADAPTION**
15 **PARTNERSHIPS.**

16 (a) DEFINITIONS.—In this section:

17 (1) OWNER OR OPERATOR.—

18 (A) IN GENERAL.—The term “owner or
19 operator” means a person (including a regional,
20 local, municipal, or private entity) that owns or
21 operates a water system.

22 (B) INCLUSION.—The term “owner or op-
23 erator” includes—

1 (i) a non-Federal entity that has oper-
2 ational responsibilities for a federally or
3 State owned water system; and

4 (ii) an entity formed pursuant to any
5 State's joint exercise of powers statutes
6 that includes one or more of the entities in
7 paragraph (A).

8 (2) WATER SYSTEM.—The term “water sys-
9 tem” means—

10 (A) a community water system (as defined
11 in section 1401 of the Safe Drinking Water Act
12 (42 U.S.C. 300f));

13 (B) a treatment works (as defined in sec-
14 tion 212 of the Federal Water Pollution Control
15 Act (33 U.S.C. 1292)), including a municipal
16 separate storm sewer system;

17 (C) a decentralized wastewater treatment
18 system for domestic sewage;

19 (D) a groundwater storage and replenish-
20 ment system; or

21 (E) a system for transport and delivery of
22 water for irrigation or conservation.

23 (b) ESTABLISHMENT.—The Administrator shall es-
24 tablish a water system mitigation and adaptation partner-

1 ship program to provide funds to States for water system
2 adaptation projects.

3 (c) GRANTS.—Beginning in fiscal year 2010, each
4 State receiving funds pursuant to this section shall make
5 grants to owners or operators of water systems to address
6 any ongoing or forecasted (based on the best available re-
7 search and data) climate-related impact on the water qual-
8 ity, water supply or reliability of a region of the United
9 States, for the purposes of mitigating or adapting to the
10 impacts of climate change.

11 (d) ELIGIBLE USES.—The funds made available to
12 each State pursuant to this section shall be used exclu-
13 sively to assist in the planning, design, construction, im-
14 plementation, or operation or maintenance of any program
15 or project to respond or increase the resilience of a water
16 system to climate change by—

17 (1) conserving water or enhancing water use ef-
18 ficiency, including through the use of water metering
19 and electronic sensing and control systems to meas-
20 ure the effectiveness of a water efficiency program;

21 (2) modifying or relocating existing water sys-
22 tem infrastructure made or projected to be signifi-
23 cantly impaired by climate change impacts;

24 (3) preserving or improving water quality, in-
25 cluding through measures to manage, reduce, treat,

1 or reuse municipal stormwater, wastewater, or
2 drinking water;

3 (4) investigating, designing, or constructing
4 groundwater remediation, recycled water, or desali-
5 nation facilities or systems to serve existing commu-
6 nities;

7 (5) enhancing water management by increasing
8 watershed preservation and protection, such as
9 through the use of natural or engineered green in-
10 frastructure in the management, conveyance, or
11 treatment of water, wastewater, or stormwater;

12 (6) enhancing energy efficiency or the use and
13 generation of renewable energy in the management,
14 conveyance, or treatment of water, wastewater, or
15 stormwater;

16 (7) supporting the adoption and use of ad-
17 vanced water treatment, water supply management
18 (such as reservoir reoperation and water banking),
19 or water demand management technologies, projects,
20 or processes (such as water reuse and recycling,
21 adaptive conservation pricing, and groundwater
22 banking) that maintain or increase water supply or
23 improve water quality;

24 (8) modifying or replacing existing systems or
25 constructing new systems for existing communities

1 or land currently in agricultural production to im-
2 prove water supply, reliability, storage, or convey-
3 ance in a manner that—

4 (A) promotes conservation or improves the
5 efficiency of utilization of available water sup-
6 plies; and

7 (B) does not further exacerbate stresses on
8 ecosystems or cause redirected impacts by de-
9 grading water quality or increasing net green-
10 house gas emissions;

11 (9) supporting practices and projects, such as
12 improved irrigation systems, water banking and
13 other forms of water transactions, groundwater re-
14 charge, stormwater capture, groundwater conjunc-
15 tive use, and reuse or recycling of drainage water,
16 to improve water quality or promote more efficient
17 water use on land currently in agricultural produc-
18 tion; or

19 (10) conducting and completing studies or as-
20 sessments to project how climate change may impact
21 the future operations and sustainability of water sys-
22 tems.

23 (e) APPLICATION.—To be eligible to receive a grant
24 from the State under this section, the owner or operator

1 of a water system shall submit to the State an application
2 that—

3 (1) includes a proposal of the program, strat-
4 egy, or infrastructure improvement to be planned,
5 designed, constructed, implemented, or maintained
6 by the water system;

7 (2) cites the best available research or data that
8 demonstrate—

9 (A) the risk to the water resources or in-
10 frastructure of the water system as a result of
11 ongoing or forecasted changes to the
12 hydrological system brought about by factors
13 arising from climate change, including rising
14 sea levels and changes in precipitation levels;
15 and

16 (B) how the proposed program, strategy,
17 or infrastructure improvement would perform
18 under the anticipated climate conditions; and

19 (3) explains how the proposed program, strat-
20 egy, or infrastructure improvement is expected to
21 enhance the resiliency of the water system, including
22 source water protection for community water sys-
23 tems, to these risks or reduce the direct or indirect
24 greenhouse gas emissions of the water system.

25 (f) COMPETITIVE PROCESS.—

1 (1) IN GENERAL.—Each calendar year, each
2 State shall conduct a competitive process to select
3 and fund applications under this section.

4 (2) PRIORITY REQUIREMENTS AND
5 WEIGHTING.—In carrying out the process, the
6 States shall—

7 (A) prioritize funding of applications that
8 are submitted by the owners or operators of
9 water systems that are, based on the best avail-
10 able research and data, at the greatest and
11 most immediate risk of facing significant cli-
12 mate-related negative impacts on water quality
13 or quantity; and

14 (B) in selecting among the priority applica-
15 tions determined under subparagraph (A), en-
16 sure that, to the maximum extent practicable,
17 the final list of applications funded for each
18 year includes a substantial number meeting one
19 or more of each of the following goals—

20 (i) promote more efficient water use,
21 water conservation, water reuse, or recy-
22 cling;

23 (ii) use decentralized, low-impact de-
24 velopment technologies and nonstructural
25 approaches, including practices that use,

1 enhance, or mimic the natural hydrological
2 cycle or protect natural flows;

3 (iii) reduce stormwater runoff by pro-
4 tecting or enhancing natural ecosystem
5 functions;

6 (iv) modify, upgrade, enhance, or re-
7 place existing water system infrastructure
8 in response to ongoing or forecasted cli-
9 mate-related impacts;

10 (v) promote the sustainability and re-
11 liability of water supplies used for agricul-
12 tural purposes;

13 (vi) improve water quality or quantity
14 for agricultural and municipal uses, includ-
15 ing through salinity reduction; and

16 (vii) provide multiple benefits, includ-
17 ing to water supply enhancement or de-
18 mand reduction, water quality protection
19 or improvement, increased flood protection,
20 and ecosystem protection or improvement;
21 and

22 (C) provide for solicitation and consider-
23 ation of public input in the development of cri-
24 teria used in evaluating applications.

25 (g) COST-SHARING.—

1 (1) FEDERAL SHARE.—The share of the cost of
2 any program, strategy, or infrastructure improve-
3 ment that is the subject of a grant awarded by a
4 State to the owner or operator of a water system
5 under subsection (c) paid through funds distributed
6 under this section shall not exceed 50 percent of the
7 cost of the program, strategy, and infrastructure im-
8 provement.

9 (2) CALCULATION OF NON-FEDERAL SHARE.—
10 In calculating the non-Federal share of the cost of
11 a program, strategy, or infrastructure improvement
12 proposed by a water system through an application
13 submitted by the water system under subsection (e),
14 the State shall—

15 (A) include the value of any in-kind serv-
16 ices that are integral to the completion of the
17 program, strategy, or infrastructure improve-
18 ment, including reasonable administrative and
19 overhead costs; and

20 (B) not include any other amount that the
21 water system receives from a Federal agency.

22 (h) LABOR STANDARDS.—

23 (1) IN GENERAL.—Other than with respect to
24 employees of State and local agencies, or other pub-
25 lic entities, all laborers and mechanics employed on

1 infrastructure improvements funded directly by or
2 assisted in whole or in part by this section shall be
3 paid wages at rates not less than those prevailing for
4 the same type of work on similar construction in the
5 immediate locality, as determined by the Secretary
6 of Labor in accordance with subchapter IV of chap-
7 ter 31 of part A of subtitle II of title 40, United
8 States Code.

9 (2) **AUTHORITY AND FUNCTIONS.**—With re-
10 spect to the labor standards in this subsection, the
11 Secretary of Labor shall have the authority and
12 functions set forth in Reorganization Plan Num-
13 bered 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.)
14 and section 3145 of title 40, United States Code.

15 **SEC. 382. FLOOD CONTROL, PROTECTION, PREVENTION,**
16 **AND RESPONSE.**

17 (a) **ESTABLISHMENT.**—The Administrator shall es-
18 tablish a Flood Control, Protection, Prevention and Re-
19 sponse Program to provide funds to States for flood con-
20 trol, protection, prevention and response projects.

21 (b) **ELIGIBLE USES.**—

22 (1) **IN GENERAL.**—States receiving funding
23 pursuant to this section may use such funding on
24 flood control, protection, prevention and response
25 programs and projects addressing the projected im-

1 pacts of climate change in accordance with this sec-
2 tion.

3 (2) OBJECTIVES.—Such projects and activities
4 shall seek to mitigate or adapt to the destructive im-
5 pacts of climate related increases in the duration,
6 frequency, or magnitude of rainfall or runoff, includ-
7 ing snowmelt runoff, as well as hurricanes, including
8 projects and programs that—

9 (A) reduce flood damage, risk, and vulner-
10 ability;

11 (B) identify, maintain and restore eco-
12 systems and natural barriers integral to flood
13 control, protection, prevention and response;

14 (C) update the available data, technologies,
15 and scientific knowledge used in estimating,
16 identifying and mitigating flood hazards;

17 (D) highlight, update and remediate
18 vulnerabilities in emergency response;

19 (E) incorporate risk analysis and a risk-re-
20 duction approach to flood-related investments;

21 (F) incorporate and identify changes in
22 risk due to processes such as land loss, subsid-
23 ence, sea-level rise, reduced natural buffers,
24 urban development and infrastructure aging;
25 and

1 (G) identify and incorporate innovative ap-
2 proaches to land use management, water re-
3 source planning, and ecosystem restoration.

4 (3) PRIORITY.—Priority in projects to reduce
5 flood events shall be given to those projects that di-
6 rectly assist local governments and communities in
7 flood control, protection, prevention and response ac-
8 tivities.

9 **SEC. 383. WILDFIRE.**

10 (a) FINDINGS.—Congress finds that—

11 (1) since 1980, wildfires in the United States
12 have burned almost twice as many acres per year on
13 average than the average burned acreage during the
14 period beginning on January 1, 1920, and ending on
15 December 31, 1979;

16 (2) the wildfire season in the western United
17 States has increased by an average of 78 days dur-
18 ing the 30-year period preceding the date of enact-
19 ment of this Act;

20 (3) researchers predict that the area subject to
21 wildfire damage will increase during the 21st cen-
22 tury by up to 118 percent as a result of climate
23 change;

1 (D) has a community wildfire protection
2 plan (as defined in section 101 of the Healthy
3 Forests Restoration Act of 2003 (16 U.S.C.
4 6502)); and

5 (E) is engaged in a successful collaborative
6 process that includes multiple interested per-
7 sons representing diverse interests and is trans-
8 parent and nonexclusive, such as a resource ad-
9 visory committee established under section 205
10 of the Secure Rural Schools and Community
11 Self-Determination Act of 2000 (Public Law
12 106-393; 16 U.S.C. 500 note).

13 (2) SECRETARIES.—The term “Secretaries”
14 means the Secretary of Agriculture and the Sec-
15 retary of the Interior.

16 (d) FIRE RISK MAPPING.—As soon as is practicable
17 after the date of the enactment of this Act, the Secretaries
18 shall develop regional maps of communities most at risk
19 of wildfire and in need of hazardous fuel treatment and
20 maintenance. The maps shall identify priority areas for
21 hazardous fuels reduction projects, including—

22 (1) at-risk communities in fire-prone areas of
23 the wildland-urban interface (as defined in section
24 101 of the Healthy Forests Restoration Act of 2003
25 (16 U.S.C. 6502));

1 (2) watersheds and municipal drinking water
2 sources;

3 (3) emergency evacuation corridors;

4 (4) electricity transmission corridors;

5 (5) low-capacity or low-income communities;

6 and

7 (6) communities in fire-prone areas due to the
8 impact of pest infestation on forest resources.

9 (e) LOCAL WILDLAND FIREFIGHTING CAPABILITY
10 GRANTS.—

11 (1) GRANTS AVAILABLE.—The Secretaries may
12 provide cost-share grants to fire-ready communities
13 to assist such communities in carrying out activities
14 authorized by paragraph (2).

15 (2) ELIGIBLE ACTIVITIES.—Grant funds may
16 be used for the following:

17 (A) Education programs to raise aware-
18 ness of homeowners and citizens about wildland
19 fire protection practices, including FireWise or
20 similar programs.

21 (B) Training programs for local fire-
22 fighters on wildland firefighting techniques and
23 approaches.

24 (C) Equipment acquisition to facilitate
25 wildland fire preparedness.

1 (D) Implementation of a community wild-
2 fire protection plan.

3 (E) Forest restoration that accomplishes
4 fuels reduction

5 (f) WILDLAND FIRE COST-SHARE AGREEMENTS.—In
6 developing any wildland fire cost-share agreement with a
7 State Forester or equivalent official, the Secretaries shall,
8 to the maximum extent practicable, encourage the State
9 and local communities involved to become fire-ready com-
10 munities.

11 **SEC. 384. COASTAL AND GREAT LAKES STATE ADAPTATION**
12 **PROGRAM.**

13 (a) FINDINGS.—According to the National Ocean Ec-
14 onomics Program, coastal and Great Lakes States account
15 for 81.4 percent of the population of the United States
16 and generate 83 percent of the economic output of the
17 United States.

18 (b) DEFINITIONS.—In this section:

19 (1) COASTAL STATE.—The term “coastal
20 State” has the meaning given the term “coastal
21 state” in section 304 of the Coastal Zone Manage-
22 ment Act of 1972 (16 U.S.C. 1453).

23 (2) COASTAL WATERSHED.—The term “coastal
24 watershed” means a geographical area drained into
25 or contributing water to an estuarine area, an ocean,

1 or a Great Lake, all or a portion of which is within
2 the coastal zone (as defined in section 304 of the
3 Coastal Zone Management Act of 1972 (16 U.S.C.
4 1453)).

5 (3) SHORELINE MILES.—The term “shoreline
6 miles”, with respect to a coastal State, means the
7 mileage of tidal shoreline or Great Lake shoreline of
8 the coastal State, based on the most recently avail-
9 able data from or accepted by the National Ocean
10 Service of the National Oceanic and Atmospheric
11 Administration.

12 (c) DISTRIBUTION.—

13 (1) IN GENERAL.—The Administrator shall dis-
14 tribute, in accordance with this section, funding for
15 coastal State economic protection under subsection.

16 (2) ALLOCATION.—The funding available for al-
17 location under subsection (b) for a calendar year
18 shall be distributed among coastal States, as follows:

19 (A) 25 percent based on the proportion
20 that—

21 (i) the number of shoreline miles of a
22 coastal State; bears to

23 (ii) the total number of shoreline
24 miles of all coastal States.

1 (B) 25 percent based on the proportion
2 that—

3 (i) the population of a coastal State;
4 bears to

5 (ii) the total population of all coastal
6 States.

7 (C) 50 percent divided equally among all
8 coastal States.

9 (d) USE OF FUNDING.—

10 (1) IN GENERAL.—During any calendar year, a
11 coastal State receiving funding under this section
12 may use the funding only for projects and activities
13 to plan for and address the impacts of climate
14 change in the coastal watershed, including—

15 (A) to address the impacts of climate
16 change with respect to—

17 (i) accelerated sea level rise and lake
18 level changes;

19 (ii) shoreline erosion;

20 (iii) increased storm frequency or in-
21 tensity;

22 (iv) changes in rainfall or other pre-
23 cipitation; and

24 (v) related flooding;

1 (B) to identify and develop plans to pro-
2 tect, or, as necessary or applicable, to relocate
3 public facilities and infrastructure, coastal re-
4 sources of national significance, public energy
5 facilities, or other public water uses located in
6 the coastal watershed that are affected by cli-
7 mate change, including strategies that use nat-
8 ural resources, such as natural buffer zones,
9 natural shorelines, and habitat protection or
10 restoration;

11 (C) to research and collect data using, or
12 on matters such as—

- 13 (i) historical shoreline position maps;
14 (ii) historical shoreline erosion rates;
15 (iii) inventories of shoreline features
16 and conditions;
17 (iv) acquisition of high-resolution to-
18 pography and bathymetry;
19 (v) sea level rise inundation models;
20 (vi) storm surge sea level rise linked
21 inundation models;
22 (vii) shoreline change modeling based
23 on sea level rise projections;
24 (viii) sea level rise vulnerability anal-
25 yses and socioeconomic studies; and

1 (ix) environmental and habitat
2 changes associated with sea level rise; and

3 (D) to respond to—

4 (i) changes in chemical characteristics
5 (including ocean acidification) and physical
6 characteristics (including thermal strati-
7 fication) of marine systems;

8 (ii) saltwater intrusion into ground-
9 water aquifers;

10 (iii) increased harmful algae blooms;

11 (iv) spread of invasive species;

12 (v) coastal habitat loss;

13 (vi) species migrations; and

14 (vii) marine, estuarine, and freshwater
15 ecosystem changes associated with climate
16 change.

17 (2) EXECUTION.—Priority to plan and carry
18 out projects and activities under this subsection shall
19 be given to State coastal agencies, as determined in
20 accordance with State law.

21 (3) COORDINATION.—In carrying out this sub-
22 section, a coastal State shall coordinate with other
23 statewide climate change efforts in order to avoid
24 duplication of such efforts.

1 (e) REPORT.—Not later than 1 year after the date
2 on which a State receives funds under this section, and
3 biennially thereafter until such time as the funding is fully
4 expended, the State shall submit to the Administrator, or
5 the heads of such other Federal agencies as the President
6 may designate, a report that—

7 (1) provides a full accounting for the State’s
8 use of funding distributed under this section, includ-
9 ing a description of the projects and activities fund-
10 ed; and

11 (2) may be independent or included within any
12 report required for any State programs for green-
13 house gas reduction and climate adaptation.

14 **DIVISION B—POLLUTION**
15 **REDUCTION AND INVESTMENT**
16 **TITLE I—REDUCING GLOBAL**
17 **WARMING POLLUTION**
18 **Subtitle A—Reducing Global**
19 **Warming Pollution**

20 **SEC. 101. REDUCING GLOBAL WARMING POLLUTION.**

21 The Clean Air Act is amended by adding after title
22 VI (42 U.S.C. 7671 et seq.) the following:

1 **“TITLE VII—GLOBAL WARMING**
2 **POLLUTION REDUCTION AND**
3 **INVESTMENT PROGRAM**

4 **“PART A—GLOBAL WARMING POLLUTION**
5 **REDUCTION GOALS AND TARGETS**

6 **“SEC. 701. FINDINGS.**

7 “Congress finds that—

8 “(1) global warming poses a significant threat
9 to the national security, economy, public health and
10 welfare, and environment of the United States, as
11 well as of other countries;

12 “(2) reviews of scientific studies, including by
13 the Intergovernmental Panel on Climate Change and
14 the National Academy of Sciences, demonstrate that
15 global warming is the result of the combined anthro-
16 pogenic greenhouse gas emissions from numerous
17 sources of all types and sizes;

18 “(3) each increment of emission, when com-
19 bined with other emissions, causes or contributes
20 materially to the acceleration and extent of global
21 warming and its adverse effects for the lifetime of
22 such gas in the atmosphere;

23 “(4) accordingly, controlling emissions in small
24 as well as large quantities is essential to prevent,

1 slow the pace of, reduce the threats from, and miti-
2 gate global warming and its adverse effects;

3 “(5) because they induce global warming,
4 greenhouse gas emissions cause or contribute to in-
5 juries to persons in the United States, including—

6 “(A) adverse health effects, such as disease
7 and loss of life;

8 “(B) displacement of human populations;

9 “(C) damage to property and other inter-
10 ests relating to ocean levels, acidification, and
11 ice changes;

12 “(D) severe weather and seasonal changes;

13 “(E) disruption, costs, and losses to busi-
14 ness, trade, employment, farms, subsistence,
15 aesthetic enjoyment of the environment, recre-
16 ation, culture, and tourism;

17 “(F) damage to plants, forests, lands, and
18 waters;

19 “(G) harm to wildlife and habitat;

20 “(H) scarcity of water and the decreased
21 abundance of other natural resources;

22 “(I) worsening of tropospheric air pollu-
23 tion;

24 “(J) substantial threats of similar damage;

25 and

1 “(K) other harm;

2 “(6) the fact that many of those effects and
3 risks of future effects of global warming are widely
4 shared does not minimize the adverse effects indi-
5 vidual persons have suffered, will suffer, and are at
6 risk of suffering because of global warming;

7 “(7) the fact that some of the adverse and po-
8 tentially catastrophic effects of global warming are
9 at risk of occurring and not a certainty does not ne-
10 gate the harm persons suffer from actions that in-
11 crease the likelihood, extent, and severity of such fu-
12 ture impacts;

13 “(8) countries of the world look to the United
14 States for leadership in addressing the threat of and
15 harm from global warming;

16 “(9) full implementation of this title is critical
17 to engage other countries in an international effort
18 to mitigate the threat of and harm from global
19 warming; and

20 “(10) global warming and its adverse effects
21 are occurring and are likely to continue and increase
22 in magnitude, and to do so at a greater and more
23 harmful rate, unless the this title is fully imple-
24 mented and enforced in an expeditious manner.

1 **“SEC. 702. ECONOMYWIDE REDUCTION GOALS.**

2 “The goals of this title, and the Clean Energy Jobs
3 and American Power Act (and the amendments made by
4 that Act), are to reduce steadily the quantity of United
5 States greenhouse gas emissions such that—

6 “(1) in 2012, the quantity of United States
7 greenhouse gas emissions does not exceed 97 percent
8 of the quantity of United States greenhouse gas
9 emissions in 2005;

10 “(2) in 2020, the quantity of United States
11 greenhouse gas emissions does not exceed 80 percent
12 of the quantity of United States greenhouse gas
13 emissions in 2005;

14 “(3) in 2030, the quantity of United States
15 greenhouse gas emissions does not exceed 58 percent
16 of the quantity of United States greenhouse gas
17 emissions in 2005; and

18 “(4) in 2050, the quantity of United States
19 greenhouse gas emissions does not exceed 17 percent
20 of the quantity of United States greenhouse gas
21 emissions in 2005.

22 **“SEC. 703. REDUCTION TARGETS FOR SPECIFIED SOURCES.**

23 “(a) IN GENERAL.—The regulations issued under
24 section 721 shall limit and reduce annually the greenhouse
25 gas emissions of capped sources each calendar year begin-
26 ning in 2012 such that—

1 “(1) in 2012, the quantity of greenhouse gas
2 emissions from capped sources does not exceed 97
3 percent of the quantity of greenhouse gas emissions
4 from such sources in 2005;

5 “(2) in 2020, the quantity of greenhouse gas
6 emissions from capped sources does not exceed 80
7 percent of the quantity of greenhouse gas emissions
8 from such sources in 2005;

9 “(3) in 2030, the quantity of greenhouse gas
10 emissions from capped sources does not exceed 58
11 percent of the quantity of greenhouse gas emissions
12 from such sources in 2005; and

13 “(4) in 2050, the quantity of greenhouse gas
14 emissions from capped sources does not exceed 17
15 percent of the quantity of greenhouse gas emissions
16 from such sources in 2005.

17 “(b) DEFINITION OF GREENHOUSE GAS EMISSIONS
18 FROM SUCH SOURCES IN 2005.—For purposes of this sec-
19 tion, the term ‘greenhouse gas emissions from such
20 sources in 2005’ means emissions to which section 722
21 would have applied if the requirements of this title for the
22 specified year had been in effect for 2005.

23 **“SEC. 704. SUPPLEMENTAL POLLUTION REDUCTIONS.**

24 “For the purposes of decreasing the likelihood of cat-
25 astrophic climate change, preserving tropical forests,

1 building capacity to generate offset credits, and facili-
2 tating international action on global warming, the Admin-
3 istrator shall set aside a percentage specified in section
4 771(d) of the quantity of emission allowances established
5 under section 721(a) for each year, to be used to achieve
6 a reduction of greenhouse gas emissions from deforest-
7 ation in developing countries in accordance with part E.
8 In 2020, activities supported under part E shall provide
9 greenhouse gas reductions in an amount equal to an addi-
10 tional 10 percentage points of reductions from United
11 States greenhouse gas emissions in 2005. The Adminis-
12 trator shall distribute these allowances with respect to ac-
13 tivities in countries that enter into and implement agree-
14 ments or arrangements relating to reduced deforestation
15 as described in section 753(a)(2).

16 **“SEC. 705. REVIEW AND PROGRAM RECOMMENDATIONS.**

17 “(a) IN GENERAL.—The Administrator shall, in con-
18 sultation with appropriate Federal agencies, submit to
19 Congress a report not later than July 1, 2013, and every
20 4 years thereafter, that includes—

21 “(1) an analysis of key findings based on up-
22 to-date scientific information and data relevant to
23 global climate change;

24 “(2) an analysis of capabilities to monitor and
25 verify greenhouse gas reductions on a worldwide

1 basis, including for the United States, as required
2 under the Clean Energy Jobs and American Power
3 Act (and the amendments made by that Act); and

4 “(3) an analysis of the status of worldwide
5 greenhouse gas reduction efforts, including imple-
6 mentation of the Clean Energy Jobs and American
7 Power Act and other policies, both domestic and
8 international, for reducing greenhouse gas emissions,
9 preventing dangerous atmospheric concentrations of
10 greenhouse gases, preventing significant irreversible
11 consequences of climate change, and reducing vul-
12 nerability to the impacts of climate change.

13 “(b) EXCEPTION.—Subsection (a)(3) shall not apply
14 to the first report submitted under subsection (a).

15 “(c) LATEST SCIENTIFIC INFORMATION.—The anal-
16 ysis required under subsection (a)(1) shall—

17 “(1) address existing scientific information and
18 reports, considering, to the greatest extent possible,
19 the most recent assessment report of the Intergov-
20 ernmental Panel on Climate Change, reports by the
21 United States Global Change Research Program, the
22 Natural Resources Climate Change Adaptation
23 Panel established under section 365 of the Clean
24 Energy Jobs and American Power Act, and Federal

1 agencies, and the European Union’s global tempera-
2 ture data assessment;

3 “(2) review trends and projections for—

4 “(A) global and country-specific annual
5 emissions of greenhouse gases, and cumulative
6 greenhouse gas emissions produced between
7 1850 and the present, including—

8 “(i) global cumulative emissions of an-
9 thropogenic greenhouse gases;

10 “(ii) global annual emissions of an-
11 thropogenic greenhouse gases; and

12 “(iii) by country, annual total, annual
13 per capita, and cumulative anthropogenic
14 emissions of greenhouse gases for the top
15 50 emitting nations;

16 “(B) significant changes, both globally and
17 by region, in annual net non-anthropogenic
18 greenhouse gas emissions from natural sources,
19 including permafrost, forests, or oceans;

20 “(C) global atmospheric concentrations of
21 greenhouse gases, expressed in annual con-
22 centration units as well as carbon dioxide
23 equivalents based on 100-year global warming
24 potentials;

1 “(D) major climate forcing factors, such as
2 aerosols;

3 “(E) global average temperature, expressed
4 as seasonal and annual averages in land, ocean,
5 and land-plus-ocean averages; and

6 “(F) sea level rise;

7 “(3) assess the current and potential impacts of
8 global climate change on—

9 “(A) human populations, including impacts
10 on public health, economic livelihoods, subsist-
11 ence, tribal culture, human infrastructure, and
12 displacement or permanent relocation due to
13 flooding, severe weather, extended drought, ero-
14 sion, or other ecosystem changes;

15 “(B) freshwater systems, including water
16 resources for human consumption and agri-
17 culture and natural and managed ecosystems,
18 flood and drought risks, and relative humidity;

19 “(C) the carbon cycle, including impacts
20 related to the thawing of permafrost, the fre-
21 quency and intensity of wildfire, and terrestrial
22 and ocean carbon sinks;

23 “(D) ecosystems and animal and plant
24 populations, including impacts on species abun-
25 dance, phenology, and distribution;

1 “(E) oceans and ocean ecosystems, includ-
2 ing effects on sea level, ocean acidity, ocean
3 temperatures, coral reefs, ocean circulation,
4 fisheries, and other indicators of ocean eco-
5 system health;

6 “(F) the cryosphere, including effects on
7 ice sheet mass balance, mountain glacier mass
8 balance, and sea-ice extent and volume;

9 “(G) changes in the intensity, frequency,
10 or distribution of severe weather events, includ-
11 ing precipitation, tropical cyclones, tornadoes,
12 and severe heat waves;

13 “(H) agriculture and forest systems; and

14 “(I) any other indicators the Administrator
15 deems appropriate;

16 “(4) summarize any significant socioeconomic
17 impacts of climate change in the United States, in-
18 cluding the territories of the United States, drawing
19 on work by Federal agencies and the academic lit-
20 erature, including impacts on—

21 “(A) public health;

22 “(B) economic livelihoods, subsistence, and
23 tribal culture;

1 “(C) displacement or permanent relocation
2 due to flooding, severe weather, extended
3 drought, or other ecosystem changes;

4 “(D) human infrastructure, including
5 coastal infrastructure vulnerability to extreme
6 events and sea level rise, river floodplain infra-
7 structure, and sewer and water management
8 systems;

9 “(E) agriculture and forests, including ef-
10 fects on potential growing season, distribution,
11 and yield;

12 “(F) water resources for human consump-
13 tion, agriculture and natural and managed eco-
14 systems, flood and drought risks, and relative
15 humidity;

16 “(G) energy supply and use; and

17 “(H) transportation;

18 “(5) in assessing risks and impacts, use a risk
19 management framework, including both qualitative
20 and quantitative measures, to assess the observed
21 and projected impacts of current and future climate
22 change, accounting for—

23 “(A) both monetized and non-monetized
24 losses;

1 “(B) potential nonlinear, abrupt, or essen-
2 tially irreversible changes in the climate system;

3 “(C) potential nonlinear increases in the
4 cost of impacts;

5 “(D) potential low-probability, high impact
6 events; and

7 “(E) whether impacts are transitory or es-
8 sentially permanent; and

9 “(6) based on the findings of the Administrator
10 under this section, as well as assessments produced
11 by the Intergovernmental Panel on Climate Change,
12 the United States Global Change Research program,
13 and other relevant scientific entities—

14 “(A) describe increased risks to natural
15 systems and society that would result from an
16 increase in global average temperature 3.6 de-
17 grees Fahrenheit (2 degrees Celsius) above the
18 pre-industrial average or an increase in atmos-
19 pheric greenhouse gas concentrations above 450
20 parts per million carbon dioxide equivalent; and

21 “(B) identify and assess—

22 “(i) significant residual risks not
23 avoided by the thresholds described in sub-
24 paragraph (A);

1 “(ii) alternative thresholds or targets
2 that may more effectively limit the risks
3 identified pursuant to clause (i); and

4 “(iii) thresholds above those described
5 in subparagraph (A) which significantly in-
6 crease the risk of certain impacts or render
7 them essentially permanent.

8 “(d) STATUS OF MONITORING AND VERIFICATION
9 CAPABILITIES TO EVALUATE GREENHOUSE GAS REDUC-
10 TION EFFORTS.—The analysis required under subsection
11 (a)(2) shall evaluate the capabilities of the monitoring, re-
12 porting, and verification systems used to quantify progress
13 in achieving reductions in greenhouse gas emissions both
14 globally and in the United States (as described in section
15 702), including—

16 “(1) quantification of emissions and emission
17 reductions by entities participating in the pollution
18 reduction and investment program under this title;

19 “(2) quantification of emissions and emission
20 reductions by entities participating in the offset pro-
21 gram under this title;

22 “(3) quantification of emission and emission re-
23 ductions by entities regulated by performance stand-
24 ards;

1 “(4) quantification of aggregate net emissions
2 and emission reductions by the United States; and

3 “(5) quantification of global changes in net
4 emissions and in sources and sinks of greenhouse
5 gases.

6 “(e) STATUS OF GREENHOUSE GAS REDUCTION EF-
7 FORTS.—The analysis required under subsection (a)(3)
8 shall address—

9 “(1) whether the programs under the Clean En-
10 ergy Jobs and American Power Act (and the amend-
11 ments made by that Act) and other Federal statutes
12 are resulting in sufficient United States greenhouse
13 gas emission reductions to meet the emissions reduc-
14 tion goals described in section 702, taking into ac-
15 count the use of offsets; and

16 “(2) whether United States actions, taking into
17 account international actions, commitments, and
18 trends, and considering the range of plausible emis-
19 sions scenarios, are sufficient to avoid—

20 “(A) atmospheric greenhouse gas con-
21 centrations above 450 parts per million carbon
22 dioxide equivalent;

23 “(B) global average surface temperature
24 3.6 degrees Fahrenheit (2 degrees Celsius)
25 above the pre-industrial average, or such other

1 temperature thresholds as the Administrator
2 deems appropriate; and

3 “(C) other temperature or greenhouse gas
4 thresholds identified pursuant to subsection
5 (c)(6)(B).

6 “(f) RECOMMENDATIONS.—

7 “(1) LATEST SCIENTIFIC INFORMATION.—
8 Based on the analysis described in subsection (a)(1),
9 each report under subsection (a) shall identify ac-
10 tions that could be taken to—

11 “(A) improve the characterization of
12 changes in the earth-climate system and im-
13 pacts of global climate change;

14 “(B) better inform decision making and
15 actions related to global climate change;

16 “(C) mitigate risks to natural and social
17 systems; and

18 “(D) design policies to better account for
19 climate risks.

20 “(2) MONITORING, REPORTING AND
21 VERIFICATION.—Based on the analysis described in
22 subsection (a)(2), each report under subsection (a)
23 shall identify key gaps in measurement, reporting,
24 and verification capabilities and make recommenda-

1 tions to improve the accuracy and reliability of those
2 capabilities.

3 “(3) STATUS OF GREENHOUSE GAS REDUCTION
4 EFFORTS.—Based on the analysis described in sub-
5 section (a)(3), taking into account international ac-
6 tions, commitments, and trends, and considering the
7 range of plausible emissions scenarios, each report
8 under subsection (a) shall identify—

9 “(A) the quantity of additional reductions
10 required to meet the emissions reduction goals
11 in section 702;

12 “(B) the quantity of additional reductions
13 in global greenhouse gas emissions needed to
14 avoid the concentration and temperature
15 thresholds identified in subsection (e); and

16 “(C) possible strategies and approaches for
17 achieving additional reductions.

18 “(g) AUTHORIZATION OF APPROPRIATIONS.—There
19 are authorized to be appropriated to carry out this section
20 such sums as may be necessary.

21 **“SEC. 706. NATIONAL ACADEMY REVIEW.**

22 “(a) IN GENERAL.—Not later than 1 year after the
23 date of enactment of this title, the Administrator shall
24 offer to enter into a contract with the National Academy
25 of Sciences (in this section referred to as the ‘Academy’)

1 under which the Academy shall, not later than July 1,
2 2014, and every 4 years thereafter, submit to Congress
3 and the Administrator a report that includes—

4 “(1) a review of the most recent report and rec-
5 ommendations issued under section 705; and

6 “(2) an analysis of technologies to achieve re-
7 ductions in greenhouse gas emissions.

8 “(b) FAILURE TO ISSUE A REPORT.—In the event
9 that the Administrator has not issued all or part of the
10 most recent report required under section 705, the Acad-
11 emy shall conduct its own review and analysis of the re-
12 quired information.

13 “(c) TECHNOLOGICAL INFORMATION.—The analysis
14 required under subsection (a)(2) shall—

15 “(1) review existing technological information
16 and reports, including the most recent reports by the
17 Department of Energy, the United States Global
18 Change Research Program, the Intergovernmental
19 Panel on Climate Change, and the International En-
20 ergy Agency and any other relevant information on
21 technologies or practices that reduce or limit green-
22 house gas emissions;

23 “(2) include the participation of technical ex-
24 perts from relevant private industry sectors;

1 “(3) review the current and future projected de-
2 ployment of technologies and practices in the United
3 States that reduce or limit greenhouse gas emis-
4 sions, including—

5 “(A) technologies for capture and seques-
6 tration of greenhouse gases;

7 “(B) technologies to improve energy effi-
8 ciency;

9 “(C) low- or zero-greenhouse gas emitting
10 energy technologies;

11 “(D) low- or zero-greenhouse gas emitting
12 fuels;

13 “(E) biological sequestration practices and
14 technologies; and

15 “(F) any other technologies the Academy
16 deems relevant; and

17 “(4) review and compare the emissions reduc-
18 tion potential, commercial viability, market penetra-
19 tion, investment trends, and deployment of the tech-
20 nologies described in paragraph (3), including—

21 “(A) the need for additional research and
22 development, including publicly funded research
23 and development;

24 “(B) the extent of commercial deployment,
25 including, where appropriate, a comparison to

1 the cost and level of deployment of conventional
2 fossil fuel-fired energy technologies and devices;
3 and

4 “(C) an evaluation of any substantial tech-
5 nological, legal, or market-based barriers to
6 commercial deployment.

7 “(d) RECOMMENDATIONS.—

8 “(1) LATEST SCIENTIFIC INFORMATION.—
9 Based on the review described in subsection (a)(1),
10 the Academy shall identify actions that could be
11 taken to—

12 “(A) improve the characterization of
13 changes in the earth-climate system and im-
14 pacts of global climate change;

15 “(B) better inform decision making and
16 actions related to global climate change;

17 “(C) mitigate risks to natural and social
18 systems;

19 “(D) design policies to better account for
20 climate risks; and

21 “(E) improve the accuracy and reliability
22 of capabilities to monitor, report, and verify
23 greenhouse gas emissions reduction efforts.

1 “(2) TECHNOLOGICAL INFORMATION.—Based
2 on the analysis described in subsection (a)(2), the
3 Academy shall identify—

4 “(A) additional emission reductions that
5 may be possible as a result of technologies de-
6 scribed in the analysis;

7 “(B) barriers to the deployment of such
8 technologies; and

9 “(C) actions that could be taken to speed
10 deployment of such technologies.

11 “(3) STATUS OF GREENHOUSE GAS REDUCTION
12 EFFORTS.—Based on the review described in sub-
13 section (a)(1), the Academy shall identify—

14 “(A) the quantity of additional reductions
15 required to meet the emissions reduction goals
16 described in section 702; and

17 “(B) the quantity of additional reductions
18 in global greenhouse gas emissions needed to
19 avoid the concentration and temperature
20 thresholds described in section 705(c)(6)(A) or
21 identified pursuant to section 705(c)(6)(B).

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

1 **“SEC. 707. PRESIDENTIAL RESPONSE AND RECOMMENDA-**
2 **TIONS.**

3 “Not later than July 1, 2015, and every 4 years
4 thereafter—

5 “(1) the President shall direct relevant Federal
6 agencies to use existing statutory authority to take
7 appropriate actions identified in the reports sub-
8 mitted under sections 705 and 706 and to address
9 any shortfalls identified in such reports; and

10 “(2) in the event that the National Academy of
11 Sciences has concluded, in the most recent report
12 submitted under section 706, that the United States
13 will not achieve the necessary domestic greenhouse
14 gas emission reductions, or that global actions will
15 not maintain safe global average surface tempera-
16 ture and atmospheric greenhouse gas concentration
17 thresholds, the President shall submit to Congress a
18 plan identifying domestic and international actions
19 that will achieve necessary additional greenhouse gas
20 reductions, including any recommendations for legis-
21 lative action.

22 **“PART B—DESIGNATION AND REGISTRATION OF**
23 **GREENHOUSE GASES**

24 **“SEC. 711. DESIGNATION OF GREENHOUSE GASES.**

25 “(a) GREENHOUSE GASES.—For purposes of this
26 title, the following are greenhouse gases:

1 “(1) Carbon dioxide.

2 “(2) Methane.

3 “(3) Nitrous oxide.

4 “(4) Sulfur hexafluoride.

5 “(5) Hydrofluorocarbons from a chemical man-
6 ufacturing process at an industrial stationary
7 source.

8 “(6) Any perfluorocarbon, except as otherwise
9 provided in section 714.

10 “(7) Nitrogen trifluoride.

11 “(8) Any other anthropogenic gas designated as
12 a greenhouse gas by the Administrator under this
13 section.

14 “(b) DETERMINATION ON ADMINISTRATOR’S INITIA-
15 TIVE.—The Administrator shall, by rule—

16 “(1) determine whether 1 metric ton of another
17 anthropogenic gas makes the same or greater con-
18 tribution to global warming over 100 years as 1 met-
19 ric ton of carbon dioxide;

20 “(2) determine the carbon dioxide equivalent
21 value for each gas with respect to which the Admin-
22 istrator makes an affirmative determination under
23 paragraph (1);

24 “(3) for each gas with respect to which the Ad-
25 ministrator makes an affirmative determination

1 under paragraph (1) and that is used as a substitute
2 for a class I or class II substance under title VI, de-
3 termine the extent to which to regulate that gas
4 under section 619 and specify appropriate compli-
5 ance obligations under section 619;

6 “(4) designate as a greenhouse gas for purposes
7 of this title each gas for which the Administrator
8 makes an affirmative determination under para-
9 graph (1), to the extent that it is not regulated
10 under section 619; and

11 “(5) specify the appropriate compliance obliga-
12 tions under this title for each gas designated as a
13 greenhouse gas under paragraph (4).

14 “(c) PETITIONS TO DESIGNATE A GREENHOUSE
15 GAS.—

16 “(1) IN GENERAL.—Any person may petition
17 the Administrator to designate as a greenhouse gas
18 any anthropogenic gas 1 metric ton of which makes
19 the same or greater contribution to global warming
20 over 100 years as 1 metric ton of carbon dioxide.

21 “(2) CONTENTS OF PETITION.—The petitioner
22 shall provide sufficient data, as specified by rule by
23 the Administrator, to demonstrate that the gas is
24 likely to be a greenhouse gas and is likely to be pro-
25 duced, imported, used, or emitted in the United

1 States. To the extent practicable, the petitioner shall
2 also identify producers, importers, distributors,
3 users, and emitters of the gas in the United States.

4 “(3) REVIEW AND ACTION BY THE ADMINIS-
5 TRATOR.—Not later than 90 days after receipt of a
6 petition under paragraph (2), the Administrator
7 shall determine whether the petition is complete and
8 notify the petitioner and the public of the decision.

9 “(4) ADDITIONAL INFORMATION.—The Admin-
10 istrator may require producers, importers, distribu-
11 tors, users, or emitters of the gas to provide infor-
12 mation on the contribution of the gas to global
13 warming over 100 years compared to carbon dioxide.

14 “(5) TREATMENT OF PETITION.—For any sub-
15 stance used as a substitute for a class I or class II
16 substance under title VI, the Administrator may
17 elect to treat a petition under this subsection as a
18 petition to list the substance as a class II, group II
19 substance under section 619, and may require the
20 petition to be amended to address listing criteria
21 promulgated under that section.

22 “(6) DETERMINATION.—Not later than 2 years
23 after receipt of a complete petition, the Adminis-
24 trator shall, after notice and an opportunity for com-
25 ment—

1 “(B) consider the written recommendations
2 of the Science Advisory Board under paragraph
3 (2) regarding the determination; and

4 “(C) consult with the Science Advisory
5 Board regarding such determination, including
6 consultation subsequent to receipt of such writ-
7 ten recommendations.

8 “(2) FORMULATION OF RECOMMENDATIONS.—
9 Upon receipt of notice under paragraph (1)(A) re-
10 garding a pending determination under subsection
11 (b)(1), (c)(6), or (e)(2)(B), the Science Advisory
12 Board shall—

13 “(A) formulate recommendations regarding
14 such determination, subject to a peer review
15 process; and

16 “(B) submit such recommendations in
17 writing to the Administrator.

18 “(e) MANUFACTURING AND EMISSION NOTICES.—

19 “(1) NOTICE REQUIREMENT.—

20 “(A) IN GENERAL.—Except as otherwise
21 provided in section 714, effective 24 months
22 after the date of enactment of this title, no per-
23 son may manufacture or introduce into inter-
24 state commerce a fluorinated gas, or emit a sig-
25 nificant quantity, as determined by the Admin-

1 istrator, of any fluorinated gas that is gen-
2 erated as a byproduct during the production or
3 use of another fluorinated gas, unless—

4 “(i) the gas is designated as a green-
5 house gas under this section or is an
6 ozone-depleting substance listed as a class
7 I or class II substance under title VI;

8 “(ii) the Administrator has deter-
9 mined that 1 metric ton of such gas does
10 not make a contribution to global warming
11 that is equal to or greater than that made
12 by 1 metric ton of carbon dioxide; or

13 “(iii) the person manufacturing or im-
14 porting the gas for distribution into inter-
15 state commerce, or emitting the gas, has
16 submitted to the Administrator, at least 90
17 days before the start of such manufacture,
18 introduction into commerce, or emission, a
19 notice of such person’s manufacture, intro-
20 duction into commerce, or emission of such
21 gas, and the Administrator has not deter-
22 mined that notice or a substantially similar
23 notice is incomplete.

24 “(B) ALTERNATIVE COMPLIANCE.—For a
25 gas that is a substitute for a class I or class II

1 substance under title VI and either has been
2 listed as acceptable for use under section 612
3 or is currently subject to evaluation under sec-
4 tion 612, the Administrator may accept the no-
5 tice and information provided pursuant to that
6 section as fulfilling the obligation under clause
7 (iii) of subparagraph (A).

8 “(2) REVIEW AND ACTION BY THE ADMINIS-
9 TRATOR.—

10 “(A) COMPLETENESS.—Not later than 90
11 days after receipt of notice under paragraph
12 (1)(A)(iii) or (B), the Administrator shall deter-
13 mine whether the notice is complete.

14 “(B) DETERMINATION.—If the Adminis-
15 trator determines that the notice is complete,
16 the Administrator shall, after notice and an op-
17 portunity for comment, not later than 12
18 months after receipt of the notice—

19 “(i) issue and publish in the Federal
20 Register a determination that 1 metric ton
21 of the gas does not make a contribution to
22 global warming over 100 years that is
23 equal to or greater than that made by 1
24 metric ton of carbon dioxide and an expla-
25 nation of the decision; or

1 “(ii) determine that 1 metric ton of
2 the gas makes a contribution to global
3 warming over 100 years that is equal to or
4 greater than that made by 1 metric ton of
5 carbon dioxide, and take the actions de-
6 scribed in subsection (b) with respect to
7 such gas.

8 “(f) REGULATIONS.—Not later than one year after
9 the date of enactment of this title, the Administrator shall
10 promulgate regulations to carry out this section. Such reg-
11 ulations shall include—

12 “(1) requirements for the contents of a petition
13 submitted under subsection (c);

14 “(2) requirements for the contents of a notice
15 required under subsection (e); and

16 “(3) methods and standards for evaluating the
17 carbon dioxide equivalent value of a gas.

18 “(g) GASES REGULATED UNDER TITLE VI.—The
19 Administrator shall not designate a gas as a greenhouse
20 gas under this section to the extent that the gas is regu-
21 lated under title VI.

22 “(h) SAVINGS CLAUSE.—Nothing in this section shall
23 be interpreted to relieve any person from complying with
24 the requirements of section 612.

1 **“SEC. 712. CARBON DIOXIDE EQUIVALENT VALUE OF**
 2 **GREENHOUSE GASES.**

3 “(a) MEASURE OF QUANTITY OF GREENHOUSE
 4 GASES.—Any provision of this title or title VIII that refers
 5 to a quantity or percentage of a quantity of greenhouse
 6 gases shall mean the quantity or percentage of the green-
 7 house gases expressed in carbon dioxide equivalents.

8 “(b) INITIAL VALUE.—Except as provided by the Ad-
 9 ministrator under this section or section 711—

10 “(1) the carbon dioxide equivalent value of
 11 greenhouse gases for purposes of this Act shall be as
 12 follows:

**“ CARBON DIOXIDE EQUIVALENT OF 1 TON OF LISTED
 GREENHOUSE GASES**

Greenhouse gas (1 metric ton)	Carbon dioxide equivalent (metric tons)
Carbon dioxide	1
Methane	25
Nitrous oxide	298
HFC-23	14,800
HFC-125	3,500
HFC-134a	1,430
HFC-143a	4,470
HFC-152a	124
HFC-227ea	3,220
HFC-236fa	9,810
HFC-4310mcc	1,640
CF ₄	7,390

**“ CARBON DIOXIDE EQUIVALENT OF 1 TON OF LISTED
GREENHOUSE GASES—Continued**

Greenhouse gas (1 metric ton)	Carbon dioxide equivalent (metric tons)
C ₂ F ₆	12,200
C ₄ F ₁₀	8,860
C ₆ F ₁₄	9,300
SF ₆	22,800
NF ₃	17,200

1 ; and

2 “(2) the carbon dioxide equivalent value for
3 purposes of this Act for any greenhouse gas not list-
4 ed in the table under paragraph (1) shall be the
5 100-year Global Warming Potentials provided in the
6 Intergovernmental Panel on Climate Change Fourth
7 Assessment Report.

8 “(c) PERIODIC REVIEW.—

9 “(1) Not later than February 1, 2017, and (ex-
10 cept as provided in paragraph (3)) not less than
11 every 5 years thereafter, the Administrator shall—

12 “(A) review and, if appropriate, revise the
13 carbon dioxide equivalent values established
14 under this section or section 711(b)(2), based
15 on a determination of the number of metric
16 tons of carbon dioxide that makes the same
17 contribution to global warming over 100 years
18 as 1 metric ton of each greenhouse gas; and

1 “(B) publish in the Federal Register the
2 results of that review and any revisions.

3 “(2) A revised determination published in the
4 Federal Register under paragraph (1)(B) shall take
5 effect for greenhouse gas emissions starting on Jan-
6 uary 1 of the first calendar year starting at least 9
7 months after the date on which the revised deter-
8 mination was published.

9 “(3) The Administrator may decrease the fre-
10 quency of review and revision under paragraph (1)
11 if the Administrator determines that such decrease
12 is appropriate in order to synchronize such review
13 and revision with any similar review process carried
14 out pursuant to the United Nations Framework
15 Convention on Climate Change, done at New York
16 on May 9, 1992, or to an agreement negotiated
17 under that convention, except that in no event shall
18 the Administrator carry out such review and revision
19 any less frequently than every 10 years.

20 “(d) **METHODOLOGY.**—In setting carbon dioxide
21 equivalent values, for purposes of this section or section
22 711, the Administrator shall take into account publica-
23 tions by the Intergovernmental Panel on Climate Change
24 or a successor organization under the auspices of the

1 United Nations Environmental Programme and the World
2 Meteorological Organization.

3 **“SEC. 713. GREENHOUSE GAS REGISTRY.**

4 “(a) DEFINITIONS.—For purposes of this section:

5 “(1) CLIMATE REGISTRY.—The term ‘Climate
6 Registry’ means the greenhouse gas emissions reg-
7 istry jointly established and managed by more than
8 40 States and Indian tribes in 2007 to collect high-
9 quality greenhouse gas emission data from facilities,
10 corporations, and other organizations to support var-
11 ious greenhouse gas emission reporting and reduc-
12 tion policies for the member States and Indian
13 tribes.

14 “(2) REPORTING ENTITY.—The term ‘reporting
15 entity’ means—

16 “(A) a covered entity;

17 “(B) an entity that—

18 “(i) would be a covered entity if it had
19 emitted, produced, imported, manufac-
20 tured, or delivered in 2008 or any subse-
21 quent year more than the applicable
22 threshold level in the definition of covered
23 entity in paragraph (13) of section 700;
24 and

1 “(ii) has emitted, produced, imported,
2 manufactured, or delivered in 2008 or any
3 subsequent year more than the applicable
4 threshold level in the definition of covered
5 entity in paragraph (13) of section 700,
6 provided that the figure of 25,000 tons of
7 carbon dioxide equivalent is read instead
8 as 10,000 tons of carbon dioxide equivalent
9 and the figure of 460,000,000 cubic feet is
10 read instead as 184,000,000 cubic feet;

11 “(C) any other entity that emits a green-
12 house gas, or produces, imports, manufactures,
13 or delivers material whose use results or may
14 result in greenhouse gas emissions if the Ad-
15 ministrator determines that reporting under
16 this section by such entity will help achieve the
17 purposes of this title or title VIII;

18 “(D) any vehicle fleet with emissions of
19 more than 25,000 tons of carbon dioxide equiv-
20 alent on an annual basis, if the Administrator
21 determines that the inclusion of such fleet will
22 help achieve the purposes of this title or title
23 VIII; or

24 “(E) any entity that delivers electricity to
25 an energy-intensive facility in an industrial sec-

1 tor that meets the energy or greenhouse gas in-
2 tensity criteria in section 764(b)(3)(B)(i).

3 “(b) REGULATIONS.—

4 “(1) IN GENERAL.—Not later than 6 months
5 after the date of enactment of this title, the Admin-
6 istrator shall issue regulations establishing a Federal
7 greenhouse gas registry. Such regulations shall—

8 “(A) require reporting entities to submit to
9 the Administrator data on—

10 “(i) greenhouse gas emissions in the
11 United States;

12 “(ii) the production and manufacture
13 in the United States, importation into the
14 United States, and, at the discretion of the
15 Administrator, exportation from the
16 United States, of fuels and industrial gases
17 the uses of which result or may result in
18 greenhouse gas emissions;

19 “(iii) deliveries in the United States of
20 natural gas, and any other gas meeting the
21 specifications for commingling with natural
22 gas for purposes of delivery, the combus-
23 tion of which result or may result in green-
24 house gas emissions; and

1 “(iv) the capture and sequestration of
2 greenhouse gases;

3 “(B) require covered entities and, where
4 appropriate, other reporting entities to submit
5 to the Administrator data sufficient to ensure
6 compliance with or implementation of the re-
7 quirements of this title;

8 “(C) require reporting of electricity deliv-
9 ered to industrial sources in energy-intensive in-
10 dustries;

11 “(D) ensure the completeness, consistency,
12 transparency, accuracy, precision, and reliability
13 of such data;

14 “(E) take into account the best practices
15 from the most recent Federal, State, tribal, and
16 international protocols for the measurement, ac-
17 counting, reporting, and verification of green-
18 house gas emissions, including protocols from
19 the Climate Registry and other mandatory
20 State or multistate authorized programs;

21 “(F) take into account the latest scientific
22 research;

23 “(G) require that, for covered entities with
24 respect to greenhouse gases to which section
25 722 applies, and, to the extent determined to be

1 appropriate by the Administrator, for covered
2 entities with respect to other greenhouse gases
3 and for other reporting entities, submitted data
4 are based on—

5 “(i) continuous monitoring systems
6 for fuel flow or emissions, such as contin-
7 uous emission monitoring systems;

8 “(ii) alternative systems that are dem-
9 onstrated as providing data with the same
10 precision, reliability, accessibility, and
11 timeliness, or, to the extent the Adminis-
12 trator determines is appropriate for report-
13 ing small amounts of emissions, the same
14 precision, reliability, and accessibility and
15 similar timeliness, as data provided by con-
16 tinuous monitoring systems for fuel flow or
17 emissions; or

18 “(iii) alternative methodologies that
19 are demonstrated to provide data with pre-
20 cision, reliability, accessibility, and timeli-
21 ness, or, to the extent the Administrator
22 determines is appropriate for reporting
23 small amounts of emissions, precision, reli-
24 ability, and accessibility, as similar as is
25 technically feasible to that of data gen-

1 erally provided by continuous monitoring
2 systems for fuel flow or emissions, if the
3 Administrator determines that, with re-
4 spect to a reporting entity, there is no con-
5 tinuous monitoring system or alternative
6 system described in clause (i) or (ii) that
7 is technically feasible;

8 “(H) require that the Administrator, in de-
9 termining the extent to which the requirement
10 to use systems or methodologies in accordance
11 with subparagraph (G) is appropriate for re-
12 porting entities other than covered entities or
13 for greenhouse gases to which section 722 does
14 not apply, consider the cost of using such sys-
15 tems and methodologies, and of using other sys-
16 tems and methodologies that are available and
17 suitable, for quantifying the emissions involved
18 in light of the purposes of this title, including
19 the goal of collecting consistent entity-wide
20 data;

21 “(I) include methods for minimizing double
22 reporting and avoiding irreconcilable double re-
23 porting of greenhouse gas emissions;

24 “(J) establish measurement protocols for
25 carbon capture and sequestration systems, tak-

1 ing into consideration the regulations promul-
2 gated under section 813;

3 “(K) require that reporting entities provide
4 the data required under this paragraph in re-
5 ports submitted electronically to the Adminis-
6 trator, in such form and containing such infor-
7 mation as may be required by the Adminis-
8 trator;

9 “(L) include requirements for keeping
10 records supporting or related to, and protocols
11 for auditing, submitted data;

12 “(M) establish consistent policies for calcu-
13 lating carbon content and greenhouse gas emis-
14 sions for each type of fossil fuel with respect to
15 which reporting is required;

16 “(N) subsequent to implementation of poli-
17 cies developed under subparagraph (M), provide
18 for immediate dissemination, to States, Indian
19 tribes, and on the Internet, of all data reported
20 under this section as soon as practicable after
21 electronic audit by the Administrator and any
22 resulting correction of data, except that data
23 shall not be disseminated under this subpara-
24 graph if—

1 “(i) its nondissemination is vital to
2 the national security of the United States,
3 as determined by the President; or

4 “(ii) it is confidential business infor-
5 mation that cannot be derived from infor-
6 mation that is otherwise publicly available
7 and that would cause significant calculable
8 competitive harm if published, except
9 that—

10 “(I) data relating to greenhouse
11 gas emissions, including any upstream
12 or verification data from reporting en-
13 tities, shall not be considered to be
14 confidential business information; and

15 “(II) data that is confidential
16 business information shall be provided
17 to a State or Indian tribe within
18 whose jurisdiction the reporting entity
19 is located, if the Administrator deter-
20 mines that such State or Indian tribe
21 has in effect protections for confiden-
22 tial business information that are
23 equivalent to protections applicable to
24 the Federal Government;

1 “(O) prescribe methods by which the Ad-
2 ministrators shall, in cases in which satisfactory
3 data are not submitted to the Administrator for
4 any period of time, estimate emission, produc-
5 tion, importation, manufacture, or delivery lev-
6 els—

7 “(i) for covered entities with respect
8 to greenhouse gas emissions, production,
9 importation, manufacture, or delivery regu-
10 lated under this title to ensure that emis-
11 sions, production, importation, manufac-
12 ture, or deliveries are not underreported,
13 and to create a strong incentive for meet-
14 ing data monitoring and reporting require-
15 ments—

16 “(I) with a conservative estimate
17 of the highest emission, production,
18 importation, manufacture, or delivery
19 levels that may have occurred during
20 the period for which data are missing;
21 or

22 “(II) to the extent the Adminis-
23 trator considers appropriate, with an
24 estimate of such levels assuming the
25 unit is emitting, producing, importing,

1 manufacturing, or delivering at a
2 maximum potential level during the
3 period, in order to ensure that such
4 levels are not underreported and to
5 create a strong incentive for meeting
6 data monitoring and reporting re-
7 quirements; and

8 “(ii) for covered entities with respect
9 to greenhouse gas emissions to which sec-
10 tion 722 does not apply and for other re-
11 porting entities, with a reasonable estimate
12 of the emission, production, importation,
13 manufacture, or delivery levels that may
14 have occurred during the period for which
15 data are missing;

16 “(P) require the designation of a des-
17 ignated representative for each reporting entity;

18 “(Q) require an appropriate certification,
19 by the designated representative for the report-
20 ing entity, of accurate and complete accounting
21 of greenhouse gas emissions, as determined by
22 the Administrator; and

23 “(R) include requirements for other data
24 necessary for accurate and complete accounting
25 of greenhouse gas emissions, as determined by

1 the Administrator, including data for quality
2 assurance of monitoring systems, monitors and
3 other measurement devices, and other data
4 needed to verify reported emissions, production,
5 importation, manufacture, or delivery.

6 “(2) TIMING.—

7 “(A) CALENDAR YEARS 2007 THROUGH
8 2010.—For a base period of calendar years
9 2007 through 2010, each reporting entity shall
10 submit annual data required under this section
11 to the Administrator not later than March 31,
12 2011. The Administrator may waive or modify
13 reporting requirements for calendar years 2007
14 through 2010 for categories of reporting enti-
15 ties to the extent that the Administrator deter-
16 mines that the reporting entities did not keep
17 data or records necessary to meet reporting re-
18 quirements. The Administrator may, in addition
19 to or in lieu of such requirements, collect infor-
20 mation on energy consumption and production.

21 “(B) SUBSEQUENT CALENDAR YEARS.—
22 For calendar year 2011 and each subsequent
23 calendar year, each reporting entity shall sub-
24 mit quarterly data required under this section
25 to the Administrator not later than 60 days

1 after the end of the applicable quarter, except
2 when the data is already being reported to the
3 Administrator on an earlier timeframe for an-
4 other program.

5 “(3) WAIVER OF REPORTING REQUIREMENTS.—
6 The Administrator may waive reporting require-
7 ments under this section for specific entities to the
8 extent that the Administrator determines that suffi-
9 cient and equally or more reliable verified and timely
10 data are available to the Administrator and the pub-
11 lic on the Internet under other mandatory statutory
12 requirements.

13 “(4) ALTERNATIVE THRESHOLD.—The Admin-
14 istrator may, by rule, establish applicability thresh-
15 olds for reporting under this section using alter-
16 native metrics and levels, provided that such metrics
17 and levels are easier to administer and cover the
18 same size and type of sources as the threshold de-
19 fined in this section.

20 “(c) INTERRELATIONSHIP WITH OTHER SYSTEMS.—
21 In developing the regulations issued under subsection (b),
22 the Administrator shall take into account the work done
23 by the Climate Registry and other mandatory State or
24 multistate programs. Such regulations shall include an ex-
25 planation of any major differences in approach between

1 the system established under the regulations and such reg-
2 istries and programs.

3 **“SEC. 714. PERFLUOROCARBON REGULATION.**

4 “(a) DEFINITIONS.—In this section:

5 “(1) CONSUMPTION.—The term ‘consumption’
6 means, with respect to perfluorocarbon, the quantity
7 of that substance produced in the United States,
8 plus the quantity imported, minus the quantity ex-
9 ported.

10 “(2) PRODUCE; PRODUCED; PRODUCTION.—

11 “(A) IN GENERAL.—The terms ‘produce’,
12 ‘produced’, and ‘production’ mean the manufac-
13 ture of perfluorocarbon, or the emission of
14 perfluorocarbon from other industrial sources.

15 “(B) EXCLUSIONS.—The terms ‘produce’,
16 ‘produced’, and ‘production’ do not include—

17 “(i) the manufacture of
18 perfluorocarbon that is used and entirely
19 consumed (except for trace quantities) in
20 the manufacture of other chemicals or
21 products;

22 “(ii) the reuse or recycling of
23 perfluorocarbon; or

1 “(iii) the emission of perfluorocarbon
2 from use in production processes, such as
3 electronics manufacturing.

4 “(C) OFFSET CREDIT.—The term ‘offset
5 credit’ means reduction of perfluorocarbon
6 emissions by destruction or conversionary use of
7 perfluorocarbons during production processes,
8 such as electronics manufacturing.

9 “(b) DETERMINATION BY ADMINISTRATOR.—As soon
10 as practicable after the date of enactment of this section,
11 the Administrator shall determine, based on such criteria
12 as the Administrator determines to be appropriate, wheth-
13 er emissions from the production and consumption of
14 perfluorocarbon should be regulated in accordance with—

15 “(1) this section; or

16 “(2) the other applicable provisions of this title.

17 “(c) EFFECT OF DETERMINATION.—On a determina-
18 tion by the Administrator under subsection (a)(1) that
19 perfluorocarbon emissions described in subsection (b)
20 should be regulated in accordance with this section—

21 “(1) emissions from the production of
22 perfluorocarbon shall be subject to the best available
23 control technology (as defined in section 169) for
24 each greenhouse gas designated in section 711 at fa-

1 facilities emitting 25,000 metric tons of carbon dioxide
2 equivalent perfluorocarbon emissions or more; and

3 “(2) the consumption of perfluorocarbon shall
4 be phased down in accordance with this section.

5 “(d) USE AND CONSUMPTION.—

6 “(1) PHASE-DOWNS.—

7 “(A) CONSUMPTION.—

8 “(i) IN GENERAL.—With respect to
9 perfluorocarbon, not later than 18 months
10 after the date of enactment of this section,
11 the Administrator shall promulgate regula-
12 tions phasing down, in accordance with
13 this section—

14 “(I) the consumption of
15 perfluorocarbon in the United States;
16 and

17 “(II) the importation into the
18 United States of products containing
19 any perfluorocarbon.

20 “(ii) PROHIBITION.—Effective begin-
21 ning on January 1, 2014, it shall be un-
22 lawful for any person to produce any
23 perfluorocarbon, import any
24 perfluorocarbon, or import any product
25 containing perfluorocarbon, unless the per-

1 son holds 1 consumption allowance or 1
2 offset credit for each carbon dioxide equiv-
3 alent ton of the perfluorocarbon destroyed.

4 “(iii) RETIRED ALLOWANCES.—Any
5 person who exports a perfluorocarbon for
6 which a use allowance was retired may re-
7 ceive a refund of that allowance from the
8 Administrator after the date of export.

9 “(B) INTEGRITY OF LIMITS.—To maintain
10 the integrity of the perfluorocarbon limits under
11 this paragraph, the Administrator may limit, by
12 regulation, the percentage of the compliance ob-
13 ligation of any person that may be met through
14 the consumption of offset credits or banked al-
15 lowances.

16 “(C) COUNTING OF VIOLATIONS.—Each
17 consumption allowance or offset credit not held
18 as required by this subsection shall be a sepa-
19 rate violation of this section.

20 “(2) SCHEDULE.—Pursuant to the regulations
21 promulgated under paragraph (1)(A), the number of
22 perfluorocarbon consumption allowances available for
23 distribution for each calendar year beginning in cal-
24 endar year 2014 shall be established by the Adminis-
25 trator.

1 “(3) BASELINE.—

2 “(A) IN GENERAL.—Not later than 1 year
3 after the date of enactment of this section, the
4 Administrator shall promulgate regulations to
5 establish the baseline for purposes of paragraph
6 (2).

7 “(B) CALCULATION.—The baseline shall
8 be—

9 “(i) the sum, expressed in metric tons
10 of carbon dioxide equivalents, of—

11 “(I) the average of the annual
12 consumption of all perfluorocarbon in
13 each of calendar years 2004, 2005,
14 and 2006; and

15 “(II) the annual average quantity
16 of all perfluorocarbon contained in im-
17 ported products during the period of
18 calendar years 2004, 2005, and 2006;
19 or

20 “(ii) such alternative quantity of car-
21 bon dioxide equivalents that, as determined
22 by the Administrator, more accurately re-
23 flects the average annual quantity of
24 perfluorocarbon consumed in and imported
25 into the United States (including in prod-

1 ucts), as based on information compiled by
2 the Administrator.

3 “(4) DISTRIBUTION OF ALLOWANCES.—The
4 Administrator shall determine an allocation, and
5 procedures for the distribution, transfer, and ex-
6 change of allowances for the consumption of
7 perfluorocarbon under this section, including a de-
8 termination of whether allowances may be auctioned,
9 sold, or allocated and distributed at no cost, trans-
10 ferred, or exchanged for domestic or international
11 consumption, in accordance with such criteria as the
12 Administrator considers to be appropriate.

13 “(e) IMPLEMENTATION.—To the maximum extent
14 practicable, the Administrator shall implement this section
15 in accordance with the procedures described in section
16 619.

17 “(f) DEADLINES FOR COMPLIANCE.—The Adminis-
18 trator shall promulgate regulations for perfluorocarbon in
19 accordance with this section by not later than October 31,
20 2013.

21 **“PART C—PROGRAM RULES**

22 **“SEC. 721. EMISSION ALLOWANCES.**

23 “(a) IN GENERAL.—The Administrator shall estab-
24 lish a separate quantity of emission allowances for each

1 calendar year starting in 2012, in the amounts prescribed
2 under subsection (e).

3 “(b) IDENTIFICATION NUMBERS.—The Adminis-
4 trator shall assign to each emission allowance established
5 under subsection (a) a unique identification number that
6 includes the vintage year for that emission allowance.

7 “(c) LEGAL STATUS OF EMISSION ALLOWANCES.—

8 “(1) IN GENERAL.—An allowance established
9 by the Administrator under this title does not con-
10 stitute a property right.

11 “(2) TERMINATION OR LIMITATION.—Nothing
12 in this Act or any other provision of law shall be
13 construed to limit or alter the authority of the
14 United States, including the Administrator acting
15 pursuant to statutory authority, to terminate or
16 limit allowances, offset credits, or term offset cred-
17 its.

18 “(3) OTHER PROVISIONS UNAFFECTED.—Ex-
19 cept as otherwise specified in this Act, nothing in
20 this Act relating to allowances, offset credits, or
21 term offset credits established or issued under this
22 title shall affect the application of any other provi-
23 sion of law to a covered entity, or the responsibility
24 for a covered entity to comply with any such provi-
25 sion of law.

1 “(d) SAVINGS PROVISION.—Nothing in this part shall
 2 be construed as requiring a change of any kind in any
 3 State law regulating electric utility rates and charges, or
 4 as affecting any State law regarding such State regula-
 5 tion, or as limiting State regulation (including any
 6 prudence review) under such a State law. Nothing in this
 7 part shall be construed as modifying the Federal Power
 8 Act (16 U.S.C. 791a et seq.) or as affecting the authority
 9 of the Federal Energy Regulatory Commission under that
 10 Act. Nothing in this part shall be construed to interfere
 11 with or impair any program for competitive bidding for
 12 power supply in a State in which such program is estab-
 13 lished.

14 “(e) ALLOWANCES FOR EACH CALENDAR YEAR.—

15 “(1) IN GENERAL.—Except as provided in para-
 16 graph (2), the number of emission allowances estab-
 17 lished by the Administrator under subsection (a) for
 18 each calendar year shall be as provided in the fol-
 19 lowing table:

“Calendar Year	Emissions Allow- ances (MtCO₂e)
2012	4,627
2013	4,544
2014	5,099
2015	5,003
2016	5,482
2017	5,261
2018	5,132
2019	5,002
2020	4,873
2021	4,739
2022	4,605
2023	4,471

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2024	4,337
2025	4,203
2026	4,069
2027	3,935
2028	3,801
2029	3,667
2030	3,533
2031	3,408
2032	3,283
2033	3,158
2034	3,033
2035	2,908
2036	2,784
2037	2,659
2038	2,534
2039	2,409
2040	2,284
2041	2,159
2042	2,034
2043	1,910
2044	1,785
2045	1,660
2046	1,535
2047	1,410
2048	1,285
2049	1,160
2050	1,035

1 “(2) REVISION.—

2 “(A) IN GENERAL.—The Administrator
3 may adjust, in accordance with subparagraph
4 (B), the number of emission allowances estab-
5 lished pursuant to paragraph (1) if, after notice
6 and an opportunity for public comment, the Ad-
7 ministrators determines that—

8 “(i) United States greenhouse gas
9 emissions in 2005 were other than 7,206
10 million metric tons carbon dioxide equiva-
11 lent;

12 “(ii) if the requirements of this title
13 for 2012 had been in effect in 2005, sec-

1 tion 722 would have required emission al-
2 lowances to be held for other than 66.2
3 percent of United States greenhouse gas
4 emissions in 2005;

5 “(iii) if the requirements of this title
6 for 2014 had been in effect in 2005, sec-
7 tion 722 would have required emission al-
8 lowances to be held for other than 75.7
9 percent of United States greenhouse gas
10 emissions in 2005; or

11 “(iv) if the requirements of this title
12 for 2016 had been in effect in 2005, sec-
13 tion 722 would have required emission al-
14 lowances to be held for other than 84.5
15 percent United States greenhouse gas
16 emissions in 2005.

17 “(B) ADJUSTMENT FORMULA.—

18 “(i) IN GENERAL.—If the Adminis-
19 trator adjusts under this paragraph the
20 number of emission allowances established
21 pursuant to paragraph (1), the number of
22 emission allowances the Administrator es-
23 tablishes for any given calendar year shall
24 equal the product of—

1 sion allowances established pursuant to
2 paragraph (1), the Administrator shall use
3 the carbon dioxide equivalent values estab-
4 lished pursuant to section 712.

5 “(iv) LIMITATION ON ADJUSTMENT
6 TIMING.—Once a calendar year has start-
7 ed, the Administrator may not adjust the
8 number of emission allowances to be estab-
9 lished for that calendar year.

10 “(C) LIMITATION ON ADJUSTMENT AU-
11 THORITY.—The Administrator may adjust
12 under this paragraph the number of emission
13 allowances to be established pursuant to para-
14 graph (1) only once.

15 “(f) COMPENSATORY ALLOWANCE.—

16 “(1) IN GENERAL.—The regulations promul-
17 gated under subsection (h) shall provide for the es-
18 tablishment and distribution of compensatory allow-
19 ances for—

20 “(A) the destruction, in 2012 or later, of
21 fluorinated gases that are greenhouse gases if—

22 “(i) allowances or offset credits were
23 retired for their production or importation;
24 and

1 “(ii) such gases are not required to be
2 destroyed under any other provision of law;

3 “(B) the nonemissive use, in 2012 or later,
4 of petroleum-based or coal-based liquid or gas-
5 eous fuel, petroleum coke, natural gas liquid, or
6 natural gas as a feedstock, if allowances or off-
7 set credits were retired for the greenhouse
8 gases that would have been emitted from their
9 combustion; and

10 “(C) the conversionary use, in 2012 or
11 later, of fluorinated gases in a manufacturing
12 process, including semiconductor research or
13 manufacturing, if allowances or offset credits
14 were retired for the production or importation
15 of such gas.

16 “(2) ESTABLISHMENT AND DISTRIBUTION.—

17 “(A) IN GENERAL.—Not later than 90
18 days after the end of each calendar year, the
19 Administrator shall establish and distribute to
20 the entity taking the actions described in sub-
21 paragraph (A), (B), or (C) of paragraph (1) a
22 quantity of compensatory allowances equivalent
23 to the number of tons of carbon dioxide equiva-
24 lent of avoided emissions achieved through such
25 actions. In establishing the quantity of compen-

1 satory allowances, the Administrator shall take
2 into account the carbon dioxide equivalent value
3 of any greenhouse gas resulting from such ac-
4 tion.

5 “(B) SOURCE OF ALLOWANCES.—Compen-
6 satory allowances established under this sub-
7 section shall not be emission allowances estab-
8 lished under subsection (a).

9 “(C) IDENTIFICATION NUMBERS.—The
10 Administrator shall assign to each compen-
11 satory allowance established under subpara-
12 graph (A) a unique identification number.

13 “(3) DEFINITIONS.—For purposes of this sub-
14 section—

15 “(A) the term ‘destruction’ means the con-
16 version of a greenhouse gas by thermal, chem-
17 ical, or other means to another gas or set of
18 gases with little or no carbon dioxide equivalent
19 value;

20 “(B) the term ‘nonemissive use’ means the
21 use of fossil fuel as a feedstock in an industrial
22 or manufacturing process to the extent that
23 greenhouse gases are not emitted from such
24 process, and to the extent that the products of

1 such process are not intended for use as, or to
2 be contained in, a fuel; and

3 “(C) the term ‘conversionary use’ means
4 the conversion during research or manufac-
5 turing of a fluorinated gas into another green-
6 house gas or set of gases with a lower carbon
7 dioxide equivalent value.

8 “(4) FEEDSTOCK EMISSIONS STUDY.—

9 “(A) The Administrator may conduct a
10 study to determine the extent to which petro-
11 leum-based or coal-based liquid or gaseous fuel,
12 petroleum coke, natural gas liquid, or natural
13 gas are used as feedstocks in manufacturing
14 processes to produce products and the green-
15 house gas emissions resulting from such uses.

16 “(B) If as a result of such a study, the Ad-
17 ministrator determines that the use of such
18 products by noncovered sources results in sub-
19 stantial emissions of greenhouse gases or their
20 precursors and that such emissions have not
21 been adequately addressed under other require-
22 ments of this Act, the Administrator may, after
23 notice and comment rulemaking, promulgate a
24 regulation reducing compensatory allowances

1 commensurately if doing so will not result in
2 leakage.

3 “(g) FLUORINATED GASES ASSESSMENT.—

4 “(1) IN GENERAL.—Not later than March 31,
5 2014, the Administrator shall conduct an assess-
6 ment of the regulation of non-hydrofluorocarbon
7 fluorinated gases under this title (excluding
8 perfluorocarbon) to determine whether the most ap-
9 propriate point of regulation of those gases is at—

10 “(A) the gas manufacturer or importer
11 level; or

12 “(B) the downstream source of the emis-
13 sions.

14 “(2) MODIFICATION OF DEFINITION.—If the
15 Administrator determines, based on consideration of
16 environmental effectiveness, cost-effectiveness, ad-
17 ministrative feasibility, extent of coverage of emis-
18 sions, and competitiveness considerations, that emis-
19 sions of non-hydrofluorocarbon fluorinated gases (ex-
20 cluding perfluorocarbons) can best be regulated by
21 designating downstream emission sources as covered
22 entities with compliance obligations under section
23 722, the Administrator shall—

24 “(A) after providing notice and an oppor-
25 tunity for comment, modify the definition of the

1 term ‘covered entity’ with respect to fluorinated
2 gases (other than hydrofluorocarbons and
3 perfluorocarbons) accordingly; and

4 “(B) establish such requirements as are
5 necessary to ensure compliance by the covered
6 entities with the requirements of this title.

7 “(h) REGULATIONS.—Not later than 24 months after
8 the date of enactment of this title, the Administrator shall
9 promulgate regulations to carry out the provisions of this
10 title.

11 **“SEC. 722. PROHIBITION OF EXCESS EMISSIONS.**

12 “(a) PROHIBITION.—Except as provided in sub-
13 section (c), effective January 1, 2012, each covered entity
14 is prohibited from emitting greenhouse gases, and having
15 attributable greenhouse gas emissions, in combination, in
16 excess of its allowable emissions level. A covered entity’s
17 allowable emissions level for each calendar year is the
18 number of emission allowances (or credits or other allow-
19 ances as provided in subsection (d)) it holds as of 12:01
20 a.m. on April 1 (or a later date established by the Admin-
21 istrator under subsection (j)) of the following calendar
22 year.

23 “(b) METHODS OF DEMONSTRATING COMPLIANCE.—
24 Except as otherwise provided in this section, the owner
25 or operator of a covered entity shall not be considered to

1 be in compliance with the prohibition in subsection (a) un-
2 less, as of 12:01 a.m. on April 1 (or a later date estab-
3 lished by the Administrator under subsection (j)) of each
4 calendar year starting in 2013, the owner or operator
5 holds a quantity of emission allowances (or credits or other
6 allowances as provided in subsection (d)) at least as great
7 as the quantity calculated as follows:

8 “(1) ELECTRICITY SOURCES.—For a covered
9 entity described in section 700(13)(A), 1 emission
10 allowance for each ton of carbon dioxide equivalent
11 of greenhouse gas that such covered entity emitted
12 in the previous calendar year, excluding emissions
13 resulting from the combustion of—

14 “(A) petroleum-based or coal-based liquid
15 fuel;

16 “(B) natural gas liquid;

17 “(C) renewable biomass or gas derived
18 from renewable biomass; or

19 “(D) petroleum coke.

20 “(2) FUEL PRODUCERS AND IMPORTERS.—For
21 a covered entity described in section 700(13)(B), 1
22 emission allowance for each ton of carbon dioxide
23 equivalent of greenhouse gas that would be emitted
24 from the combustion of any petroleum-based or coal-
25 based liquid fuel, petroleum coke, or natural gas liq-

1 uid, produced or imported by such covered entity
2 during the previous calendar year for sale or dis-
3 tribution in interstate commerce, assuming no cap-
4 ture and sequestration of any greenhouse gas emis-
5 sions.

6 “(3) INDUSTRIAL GAS PRODUCERS AND IM-
7 PORTERS.—For a covered entity described in section
8 700(13)(C), 1 emission allowance for each ton of
9 carbon dioxide equivalent of fossil fuel-based carbon
10 dioxide, nitrous oxide, or any other fluorinated gas
11 that is a greenhouse gas (except for nitrogen
12 trifluoride), or any combination thereof, produced or
13 imported by such covered entity during the previous
14 calendar year for sale or distribution in interstate
15 commerce or released as fugitive emissions in the
16 production of fluorinated gas.

17 “(4) NITROGEN TRIFLUORIDE SOURCES.—For
18 a covered entity described in section 700(13)(D), 1
19 emission allowance for each ton of carbon dioxide
20 equivalent of nitrogen trifluoride that such covered
21 entity emitted in the previous calendar year.

22 “(5) GEOLOGICAL SEQUESTRATION SITES.—For
23 a covered entity described in section 700(13)(E), 1
24 emission allowance for each ton of carbon dioxide

1 equivalent of greenhouse gas that such covered enti-
2 ty emitted in the previous calendar year.

3 “(6) INDUSTRIAL STATIONARY SOURCES.—For
4 a covered entity described in section 700(13)(F),
5 (G), or (H), 1 emission allowance for each ton of
6 carbon dioxide equivalent of greenhouse gas that
7 such covered entity emitted in the previous calendar
8 year, excluding emissions resulting from—

9 “(A) the combustion of petroleum-based or
10 coal-based liquid fuel;

11 “(B) the combustion of natural gas liquid;

12 “(C) the combustion of renewable biomass
13 or gas derived from renewable biomass;

14 “(D) the combustion of petroleum coke; or

15 “(E) the use of any fluorinated gas that is
16 a greenhouse gas purchased for use at that cov-
17 ered entity, except for nitrogen trifluoride.

18 “(7) INDUSTRIAL FOSSIL FUEL-FIRED COMBUS-
19 TION DEVICES.—For a covered entity described in
20 section 700(13)(I), 1 emission allowance for each
21 ton of carbon dioxide equivalent of greenhouse gas
22 that the devices emitted in the previous calendar
23 year, excluding emissions resulting from the combus-
24 tion of—

1 “(A) petroleum-based or coal-based liquid
2 fuel;

3 “(B) natural gas liquid;

4 “(C) renewable biomass or gas derived
5 from renewable biomass; or

6 “(D) petroleum coke.

7 “(8) NATURAL GAS LOCAL DISTRIBUTION COM-
8 PANIES.—For a covered entity described in section
9 700(13)(J), 1 emission allowance for each ton of
10 carbon dioxide equivalent of greenhouse gas that
11 would be emitted from the combustion of the natural
12 gas, and any other gas meeting the specifications for
13 commingling with natural gas for purposes of deliv-
14 ery, that such entity delivered during the previous
15 calendar year to customers that are not covered enti-
16 ties, assuming no capture and sequestration of that
17 greenhouse gas.

18 “(9) R&D FACILITIES.—

19 “(A) IN GENERAL.—For a qualified R&D
20 facility that emitted 25,000 tons per year or
21 more carbon dioxide equivalent in the previous
22 calendar year, 1 emission allowance for each
23 ton of carbon dioxide equivalent of greenhouse
24 gas that such facility emitted in the previous
25 calendar year.

1 “(B) TREATMENT.—A qualified R&D facil-
2 ity shall be treated as a separate covered entity
3 solely for purposes of applying the requirements
4 of this subsection.

5 “(10) ALGAE-BASED FUELS.—Where carbon di-
6 oxide (or another greenhouse gas) is used as an
7 input in the production of algae-based fuels, the Ad-
8 ministrator shall ensure that allowances are required
9 to be held either for the carbon dioxide used to grow
10 the algae or for the carbon dioxide emitted from
11 combustion of the fuel produced from such algae,
12 but not for both.

13 “(11) FUGITIVE EMISSIONS.—The greenhouse
14 gas emissions to which paragraphs (1), (4), (6), and
15 (7) apply shall not include fugitive emissions of
16 greenhouse gas, except to the extent the Adminis-
17 trator determines that data on the carbon dioxide
18 equivalent value of greenhouse gas in the fugitive
19 emissions can be provided with sufficient precision,
20 reliability, accessibility, and timeliness to ensure the
21 integrity of emission allowances, the allowance track-
22 ing system, and the limits on emissions.

23 “(12) EXPORT EXEMPTION.—This section shall
24 not apply to any petroleum-based or coal-based liq-
25 uid fuel, petroleum coke, natural gas liquid, fossil

1 fuel-based carbon dioxide, nitrous oxide, or
2 fluorinated gas that is exported for sale or use.

3 “(13) NATURAL GAS LIQUIDS.—Notwith-
4 standing subsection (a), if the owner or operator of
5 a covered entity described in section 700(13)(B)
6 that produces natural gas liquids does not take own-
7 ership of the liquids, and is not responsible for the
8 distribution or use of the liquids in commerce, the
9 owner of the liquids shall be responsible for compli-
10 ance with this section, section 723, and other rel-
11 evant sections of this title with respect to such liq-
12 uids. In the regulations promulgated under section
13 721, the Administrator shall include such provisions
14 with respect to such liquids as the Administrator de-
15 termines are appropriate to determine and ensure
16 compliance, and to penalize noncompliance. In such
17 a case, the owner of the covered entity shall provide
18 to the Administrator, in a manner to be determined
19 by the Administrator, information regarding the
20 quantity and ownership of liquids produced at the
21 covered entity.

22 “(14) APPLICATION OF MULTIPLE PARA-
23 GRAPHS.—For a covered entity to which more than
24 1 of paragraphs (1) through (8) apply, all applicable
25 paragraphs shall apply, except that not more than 1

1 emission allowance shall be required for the same
2 emission.

3 “(c) PHASE-IN OF PROHIBITION.—

4 “(1) INDUSTRIAL STATIONARY SOURCES.—The
5 prohibition under subsection (a) shall first apply to
6 a covered entity described in section 700(13)(D),
7 (F), (G), (H), or (I), with respect to emissions oc-
8 ccurring during calendar year 2014.

9 “(2) NATURAL GAS LOCAL DISTRIBUTION COM-
10 PANIES.—The prohibition under subsection (a) shall
11 first apply to a covered entity described in section
12 700(13)(J) with respect to deliveries occurring dur-
13 ing calendar year 2016.

14 “(d) ADDITIONAL METHODS.—In addition to using
15 the method of compliance described in subsection (b), a
16 covered entity may do the following:

17 “(1) OFFSET CREDITS.—

18 “(A) CREDITS.—

19 “(i) IN GENERAL.—Covered entities
20 collectively may, in accordance with this
21 paragraph, use offset credits to dem-
22 onstrate compliance for up to a maximum
23 of 2,000,000,000 tons of greenhouse gas
24 emissions annually.

1 “(ii) DEMONSTRATION OF COMPLI-
2 ANCE.—In any calendar year, a covered
3 entity may demonstrate compliance by
4 holding 1 domestic offset credit or 1.25
5 international offset credits in lieu of an
6 emission allowance, except as provided in
7 subparagraph (D), up to a total number of
8 offset credits described in subparagraph
9 (B).

10 “(B) APPLICABLE PERCENTAGE.—

11 “(i) IN GENERAL.—The total number
12 of offset credits referred to in subpara-
13 graph (A)(ii) for a covered entity for a
14 given calendar year shall be determined
15 by—

16 “(I) dividing—

17 “(aa) the tons of carbon di-
18 oxide equivalent of greenhouse
19 gas emissions of the covered enti-
20 ty (except for the types of emis-
21 sions excluded under subpara-
22 graphs (A) through (D) of sub-
23 section (b)(1), subparagraphs (A)
24 through (E) of subsection (b)(6),
25 and subparagraphs (A) through

450

1 (D) of subsection (b)(7)) and at-
2 tributable greenhouse gas emis-
3 sions for the year before the pre-
4 ceding calendar year; by

5 “(bb) the sum of the tons of
6 carbon dioxide equivalent of
7 greenhouse gas emissions of all
8 covered entities (except for the
9 types of emissions excluded under
10 subparagraphs (A) through (D)
11 of subsection (b)(1), subpara-
12 graphs (A) through (E) of sub-
13 section (b)(6), and subpara-
14 graphs (A) through (D) of sub-
15 section (b)(7)) and attributable
16 greenhouse gas emissions for the
17 year before the preceding cal-
18 endar year; and

19 “(II) multiplying the quotient ob-
20 tained under subclause (I) by
21 2,000,000,000.

22 “(ii) APPLICABILITY.—Clause (i) shall
23 apply to a covered entity (including a cov-
24 ered entity that commenced operation dur-
25 ing the preceding calendar year) even if

1 the covered entity had no greenhouse gas
2 emissions or attributable greenhouse gas
3 emissions described in that clause.

4 “(iii) OFFSET CREDITS.—Not more
5 than $\frac{3}{4}$ of the applicable percentage under
6 this paragraph may be used by holding do-
7 mestic offset credits, and not more than $\frac{1}{4}$
8 of the applicable percentage under this
9 paragraph may be used by holding inter-
10 national offset credits, except as provided
11 in subparagraph (C).

12 “(C) MODIFIED PERCENTAGES.—If the
13 Administrator determines that domestic offset
14 credits available for use in demonstrating com-
15 pliance in any calendar year at domestic offset
16 prices generally equal to or less than allowance
17 prices, are likely to offset less than 900,000,000
18 tons of greenhouse gas emissions (measured in
19 tons of carbon dioxide equivalents), the Admin-
20 istrator shall increase the percent of emissions
21 that can be offset through the use of inter-
22 national offset credits (and decrease the percent
23 of emissions that can be allowed through the
24 use of domestic offset credits by the same
25 amount) to reflect the amount that

1 1,500,000,000 exceeds the number of domestic
2 offset credits the Administrator determines is
3 available for that year, up to a maximum of
4 750,000,000 tons of greenhouse gas emissions.

5 “(D) INTERNATIONAL OFFSET CREDITS.—
6 Notwithstanding subparagraph (A), to dem-
7 onstrate compliance prior to calendar year
8 2018, a covered entity may use 1 international
9 offset credit in lieu of an emission allowance up
10 to the amount permitted under this paragraph.

11 “(E) PRESIDENT’S RECOMMENDATION.—
12 The President may make a recommendation to
13 Congress as to whether the number
14 2,000,000,000 specified in subparagraphs (A)
15 and (B) should be increased or decreased.

16 “(2) TERM OFFSET CREDITS.—

17 “(A) IN GENERAL.—Covered entities may,
18 in accordance with this paragraph, use non-ex-
19 pired term offset credits instead of domestic
20 offset credits for purposes of temporarily dem-
21 onstrating compliance with this section.

22 “(B) AMOUNT.—The combined quantity of
23 term offset credits and domestic offset credits
24 used by a covered entity to demonstrate compli-
25 ance for its emissions or attributable green-

1 house gas emissions in any given year shall not
2 exceed the quantity of domestic offset credits
3 that a covered entity is entitled to use for that
4 year to demonstrate compliance in accordance
5 with paragraph (1).

6 “(C) EXPIRATION.—A term offset credit
7 shall expire in the year after its term ends. The
8 term of a term offset credit shall be calculated
9 by adding to the year of issuance the number
10 of years equal to the length of the crediting pe-
11 riod for the practice or project for which the
12 term offset credit was issued, but in no case
13 shall be later than the date 5 years from the
14 date of issuance.

15 “(D) DEMONSTRATING COMPLIANCE UPON
16 EXPIRATION OF TERM OFFSET CREDIT.—With
17 respect to the emissions for which a covered en-
18 tity is using term offset credits to demonstrate
19 compliance temporarily with this section, the
20 owner or operator of a covered entity shall not
21 be considered to be in compliance with the pro-
22 hibition in subsection (a) unless, as of 12:01
23 a.m. on April 1 (or a later date established by
24 the Administrator under subsection (j)) of the

1 calendar year in which a term offset credit ex-
2 pires, the owner or operator holds—

3 “(i) for purposes of finally dem-
4 onstrating compliance, an allowance or a
5 domestic offset credit; or

6 “(ii) for purposes of temporarily dem-
7 onstrating compliance, a non-expired term
8 offset credit.

9 “(E) INAPPLICABILITY OF PERCENTAGE
10 LIMITATIONS.—Domestic offset credits used for
11 purposes of finally demonstrating compliance
12 under this subparagraph shall not be subject to
13 the percentage limitations in subparagraph (B).

14 “(F) FINANCIAL ASSURANCE.—A covered
15 entity may not use a term offset credit to dem-
16 onstrate compliance temporarily unless it simul-
17 taneously provides to the Administrator finan-
18 cial assurance that, at the end of the term off-
19 set credit’s crediting term, the covered entity
20 will have sufficient resources to obtain the
21 quantity of allowances or credits necessary to
22 demonstrate final compliance. The Adminis-
23 trator shall issue regulations establishing re-
24 quirements for such financial assurance, which
25 shall take into account the increased risk asso-

1 ciated with longer crediting terms. These regu-
2 lations shall take into account the total number
3 of tons of carbon dioxide equivalent of green-
4 house gas emissions for which a covered entity
5 is demonstrating compliance temporarily, and
6 may set a limit on this amount. In the event
7 that a covered entity that used term offset cred-
8 its to demonstrate compliance temporarily fails
9 to meet the requirements of subparagraph (D)
10 at the end of the term offset credits' crediting
11 term, if the financial assurance mechanism fails
12 to provide to the Administrator the number of
13 allowances or offset credits for which the cred-
14 iting term has expired, then the Administrator
15 shall retire that number of allowances with the
16 vintage year 2 years after the year in which the
17 term offset credit expires in the same amount.
18 Allowances so retired shall not be counted as
19 emission allowances established for that cal-
20 endar year under section 721(a).

21 “(3) INTERNATIONAL EMISSION ALLOW-
22 ANCES.—To demonstrate compliance, a covered enti-
23 ty may hold an international emission allowance in
24 lieu of an emission allowance, except as modified
25 under section 728(d).

1 “(4) COMPENSATORY ALLOWANCES.—To dem-
2 onstrate compliance, a covered entity may hold a
3 compensatory allowance obtained under section
4 721(f) in lieu of an emission allowance.

5 “(e) RETIREMENT OF ALLOWANCES AND CREDITS.—
6 As soon as practicable after a deadline established for cov-
7 ered entities to demonstrate compliance with this title, the
8 Administrator shall retire the quantity of allowances or
9 credits required to be held under this title.

10 “(f) ALTERNATIVE METRICS.—For categories of cov-
11 ered entities described in subparagraph (B), (C), (D), (G),
12 (H), or (I) of section 700(13), the Administrator may, by
13 rule, establish an applicability threshold for inclusion
14 under those subparagraphs using an alternative metric
15 and level, provided that such metric and level are easier
16 to administer and cover the same size and type of sources
17 as the threshold defined in such subparagraphs.

18 “(g) THRESHOLD REVIEW.—For each category of
19 covered entities described in subparagraph (B), (C), (D),
20 (G), (H), or (I) of section 700(13), the Administrator
21 shall, in 2020 and once every 8 years thereafter, review
22 the carbon dioxide equivalent emission thresholds that are
23 used to define covered entities. After consideration of—

24 “(1) emissions from covered entities in each
25 such category, and from other entities of the same

1 type that emit less than the threshold amount for
2 the category (including emission sources that com-
3 mence operation after the date of enactment of this
4 title that are not covered entities); and

5 “(2) whether greater greenhouse gas emission
6 reductions can be cost-effectively achieved by low-
7 ering the applicable threshold,

8 the Administrator may by rule lower such threshold to not
9 less than 10,000 tons of carbon dioxide equivalent emis-
10 sions. In determining the cost effectiveness of potential re-
11 ductions from lowering the threshold for covered entities,
12 the Administrator shall consider alternative regulatory
13 greenhouse gas programs, including setting standards
14 under other titles of this Act.

15 “(h) DESIGNATED REPRESENTATIVES.—The regula-
16 tions promulgated under section 721(h) shall require that
17 each covered entity, and each entity holding allowances or
18 credits or receiving allowances or credits from the Admin-
19 istrator under this title, select a designated representative.

20 “(i) EDUCATION AND OUTREACH.—

21 “(1) IN GENERAL.—The Administrator shall es-
22 tablish and carry out a program of education and
23 outreach to assist covered entities, especially entities
24 having little experience with environmental regu-
25 latory requirements similar or comparable to those

1 under this title, in preparing to meet the compliance
2 obligations of this title. Such program shall include
3 education with respect to using markets to effec-
4 tively achieve such compliance.

5 “(2) FAILURE TO RECEIVE INFORMATION.—A
6 failure to receive information or assistance under
7 this subsection may not be used as a defense against
8 an allegation of any violation of this title.

9 “(j) ADJUSTMENT OF DEADLINE.—The Adminis-
10 trator may, by rule, establish a deadline for demonstrating
11 compliance, for a calendar year, later than the date pro-
12 vided in subsection (a), as necessary to ensure the avail-
13 ability of emissions data, but in no event shall the deadline
14 be later than June 1.

15 “(k) NOTICE REQUIREMENT FOR COVERED ENTI-
16 TIES RECEIVING NATURAL GAS FROM NATURAL GAS
17 LOCAL DISTRIBUTION COMPANIES.—The owner or oper-
18 ator of a covered entity that takes delivery of natural gas
19 from a natural gas local distribution company shall, not
20 later than September 1 of each calendar year, notify such
21 natural gas local distribution company in writing that
22 such entity will qualify as a covered entity under this title
23 for that calendar year.

24 “(l) COMPLIANCE OBLIGATION.—For purposes of
25 this title, the year of a compliance obligation is the year

1 in which compliance is determined, not the year in which
2 the greenhouse gas emissions occur or the covered entity
3 has attributable greenhouse gas emissions.

4 **“SEC. 723. PENALTY FOR NONCOMPLIANCE.**

5 “(a) ENFORCEMENT.—A violation of any prohibition
6 of, requirement of, or regulation promulgated pursuant to
7 this title shall be a violation of this Act. It shall be a viola-
8 tion of this Act for a covered entity to emit greenhouse
9 gases, and have attributable greenhouse gas emissions, in
10 combination, in excess of its allowable emissions level as
11 provided in section 722(a). Each ton of carbon dioxide
12 equivalent for which a covered entity fails to demonstrate
13 compliance under section 722(b) shall be a separate viola-
14 tion. In the event that a covered entity fails to dem-
15 onstrate compliance at the expiration of a term of offset
16 credits crediting term as required by section 722(d)(2)(D),
17 the year of the violation shall be the year in which the
18 term offset credit expires.

19 “(b) EXCESS EMISSIONS PENALTY.—

20 “(1) IN GENERAL.—The owner or operator of
21 any covered entity that fails for any year to comply,
22 on the deadline described in section 722(a) or (j),
23 shall be liable for payment to the Administrator of
24 an excess emissions penalty in the amount described
25 in paragraph (2).

1 “(2) AMOUNT.—The amount of an excess emis-
2 sions penalty required to be paid under paragraph
3 (1) shall be equal to the product obtained by multi-
4 plying—

5 “(A) the tons of carbon dioxide equivalent
6 of greenhouse gas emissions or attributable
7 greenhouse gas emissions for which the owner
8 or operator of a covered entity failed to comply
9 under section 722(b) on the deadline; by

10 “(B) twice the fair market value of emis-
11 sion allowances established for emissions occur-
12 ring in the calendar year for which the emission
13 allowances were due.

14 “(3) TIMING.—An excess emissions penalty re-
15 quired under this subsection shall be immediately
16 due and payable to the Administrator, without de-
17 mand, in accordance with regulations promulgated
18 by the Administrator, which shall be issued not later
19 than 2 years after the date of enactment of this
20 title.

21 “(4) NO EFFECT ON LIABILITY.—An excess
22 emissions penalty due and payable by the owners or
23 operators of a covered entity under this subsection
24 shall not diminish the liability of the owners or oper-
25 ators for any fine, penalty, or assessment against

1 the owners or operators for the same violation under
2 any other provision of this Act or any other law.

3 “(c) **EXCESS EMISSIONS ALLOWANCES.**—The owner
4 or operator of a covered entity that fails for any year to
5 comply on the deadline described in section 722(a) or (j)
6 shall be liable to offset the covered entity’s excess com-
7 bination of greenhouse gases emitted and attributable
8 greenhouse gas emissions by an equal quantity of emission
9 allowances during the following calendar year, or such
10 longer period as the Administrator may prescribe. During
11 the year in which the covered entity failed to comply, or
12 any year thereafter, the Administrator may deduct the
13 emission allowances required under this subsection to off-
14 set the covered entity’s excess actual or attributable emis-
15 sions.

16 **“SEC. 724. TRADING.**

17 “(a) **PERMITTED TRANSACTIONS.**—Except as other-
18 wise provided in this title, the lawful holder of an emission
19 allowance, compensatory allowance, or offset credit may,
20 without restriction, sell, exchange, transfer, hold for com-
21 pliance in accordance with section 722, or request that the
22 Administrator retire the emission allowance, compensatory
23 allowance, or offset credit.

24 “(b) **NO RESTRICTION ON TRANSACTIONS.**—The
25 privilege of purchasing, holding, selling, exchanging,

1 transferring, and requesting retirement of emission allow-
2 ances, compensatory allowances, or offset credits shall not
3 be restricted to the owners and operators of covered enti-
4 ties, except as otherwise provided in this title.

5 “(c) EFFECTIVENESS OF ALLOWANCE TRANS-
6 FERS.—No transfer of an allowance or offset credit shall
7 be effective for purposes of this title until a certification
8 of the transfer, signed by the designated representative of
9 the transferor, is received and recorded by the Adminis-
10 trator in accordance with regulations promulgated under
11 section 721(h).

12 “(d) ALLOWANCE TRACKING SYSTEM.—The regula-
13 tions promulgated under section 721(h) shall include a
14 system for issuing, recording, holding, and tracking allow-
15 ances, offset credits, and term offset credits that shall
16 specify all necessary procedures and requirements for an
17 orderly and competitive functioning of the allowance and
18 offset credit markets. Such regulations shall provide for
19 appropriate publication of the information in the system
20 on the Internet.

21 **“SEC. 725. BANKING AND BORROWING.**

22 “(a) BANKING.—An emission allowance may be used
23 to comply with section 722 or 723 for emissions in—

24 “(1) the vintage year for the allowance; or

1 “(2) any calendar year subsequent to the vin-
2 tage year for the allowance.

3 “(b) EXPIRATION.—

4 “(1) REGULATIONS.—The Administrator may
5 establish by regulation criteria and procedures for
6 determining whether, and for implementing a deter-
7 mination that, the expiration of an allowance, credit,
8 or term offset credit established or issued by the Ad-
9 ministrator under this title, or expiration of the abil-
10 ity to use an international emission allowance to
11 comply with section 722, is necessary to ensure the
12 authenticity and integrity of allowances, credits, or
13 term offset credits or the allowance tracking system.

14 “(2) GENERAL RULE.—An allowance, credit, or
15 term offset credit established or issued by the Ad-
16 ministrator under this title shall not expire unless—

17 “(A) it is retired by the Administrator as
18 required under this title; or

19 “(B) it is determined to expire or to have
20 expired by a specific date by the Administrator
21 in accordance with regulations promulgated
22 under paragraph (1).

23 “(3) INTERNATIONAL EMISSION ALLOW-
24 ANCES.—The ability to use an international emission

1 allowance to comply with section 722 shall not ex-
2 pire unless—

3 “(A) the allowance is retired by the Ad-
4 ministrator as required by this title; or

5 “(B) the ability to use such allowance to
6 meet such compliance obligation requirements is
7 determined to expire or to have expired by a
8 specific date by the Administrator in accord-
9 ance with regulations promulgated under para-
10 graph (1).

11 “(c) BORROWING FUTURE VINTAGE YEAR ALLOW-
12 ANCES.—

13 “(1) BORROWING WITHOUT INTEREST.—In ad-
14 dition to the uses described in subsection (a), an
15 emission allowance may be used to comply with sec-
16 tion 722(a) or 723 for emissions, production, impor-
17 tation, manufacture, or deliveries in the calendar
18 year immediately preceding the vintage year for the
19 allowance.

20 “(2) BORROWING WITH INTEREST.—

21 “(A) IN GENERAL.—A covered entity may
22 demonstrate compliance under subsection (b) in
23 a specific calendar year for up to 15 percent of
24 its emissions by holding emission allowances

1 with a vintage year 1 to 5 years later than that
2 calendar year.

3 “(B) LIMITATIONS.—An emission allow-
4 ance borrowed pursuant to this paragraph shall
5 be an emission allowance that is established by
6 the Administrator for a specific future calendar
7 year under section 721(a) and that is held by
8 the borrower.

9 “(C) PREPAYMENT OF INTEREST.—For
10 each emission allowance that an owner or oper-
11 ator of a covered entity borrows pursuant to
12 this paragraph, such owner or operator shall, at
13 the time it borrows the allowance, hold for re-
14 tirement by the Administrator a quantity of
15 emission allowances that is equal to the product
16 obtained by multiplying—

17 “(i) 0.08; by

18 “(ii) the number of years between the
19 calendar year in which the allowance is
20 being used to satisfy a compliance obliga-
21 tion and the vintage year of the allowance.

22 **“SEC. 726. MARKET STABILITY RESERVE.**

23 “(a) MARKET STABILITY RESERVE AUCTIONS.—

24 “(1) IN GENERAL.—Once each quarter of each
25 calendar year for which allowances are established

1 under section 721(a), the Administrator shall auc-
2 tion market stability reserve allowances.

3 “(2) RESTRICTION TO COVERED ENTITIES.—In
4 each auction conducted under paragraph (1), only
5 covered entities that the Administrator expects will
6 be required to comply with section 722 in the fol-
7 lowing calendar year shall be eligible to make pur-
8 chases.

9 “(b) POOL OF EMISSION ALLOWANCES FOR MARKET
10 STABILITY RESERVE AUCTIONS.—

11 “(1) FILLING THE MARKET STABILITY RE-
12 SERVE INITIALLY.—

13 “(A) IN GENERAL.—The Administrator
14 shall, not later than 2 years after the date of
15 enactment of this title, establish a market sta-
16 bility reserve account, and shall place in that
17 account an amount of emission allowances es-
18 tablished under section 721(a).

19 “(B) EFFECT ON OTHER PROVISIONS.—
20 Any provision in this title (except for subpara-
21 graph (B) of this paragraph) that refers to a
22 quantity or percentage of the emission allow-
23 ances established for a calendar year under sec-
24 tion 721(a) shall be considered to refer to the
25 amount of emission allowances as determined

1 stability reserve auction price shall be \$28 (in con-
2 stant 2005 dollars) for the market stability reserve
3 auctions held in 2012. For the market stability re-
4 serve auctions held in 2013 through 2017, the min-
5 imum market stability reserve auction price shall be
6 the market stability reserve auction price for the
7 previous year increased by 5 percent plus the rate of
8 inflation (as measured by the Consumer Price Index
9 for All Urban Consumers).

10 “(3) MINIMUM MARKET STABILITY RESERVE
11 AUCTION PRICE IN SUBSEQUENT YEARS.—For each
12 market stability reserve auction held in 2018 and
13 each year thereafter, the minimum market stability
14 reserve auction price shall be the market stability re-
15 serve auction price for the previous year increased
16 by 7 percent, plus the rate of inflation (as measured
17 by the Consumer Price Index for All Urban Con-
18 sumers).

19 “(d) QUANTITY OF EMISSION ALLOWANCES RE-
20 LEASED FROM THE MARKET STABILITY RESERVE.—

21 “(1) INITIAL LIMITS.—Subject to paragraph
22 (4), for each of calendar years 2012 through 2016,
23 the annual limit on the number of emission allow-
24 ances from the market stability reserve account that
25 may be auctioned is an amount equal to 15 percent

1 of the emission allowances established for that cal-
2 endar year under section 721(a). This limit does not
3 apply to offset credits sold on consignment pursuant
4 to subsection (h).

5 “(2) LIMITS IN SUBSEQUENT YEARS.—Subject
6 to paragraph (4), for calendar year 2017 and each
7 year thereafter, the annual limit on the number of
8 emission allowances from the market stability re-
9 serve account that may be auctioned is an amount
10 equal to 25 percent of the emission allowances estab-
11 lished for that calendar year under section 721(a).
12 This limit does not apply to offset credits sold on
13 consignment pursuant to subsection (h).

14 “(3) ALLOCATION OF LIMITATION.—One-fourth
15 of each year’s annual market stability reserve auc-
16 tion limit under this subsection shall be made avail-
17 able for auction in each quarter. Any allowances
18 from the market stability reserve account that are
19 made available for sale in a quarterly auction and
20 not sold shall be rolled over and added to the quan-
21 tity available for sale in the following quarter, except
22 that allowances not sold at auction in the fourth
23 quarter of a year shall not be rolled over to the fol-
24 lowing calendar year’s auctions, but shall be re-
25 turned to the market stability reserve account.

1 “(4) AUTHORITY TO ADJUST LIMITATION.—The
2 Administrator may adjust the limits in paragraphs
3 (1) or (2) if the Administrator determines an adjust-
4 ment is required to prevent disruptively high prices
5 or to preserve the integrity of the market stability
6 reserve.

7 “(e) PURCHASE LIMIT.—

8 “(1) IN GENERAL.—Except as provided in para-
9 graph (2) or (3), the annual number of emission al-
10 lowances that a covered entity may purchase at the
11 market stability reserve auctions in each calendar
12 year shall not exceed 20 percent of the covered enti-
13 ty’s emissions during the most recent year for which
14 allowances or credits were retired under section 722.

15 “(2) 2012 LIMIT.—For calendar year 2012, the
16 maximum aggregate number of emission allowances
17 that a covered entity may purchase from that year’s
18 market stability reserve auctions shall be 20 percent
19 of the covered entity’s greenhouse gas emissions that
20 the covered entity reported to the registry estab-
21 lished under section 713 for 2011 and that would be
22 subject to section 722(a) if occurring in later cal-
23 endar years.

24 “(3) NEW ENTRANTS.—The Administrator
25 shall, by regulation, establish a separate purchase

1 limit applicable to entities that expect to become a
2 covered entity in the year of the auction, permitting
3 them to purchase emission allowances at the market
4 stability reserve auctions in their first calendar year
5 of operation in an amount of at least 20 percent of
6 their expected combined emissions and attributable
7 greenhouse gas emissions for that year.

8 “(f) DELEGATION OR CONTRACT.—Pursuant to regu-
9 lations under this section, the Administrator may, by dele-
10 gation or contract, provide for the conduct of market sta-
11 bility reserve auctions under the Administrator’s super-
12 vision by other departments or agencies of the Federal
13 Government or by nongovernmental agencies, groups, or
14 organizations.

15 “(g) USE OF AUCTION PROCEEDS.—

16 “(1) DEPOSIT IN MARKET STABILITY RESERVE
17 FUND.—The proceeds from market stability reserve
18 auctions shall be placed in the Market Stability Re-
19 serve Fund established by subsection (j), and shall
20 be available without further appropriation or fiscal
21 year limitation for the purposes described in this
22 subsection.

23 “(2) OFFSET CREDITS.—The Administrator
24 shall use the proceeds from each market stability re-
25 serve auction to purchase offset credits, including

1 domestic offset credits and international offset cred-
2 its issued for reduced deforestation activities pursu-
3 ant to section 753. The Administrator shall retire
4 those offset credits and establish a number of emis-
5 sion allowances equal to the number of international
6 offset credits so retired. Emission allowances estab-
7 lished under this paragraph shall be in addition to
8 those established under section 721(a).

9 “(3) EMISSION ALLOWANCES.—The Adminis-
10 trator shall deposit emission allowances established
11 under paragraph (2) in the market stability reserve,
12 except that, with respect to any such emission allow-
13 ances in excess of the amount necessary to fill the
14 market stability reserve to its original size, the Ad-
15 ministrator shall—

16 “(A) except as provided in subparagraph
17 (B), assign a vintage year to the emission al-
18 lowance, which shall be no earlier than the year
19 in which the allowance is established under
20 paragraph (2) and shall treat such allowances
21 as ones that are not designated for distribution
22 or auction; and

23 “(B) to the extent any such allowances
24 cannot be assigned a vintage year because of

1 the limitation in paragraph (4), retire the allow-
2 ances.

3 “(4) LIMITATION.—In no case may the Admin-
4 istrator assign under paragraph (3)(A) more emis-
5 sion allowances to a vintage year than the number
6 of emission allowances from that vintage year that
7 were placed in the market stability reserve account
8 under subsection (b)(1).

9 “(h) AVAILABILITY OF OFFSET CREDITS FOR AUC-
10 TION.—

11 “(1) IN GENERAL.—The regulations promul-
12 gated under section 721(h) shall allow any entity
13 holding offset credits to request that the Adminis-
14 trator include such offset credits in an upcoming
15 market stability reserve auction. The regulations
16 shall provide that—

17 “(A) upon sale of such offset credits, the
18 Administrator shall retire those offset credits,
19 and establish and provide to the purchasers a
20 number of emission allowances equal to the
21 number of offset credits so retired, which allow-
22 ances shall be in addition to those established
23 under section 721(a); and

24 “(B) for offset credits sold pursuant to
25 this subsection, the proceeds for the entity that

1 offered the offset credits for sale shall be the
2 lesser of—

3 “(i) the average daily closing price for
4 offset credits sold on registered exchanges
5 (or if such price is unavailable, the average
6 price as determined by the Administrator)
7 during the six months prior to the market
8 stability reserve auction at which they were
9 auctioned, with the remaining funds col-
10 lected upon the sale of the offset credits
11 deposited in the Treasury; and

12 “(ii) the amount received for the off-
13 set credits at the auction.

14 “(2) PROCEEDS.—For offset credits sold pursu-
15 ant to this subsection, notwithstanding section 3302
16 of title 31, United States Code, or any other provi-
17 sion of law, within 90 days of receipt, the United
18 States shall transfer the proceeds from the auction,
19 as defined in paragraph (1)(D), to the entity that
20 offered the offset credits for sale. No funds trans-
21 ferred from a purchaser to a seller of offset credits
22 under this paragraph shall be held by any officer or
23 employee of the United States or treated for any
24 purpose as public monies.

1 “(3) PRICING.—When the Administrator acts
2 under this subsection as the agent of an entity in
3 possession of offset credits, the Administrator is not
4 obligated to obtain the highest price possible for the
5 offset credits, and instead shall auction such offset
6 credits in the same manner and pursuant to the
7 same rules (except as modified in paragraph (1)) as
8 set forth for auctioning market stability reserve al-
9 lowances. Entities requesting that such offset credits
10 be offered for sale at a market stability reserve auc-
11 tion may not set a minimum reserve price for their
12 offset credits that is different than the minimum
13 market stability reserve auction price set pursuant
14 to subsection (c).

15 “(i) INITIAL REGULATIONS.—Not later than 24
16 months after the date of enactment of this title, the Ad-
17 ministrator shall promulgate regulations, in consultation
18 with other appropriate agencies, governing the auction of
19 allowances under this section. Such regulations shall in-
20 clude the following requirements:

21 “(1) FREQUENCY; FIRST AUCTION.—Auctions
22 shall be held four times per year at regular intervals,
23 with the first auction to be held no later than March
24 31, 2012.

1 “(2) AUCTION FORMAT.—Auctions shall follow
2 a single-round, sealed-bid, uniform price format.

3 “(3) PARTICIPATION; FINANCIAL ASSURANCE.—
4 Auctions shall be open to any covered entity eligible
5 to purchase emission allowances at the auction
6 under subsection (a)(2), except that the Adminis-
7 trator may establish financial assurance require-
8 ments to ensure that auction participants can and
9 will perform on their bids.

10 “(4) DISCLOSURE OF BENEFICIAL OWNER-
11 SHIP.—Each bidder in an auction shall be required
12 to disclose the person or entity sponsoring or bene-
13 fitting from the bidder’s participation in the auction
14 if such person or entity is, in whole or in part, other
15 than the bidder.

16 “(5) PURCHASE LIMITS.—No person may, di-
17 rectly or in concert with another participant, pur-
18 chase more than 20 percent of the allowances of-
19 fered for sale at any quarterly auction.

20 “(6) PUBLICATION OF INFORMATION.—After
21 the auction, the Administrator shall, in a timely
22 fashion, publish the identities of winning bidders,
23 the quantity of allowances obtained by each winning
24 bidder, and the auction clearing price.

1 “(7) OTHER REQUIREMENTS.—The Adminis-
2 trator may include in the regulations such other re-
3 quirements or provisions as the Administrator, in
4 consultation with other agencies as appropriate, con-
5 siders appropriate to promote effective, efficient,
6 transparent, and fair administration of auctions
7 under this section.

8 “(j) MARKET STABILITY RESERVE FUND.—There
9 are established in the Treasury of the United States a
10 fund to be known as the ‘Market Stability Reserve Fund’.

11 “(k) REVISION OF REGULATIONS.—The Adminis-
12 trator may, at any time, in consultation with other agen-
13 cies as appropriate, revise the initial regulations promul-
14 gated under subsection (i). Such revised regulations need
15 not meet the requirements identified in subsection (i) if
16 the Administrator determines that an alternative auction
17 design would be more effective, taking into account factors
18 including costs of administration, transparency, fairness,
19 and risks of collusion or manipulation. In determining
20 whether and how to revise the initial regulations under
21 this subsection, the Administrator shall not consider maxi-
22 mization of revenues to the Federal Government.

23 **“SEC. 727. PERMITS.**

24 “(a) PERMIT PROGRAM.—For stationary sources
25 subject to title V of this Act, that are covered entities,

1 the provisions of this title shall be implemented by permits
2 issued to such covered entities (and enforced) in accord-
3 ance with the provisions of title V, as modified by this
4 title. Any such permit issued by the Administrator, or by
5 a State with an approved permit program, shall require
6 the owner or operator of a covered entity to hold emission
7 allowances or offset credits at least equal to the total an-
8 nual amount of carbon dioxide equivalents for its com-
9 bined emissions and attributable greenhouse gas emissions
10 to which section 722 applies. No such permit shall be
11 issued that is inconsistent with the requirements of this
12 title, and title V as applicable. Nothing in this section re-
13 garding compliance plans or in title V shall be construed
14 as affecting allowances or offset credits. Submission of a
15 statement by the owner or operator, or the designated rep-
16 resentative of the owners and operators, of a covered enti-
17 ty that the owners and operators will hold emission allow-
18 ances or offset credits for the entity's combined emissions
19 and attributable greenhouse gas emissions to which sec-
20 tion 722 applies shall be deemed to meet the proposed and
21 approved planning requirements of title V. Recordation by
22 the Administrator of transfers of emission allowances shall
23 amend automatically all applicable proposed or approved
24 permit applications, compliance plans, and permits.

1 “(b) MULTIPLE OWNERS.—No permit shall be issued
2 under this section and no allowances or offset credits shall
3 be disbursed under this title to a covered entity or any
4 other person until the designated representative of the
5 owners or operators has filed a certificate of representa-
6 tion with regard to matters under this title, including the
7 holding and distribution of emission allowances and the
8 proceeds of transactions involving emission allowances.
9 Where there are multiple holders of a legal or equitable
10 title to, or a leasehold interest in, such a covered entity
11 or other entity or where a utility or industrial customer
12 purchases power under a long-term power purchase con-
13 tract from an independent power production facility that
14 is a covered entity, the certificate shall state—

15 “(1) that emission allowances and the proceeds
16 of transactions involving emission allowances will be
17 deemed to be held or distributed in proportion to
18 each holder’s legal, equitable, leasehold, or contrac-
19 tual reservation or entitlement; or

20 “(2) if such multiple holders have expressly pro-
21 vided for a different distribution of emission allow-
22 ances by contract, that emission allowances and the
23 proceeds of transactions involving emission allow-
24 ances will be deemed to be held or distributed in ac-
25 cordance with the contract.

1 A passive lessor, or a person who has an equitable interest
2 through such lessor, whose rental payments are not based,
3 either directly or indirectly, upon the revenues or income
4 from the covered entity or other entity shall not be deemed
5 to be a holder of a legal, equitable, leasehold, or contrac-
6 tual interest for the purpose of holding or distributing
7 emission allowances as provided in this subsection, during
8 either the term of such leasehold or thereafter, unless ex-
9 pressly provided for in the leasehold agreement. Except
10 as otherwise provided in this subsection, where all legal
11 or equitable title to or interest in a covered entity, or other
12 entity, is held by a single person, the certificate shall state
13 that all emission allowances received by the entity are
14 deemed to be held for that person.

15 “(c) PROHIBITION.—It shall be unlawful for any per-
16 son to operate any stationary source subject to the re-
17 quirements of this section except in compliance with the
18 terms and requirements of a permit issued by the Admin-
19 istrator or a State with an approved permit program in
20 accordance with this section. For purposes of this sub-
21 section, compliance, as provided in section 504(f), with a
22 permit issued under title V which complies with this title
23 for covered entities shall be deemed compliance with this
24 subsection as well as section 502(a).

1 “(d) **RELIABILITY.**—Nothing in this section or title
2 V shall be construed as requiring termination of oper-
3 ations of a stationary source that is a covered entity for
4 failure to have an approved permit, or compliance plan,
5 that is consistent with the requirements in the second and
6 fifth sentences of subsection (a) concerning the holding
7 of emission allowances, compensatory allowances, inter-
8 national emission allowances, or offset allowances, except
9 that any such covered entity may be subject to the applica-
10 ble enforcement provision of section 113.

11 “(e) **REGULATIONS.**—The Administrator shall pro-
12 mulgate regulations to implement this section. To provide
13 for permits required under this section, each State in
14 which one or more stationary sources and that are covered
15 entities are located shall submit, in accordance with this
16 section and title V, revised permit programs for approval.

17 **“SEC. 728. INTERNATIONAL EMISSION ALLOWANCES.**

18 “(a) **QUALIFYING PROGRAMS.**—The Administrator,
19 in consultation with the Secretary of State, may by rule
20 designate an international climate change program as a
21 qualifying international program if—

22 “(1) the program is run by a national or supra-
23 national foreign government, and imposes a manda-
24 tory absolute tonnage limit on greenhouse gas emis-
25 sions from 1 or more foreign countries, or from 1 or

1 more economic sectors in such a country or coun-
2 tries; and

3 “(2) the program is at least as stringent as the
4 program established by this title, including provi-
5 sions to ensure at least comparable monitoring, com-
6 pliance, enforcement, quality of offsets, and restric-
7 tions on the use of offsets.

8 “(b) DISQUALIFIED ALLOWANCES.—An international
9 emission allowance may not be held under section
10 722(d)(3) if it is in the nature of an offset instrument
11 or allowance awarded based on the achievement of green-
12 house gas emission reductions or avoidance, or greenhouse
13 gas sequestration, that are not subject to the mandatory
14 absolute tonnage limits referred to in subsection (a)(1).

15 “(c) RETIREMENT.—

16 “(1) ENTITY CERTIFICATION.—The owner or
17 operator of an entity that holds an international
18 emission allowance under section 722(d)(3) shall
19 certify to the Administrator that such international
20 emission allowance has not previously been used to
21 comply with any foreign, international, or domestic
22 greenhouse gas regulatory program.

23 “(2) RETIREMENT.—

24 “(A) FOREIGN AND INTERNATIONAL REG-
25 ULATORY ENTITIES.—The Administrator, in

1 consultation with the Secretary of State, shall
2 seek, by whatever means appropriate, including
3 agreements and technical cooperation on allow-
4 ance tracking, to ensure that any relevant for-
5 eign, international, and domestic regulatory en-
6 tities—

7 “(i) are notified of the use, for pur-
8 poses of compliance with this title, of any
9 international emission allowance; and

10 “(ii) provide for the disqualification of
11 such international emission allowance for
12 any subsequent use under the relevant for-
13 eign, international, or domestic greenhouse
14 gas regulatory program, regardless of
15 whether such use is a sale, exchange, or
16 submission to satisfy a compliance obliga-
17 tion.

18 “(B) DISQUALIFICATION FROM FURTHER
19 USE.—The Administrator shall ensure that,
20 once an international emission allowance has
21 been disqualified or otherwise used for purposes
22 of compliance with this title, such allowance
23 shall be disqualified from any further use under
24 this title.

1 and such second term may follow directly after a first
2 term.

3 “(c) ACTIVITIES.—The Advisory Board established
4 pursuant to subsection (a) shall—

5 “(1) provide recommendations, not later than
6 90 days after the Advisory Board’s establishment
7 and periodically thereafter, to the President regard-
8 ing offset project types that should be considered for
9 eligibility under section 733, taking into consider-
10 ation relevant scientific and other issues, including—

11 “(A) the availability of a representative
12 data set for use in developing the activity base-
13 line;

14 “(B) the potential for accurate quantifica-
15 tion of greenhouse gas reduction, avoidance, or
16 sequestration for an offset project type;

17 “(C) the potential level of scientific and
18 measurement uncertainty associated with an
19 offset project type;

20 “(D) any beneficial or adverse environ-
21 mental, public health, welfare, social, economic,
22 or energy effects associated with an offset
23 project type;

1 “(E) the extent to which, as of the date of
2 submission of the report, the project or activity
3 types within each category—

4 “(i) are required by law (including a
5 regulation); or

6 “(ii) represent business-as-usual (ab-
7 sent funding from offset credits) practices
8 for a relevant land area, industry sector, or
9 forest, soil or facility type;

10 “(2) make available to the President its advice
11 and comments on offset methodologies that should
12 be considered under regulations promulgated pursu-
13 ant to subsection (a) and (b) of section 734, includ-
14 ing methodologies to address the issues of
15 additionality, activity baselines, measurement, leak-
16 age, uncertainty, permanence, and environmental in-
17 tegrity;

18 “(3) make available to the President, and other
19 relevant Federal agencies, its advice and comments
20 regarding scientific, technical, and methodological
21 issues specific to the issuance of international offset
22 credits under section 744;

23 “(4) make available to the President, and other
24 relevant Federal agencies, its advice and comments
25 regarding scientific, technical, and methodological

1 issues associated with the implementation of this
2 part;

3 “(5) make available to the President its advice
4 and comments on areas in which further knowledge
5 is required to appraise the adequacy of existing, re-
6 vised, or proposed methodologies for use under this
7 part, and describe the research efforts necessary to
8 provide the required information; and

9 “(6) make available to the President its advice
10 and comments on other ways to improve or safe-
11 guard the environmental integrity of programs es-
12 tablished under this part.

13 “(d) SCIENTIFIC REVIEW OF OFFSET AND DEFOR-
14 ESTATION REDUCTION PROGRAMS.—Not later than Janu-
15 ary 1, 2017, and at five-year intervals thereafter, the Ad-
16 visory Board shall submit to the President and make avail-
17 able to the public an analysis of relevant scientific and
18 technical information related to this part. The Advisory
19 Board shall review approved and potential methodologies,
20 scientific studies, offset project monitoring, offset project
21 verification reports, and audits related to this part, and
22 evaluate the net emissions effects of implemented offset
23 projects. The Advisory Board shall recommend changes to
24 offset methodologies, protocols, or project types, or to the
25 overall offset program under this part, to ensure that off-

1 set credits issued by the President do not compromise the
2 integrity of the annual emission reductions established
3 under section 703, and to avoid or minimize adverse ef-
4 fects to human health or the environment.

5 **“SEC. 732. ESTABLISHMENT OF OFFSETS PROGRAM.**

6 “(a) REGULATIONS.—Not later than 2 years after
7 the date of enactment of this title, the President, in con-
8 sultation with appropriate Federal agencies and taking
9 into consideration the recommendations of the Advisory
10 Board, shall promulgate regulations establishing a pro-
11 gram for the issuance of offset credits in accordance with
12 the requirements of this part. The President shall periodi-
13 cally revise these regulations as necessary to meet the re-
14 quirements of this part.

15 “(b) REQUIREMENTS.—The regulations described in
16 subsection (a) shall—

17 “(1) authorize the issuance of offset credits
18 with respect to qualifying offset projects that result
19 in reductions or avoidance of greenhouse gas emis-
20 sions, or sequestration of greenhouse gases;

21 “(2) ensure that such offset credits represent
22 verifiable and additional greenhouse gas emission re-
23 ductions or avoidance, or increases in sequestration;

1 “(3) ensure that offset credits issued for se-
2 questration offset projects are only issued for green-
3 house gas reductions that are permanent;

4 “(4) provide for the implementation of the re-
5 quirements of this part;

6 “(5) include as reductions in greenhouse gases
7 reductions achieved through the destruction of meth-
8 ane and its conversion to carbon dioxide, and reduc-
9 tions achieved through destruction of
10 chlorofluorocarbons or other ozone depleting sub-
11 stances, if permitted by the President under section
12 619(b)(9) and subject to the conditions specified in
13 section 619(b)(9), based on the carbon dioxide
14 equivalent value of the substance destroyed; and

15 “(6) establish a process to accept and respond
16 to comments from third parties regarding programs
17 established under this part in a timely manner.

18 “(c) COORDINATION TO MINIMIZE NEGATIVE EF-
19 FECTS.—In promulgating and implementing regulations
20 under this part, the President shall act (including by re-
21 jecting projects, if necessary) to avoid or minimize, to the
22 maximum extent practicable, adverse effects on human
23 health or the environment resulting from the implementa-
24 tion of offset projects under this part.

1 “(d) OFFSET REGISTRY.—The President shall estab-
2 lish within the allowance tracking system established
3 under section 724(d) an Offset Registry for qualifying off-
4 set projects and offset credits issued with respect thereto
5 under this part.

6 “(e) LEGAL STATUS OF OFFSET CREDIT.—An offset
7 credit does not constitute a property right.

8 “(f) FEES.—The President shall assess fees payable
9 by offset project developers in an amount necessary to
10 cover the administrative costs and the enforcement costs
11 to the Environmental Protection Agency and the Depart-
12 ment of Justice of carrying out the activities under this
13 part. Amounts collected for such fees shall be available
14 to the President and the Attorney General for carrying
15 out the activities under this part to the extent provided
16 in advance in appropriations Acts.

17 **“SEC. 733. ELIGIBLE PROJECT TYPES.**

18 “(a) LIST OF ELIGIBLE PROJECT TYPES.—

19 “(1) IN GENERAL.—As part of the regulations
20 promulgated under section 732(a), the President
21 shall establish, and may periodically revise, a list of
22 types of projects eligible to generate offset credits,
23 including international offset credits, under this
24 part.

1 “(2) ADVISORY BOARD RECOMMENDATIONS.—

2 In determining the eligibility of project types, the
3 President shall take into consideration the rec-
4 ommendations of the Advisory Board. If a list estab-
5 lished under this section differs from the rec-
6 ommendations of the Advisory Board, the regula-
7 tions promulgated under section 732(a) shall include
8 a justification for the discrepancy.

9 “(3) INITIAL DETERMINATION.—The President
10 shall establish the initial eligibility list under para-
11 graph (1) not later than one year after the date of
12 enactment of this title for which there are well devel-
13 oped methodologies that the President determines
14 would meet the criteria of section 734.

15 “(4) PROJECT TYPES TO BE CONSIDERED FOR
16 INITIAL LIST.—In determining the initial list, the
17 President shall give priority to consideration of off-
18 set project types that are recommended by the Advi-
19 sory Board and for which there are well developed
20 methodologies that the President determines would
21 meet the criteria of section 734, and shall con-
22 sider—

23 “(A) methane collection and combustion
24 projects at active underground coal mines;

1 “(B) methane collection and combustion
2 projects at landfills;

3 “(C) capture of venting, flaring, and fugi-
4 tive emissions from oil and natural gas systems;

5 “(D) nonlandfill methane collection, com-
6 bustion and avoidance projects involving organic
7 waste streams that would have otherwise emit-
8 ted methane in the atmosphere, including ma-
9 nure management and biogas capture and com-
10 bustion;

11 “(E) projects involving afforestation or re-
12 forestation of acreage not forested as of Janu-
13 ary 1, 2009;

14 “(F) forest management resulting in an in-
15 crease in forest carbon stores, including har-
16 vested wood products;

17 “(G) agricultural, grassland, and range-
18 land sequestration and management practices,
19 including—

20 “(i) altered tillage practices, including
21 avoided abandonment of such practices;

22 “(ii) winter cover cropping, contin-
23 uous cropping, and other means to in-
24 crease biomass returned to soil in lieu of
25 planting followed by fallowing;

1 “(iii) reduction of nitrogen fertilizer
2 use or increase in nitrogen use efficiency;

3 “(iv) reduction in the frequency and
4 duration of flooding of rice paddies;

5 “(v) reduction in carbon emissions
6 from organic soils;

7 “(vi) reduction in greenhouse gas
8 emissions from manure and effluent;

9 “(vii) reduction in greenhouse gas
10 emissions due to changes in animal man-
11 agement practices, including dietary modi-
12 fications;

13 “(viii) planting and cultivation of per-
14 manent tree crops;

15 “(ix) greenhouse gas emission reduc-
16 tions from improvements and upgrades to
17 mobile or stationary equipment (including
18 engines);

19 “(x) practices to reduce and eliminate
20 soil tillage;

21 “(xi) reductions in greenhouse gas
22 emissions through restoration of wetlands,
23 forestland, and grassland; and

1 “(xii) sequestration of greenhouse
2 gases through management of tree crops;
3 and

4 “(H) changes in carbon stocks attributed
5 to land use change and forestry activities, in-
6 cluding—

7 “(i) management of peatland or wet-
8 land;

9 “(ii) conservation of grassland and
10 forested land;

11 “(iii) improved forest management,
12 including accounting for carbon stored in
13 wood products;

14 “(iv) reduced deforestation or avoided
15 forest conversion;

16 “(v) urban tree-planting and mainte-
17 nance;

18 “(vi) agroforestry; and

19 “(vii) adaptation of plant traits or
20 new technologies that increase sequestra-
21 tion by forests.

22 “(5) METHODOLOGIES.—In issuing methodolo-
23 gies pursuant to section 734, the President shall
24 give priority to methodologies for offset types in-
25 cluded on the initial eligibility list.

1 “(b) MODIFICATION OF LIST.—The President—

2 “(1) shall add additional project types to the
3 list not later than 2 years after the date of enact-
4 ment of this title;

5 “(2) may at any time, by rule, add a project
6 type to the list established under subsection (a) if
7 the President, in consultation with appropriate Fed-
8 eral agencies and taking into consideration the rec-
9 ommendations of the Advisory Board, determines
10 that the project type can generate additional reduc-
11 tions or avoidance of greenhouse gas emissions, or
12 sequestration of greenhouse gases, subject to the re-
13 quirements of this part;

14 “(3) may at any time, by rule, determine that
15 a project type on the list does not meet the require-
16 ments of this part, and remove a project type from
17 the list established under subsection (a), in consulta-
18 tion with appropriate Federal agencies and taking
19 into consideration any recommendations of the Advi-
20 sory Board; and

21 “(4) shall consider adding to or removing from
22 the list established under subsection (a), at a min-
23 imum, project types proposed to the President—

24 “(A) by petition pursuant to subsection
25 (c); or

1 “(B) by the Advisory Board.

2 “(c) PETITION PROCESS.—Any person may petition
3 the President to modify the list established under sub-
4 section (a) by adding or removing a project type pursuant
5 to subsection (b). Any such petition shall include a show-
6 ing by the petitioner that there is adequate data to estab-
7 lish that the project type does or does not meet the re-
8 quirements of this part. Not later than 12 months after
9 receipt of such a petition, the President shall either grant
10 or deny the petition and publish a written explanation of
11 the reasons for the President’s decision. The President
12 may not deny a petition under this subsection on the basis
13 of inadequate Environmental Protection Agency resources
14 or time for review.

15 **“SEC. 734. REQUIREMENTS FOR OFFSET PROJECTS.**

16 “(a) METHODOLOGIES.—As part of the regulations
17 promulgated under section 732(a), the President shall es-
18 tablish, for each type of offset project listed as eligible
19 under section 733, the following:

20 “(1) ADDITIONALITY.—A standardized method-
21 ology for determining the additionality of greenhouse
22 gas emission reductions or avoidance, or greenhouse
23 gas sequestration, achieved by an offset project of
24 that type. Such methodology shall ensure, at a min-
25 imum, that any greenhouse gas emission reduction

1 or avoidance, or any greenhouse gas sequestration, is
2 considered additional only to the extent that it re-
3 sults from activities that—

4 “(A) are not required by or undertaken to
5 comply with any law, including any regulation
6 or consent order;

7 “(B) were not commenced prior to Janu-
8 ary 1, 2009, except in the case of—

9 “(i) offset project activities that com-
10 menced after January 1, 2001, and were
11 registered as of the date of enactment of
12 this title under an offset program with re-
13 spect to which the President has made an
14 affirmative determination under section
15 740(a)(2); or

16 “(ii) activities that are readily revers-
17 ible, with respect to which the President
18 may set an alternative earlier date under
19 this subparagraph that is not earlier than
20 January 1, 2001, where the President de-
21 termines that setting such an alternative
22 date may produce an environmental benefit
23 by removing an incentive to cease and then
24 reinstate activities that began prior to
25 January 1, 2009;

1 “(C) are not receiving support under sec-
2 tion 323 of division A, or section 207 of divi-
3 sion B, of the Clean Energy Jobs and American
4 Power Act; and

5 “(D) exceed the activity baseline estab-
6 lished under paragraph (2).

7 “(2) ACTIVITY BASELINES.—A standardized
8 methodology for establishing activity baselines for
9 offset projects of that type. The President shall set
10 activity baselines to reflect a conservative estimate of
11 business-as-usual performance or practices for the
12 relevant type of activity such that the baseline pro-
13 vides an adequate margin of safety to ensure the en-
14 vironmental integrity of offsets calculated in ref-
15 erence to such baseline.

16 “(3) QUANTIFICATION METHODS.—A standard-
17 ized methodology for determining the extent to
18 which greenhouse gas emission reductions or avoid-
19 ance, or greenhouse gas sequestration, achieved by
20 an offset project of that type exceed a relevant activ-
21 ity baseline, including protocols for monitoring and
22 accounting for uncertainty.

23 “(4) LEAKAGE.—A standardized methodology
24 for accounting for and mitigating potential leakage,

1 if any, from an offset project of that type, taking
2 uncertainty into account.

3 “(b) ACCOUNTING FOR REVERSALS.—

4 “(1) IN GENERAL.—As part of the regulations
5 promulgated under section 732(a), for each type of
6 sequestration project listed under section 733, the
7 President shall establish requirements to account for
8 and address reversals, including—

9 “(A) a requirement to report any reversal
10 with respect to an offset project for which offset
11 credits have been issued under this part;

12 “(B) provisions to require emission allow-
13 ances to be held in amounts to fully compensate
14 for greenhouse gas emissions attributable to re-
15 versals, and to assign responsibility for holding
16 such emission allowances;

17 “(C) provisions to discourage repeated in-
18 tentional reversals by offset project developers,
19 including but not limited to the assessment of
20 administrative fees, temporary suspension, or
21 disqualification of an offset project developer
22 from the program; and

23 “(D) any other provisions the President
24 determines necessary to account for and ad-
25 dress reversals.

1 “(2) MECHANISMS.—The President shall pre-
2 scribe mechanisms to ensure that any sequestration
3 with respect to which an offset credit is issued under
4 this part results in a permanent net increase in se-
5 questration, and that full account is taken of any ac-
6 tual or potential reversal of such sequestration, with
7 an adequate margin of safety. The President shall
8 prescribe at least one of the following mechanisms to
9 meet the requirements of this paragraph:

10 “(A) An offsets reserve, pursuant to para-
11 graph (3).

12 “(B) Insurance that provides for purchase
13 and provision to the President for retirement of
14 an amount of offset credits or emission allow-
15 ances equal in number to the tons of carbon di-
16 oxide equivalents of greenhouse gas emissions
17 released due to reversal.

18 “(C) Another mechanism that the Presi-
19 dent determines satisfies the requirements of
20 this part.

21 “(3) OFFSETS RESERVE.—

22 “(A) IN GENERAL.—An offsets reserve re-
23 ferred to in paragraph (2)(A) is a program
24 under which, before issuance of offset credits
25 under this part, the President shall subtract

1 and reserve from the quantity to be issued a
2 quantity of offset credits based on the risk of
3 reversal. The President shall—

4 “(i) hold these reserved offset credits
5 in the offsets reserve; and

6 “(ii) register the holding of the re-
7 served offset credits in the Offset Registry
8 established under section 732(d).

9 “(B) PROJECT REVERSAL.—

10 “(i) IN GENERAL.—If a reversal has
11 occurred with respect an offset project for
12 which offset credits are reserved under this
13 paragraph, the President shall remove off-
14 set credits or emission allowances from the
15 offsets reserve and cancel them to fully ac-
16 count for the tons of carbon dioxide equiv-
17 alent that are no longer sequestered.

18 “(ii) INTENTIONAL REVERSALS.—If
19 the President determines that a reversal
20 was intentional, the offset project developer
21 for the relevant offset project shall place
22 into the offsets reserve a quantity of offset
23 credits, or combination of offset credits
24 and emission allowances, equal in number
25 to the number of reserve offset credits that

1 shall be accompanied by a statement of the
2 basis for the determination.

3 “(C) USE OF RESERVED OFFSET CRED-
4 ITS.—Offset credits placed into the offsets re-
5 serve under this paragraph may not be used to
6 comply with section 722.

7 “(4) TERM OFFSET CREDITS.—

8 “(A) APPLICABILITY.—With respect to a
9 practice listed under section 733 that seques-
10 ters greenhouse gases and has a crediting pe-
11 riod of not more than 5 years, the President
12 may address reversals pursuant to this para-
13 graph in lieu of permanently accounting for re-
14 versals pursuant to paragraphs (1) and (2).

15 “(B) ACCOUNTING FOR REVERSALS.—For
16 such practices or projects implementing the
17 practices described in subparagraph (A), the
18 President shall require only reversals that occur
19 during the crediting period to be accounted for
20 and addressed pursuant to paragraphs (1) and
21 (2).

22 “(C) CREDITS ISSUED.—For practices or
23 projects regulated pursuant to subparagraph
24 (B), the Secretary shall issue under section 737
25 a term offset credit, in lieu of an offset credit,

1 for each ton of carbon dioxide equivalent that
2 has been sequestered.

3 “(c) CREDITING PERIODS.—

4 “(1) IN GENERAL.—As part of the regulations
5 promulgated under section 732(a), for each offset
6 project type, the President shall specify a crediting
7 period, and establish provisions for petitions for new
8 crediting periods, in accordance with this subsection.

9 “(2) DURATION.—

10 “(A) IN GENERAL.—The crediting period
11 shall be not less than 5 and not greater than
12 10 years for any project type other than those
13 involving sequestration or term offsets.

14 “(B) FORESTRY PROJECTS.—The crediting
15 period for a forestry offset project shall not ex-
16 ceed 20 years.

17 “(C) TERM OFFSET CREDITS.—The cred-
18 iting period for a term offset credit issued shall
19 not exceed 5 years.

20 “(3) ELIGIBILITY.—An offset project shall be
21 eligible to generate offset credits under this part
22 only during the project’s crediting period. During
23 such crediting period, the project shall remain eligi-
24 ble to generate offset credits, subject to the meth-
25 odologies and project type eligibility list that applied

1 as of the date of project approval under section 735,
2 except as provided in paragraph (4).

3 “(4) PETITION FOR NEW CREDITING PERIOD.—

4 An offset project developer may petition for a new
5 crediting period to commence after termination of a
6 crediting period, subject to the methodologies and
7 project type eligibility list in effect at the time when
8 such petition is submitted. A petition may not be
9 submitted under this paragraph more than 18
10 months before the end of the pending crediting pe-
11 riod. The President may grant such petition after
12 public notice and opportunity for comment. The
13 President may limit the number of new crediting pe-
14 riods available for projects of particular project
15 types.

16 “(d) ENVIRONMENTAL INTEGRITY.—In establishing
17 the requirements under this section, the President shall
18 apply conservative assumptions or methods to maximize
19 the certainty that the environmental integrity of the green-
20 house gas limitations established under section 703 is not
21 compromised.

22 “(e) PRE-EXISTING METHODOLOGIES.—In promul-
23 gating requirements under this section, the President shall
24 give due consideration to methodologies for offset projects
25 existing as of the date of enactment of this title.

1 “(f) **ADDED PROJECT TYPES.**—The President shall
2 establish methodologies described in subsection (a), and,
3 as applicable, requirements and mechanisms for reversals
4 as described in subsection (b), for any project type that
5 is added to the list pursuant to section 733.

6 **“SEC. 735. APPROVAL OF OFFSET PROJECTS.**

7 “(a) **APPROVAL PETITION.**—An offset project devel-
8 oper shall submit an offset project approval petition signed
9 by a responsible official (who shall certify the accuracy of
10 the information submitted) and providing such informa-
11 tion as the President requires to determine whether the
12 offset project is eligible for issuance of offset credits under
13 rules promulgated pursuant to this part.

14 “(b) **TIMING.**—An approval petition shall be sub-
15 mitted to the President under subsection (a) not later than
16 the time at which an offset project’s first verification re-
17 port is submitted under section 736.

18 “(c) **APPROVAL PETITION REQUIREMENTS.**—As part
19 of the regulations promulgated under section 732, the
20 President shall include provisions for, and shall specify,
21 the required components of an offset project approval peti-
22 tion required under subsection (a), which shall include—

23 “(1) designation of an offset project developer;

1 “(2) designation of a party who is authorized to
2 provide access to the appropriate officials or an au-
3 thorized representative to the offset project; and

4 “(3) any other information that the President
5 considers to be necessary to achieve the purposes of
6 this part.

7 “(d) APPROVAL AND NOTIFICATION.—Not later than
8 90 days after receiving a complete approval petition under
9 subsection (a), the President shall make the approval peti-
10 tion publicly available on the internet, approve or deny the
11 petition in writing, and, if the petition is denied, make
12 the President’s decision publicly available on the internet.
13 After an offset project is approved, the offset project de-
14 veloper shall not be required to resubmit an approval peti-
15 tion during the offset project’s crediting period, except as
16 provided in section 734(c)(4).

17 “(e) APPEAL.—The President shall establish proce-
18 dures for appeal and review of determinations made under
19 subsection (d).

20 “(f) VOLUNTARY PREAPPROVAL REVIEW.—The
21 President may establish a voluntary preapproval review
22 procedure, to allow an offset project developer to request
23 the President to conduct a preliminary eligibility review
24 for an offset project. Findings of such reviews shall not

1 be binding upon the President. The voluntary preapproval
2 review procedure—

3 “(1) shall require the offset project developer to
4 submit such basic project information as the Presi-
5 dent requires to provide a meaningful review; and

6 “(2) shall require a response from the President
7 not later than 6 weeks after receiving a request for
8 review under this subsection.

9 **“SEC. 736. VERIFICATION OF OFFSET PROJECTS.**

10 “(a) IN GENERAL.—As part of the regulations pro-
11 mulgated under section 732(a), the President shall estab-
12 lish requirements, including protocols, for verification of
13 the quantity of greenhouse gas emission reductions or
14 avoidance, or sequestration of greenhouse gases, resulting
15 from an offset project. The regulations shall require that
16 an offset project developer shall submit a report, prepared
17 by a third-party verifier accredited under subsection (d),
18 providing such information as the President requires to
19 determine the quantity of greenhouse gas emission reduc-
20 tions or avoidance, or sequestration of greenhouse gas, re-
21 sulting from the offset project.

22 “(b) SCHEDULE.—The President shall prescribe a
23 schedule for the submission of verification reports under
24 subsection (a).

1 “(c) VERIFICATION REPORT REQUIREMENTS.—The
2 President shall specify the required components of a
3 verification report required under subsection (a), which
4 shall include—

5 “(1) the name and contact information for a
6 designated representative for the offset project devel-
7 oper;

8 “(2) the quantity of greenhouse gas reduced,
9 avoided, or sequestered;

10 “(3) the methodologies applicable to the project
11 pursuant to section 734;

12 “(4) a certification that the project meets the
13 applicable requirements;

14 “(5) a certification establishing that the conflict
15 of interest requirements in the regulations promul-
16 gated under subsection (d)(1) have been complied
17 with; and

18 “(6) any other information that the President
19 considers to be necessary to achieve the purposes of
20 this part.

21 “(d) VERIFIER ACCREDITATION.—

22 “(1) IN GENERAL.—As part of the regulations
23 promulgated under section 732(a), the President
24 shall establish a process and requirements for peri-
25 odic accreditation of third-party verifiers to ensure

1 that such verifiers are professionally qualified and
2 have no conflicts of interest with offset project devel-
3 opers.

4 “(2) STANDARDS.—

5 “(A) AMERICAN NATIONAL STANDARDS IN-
6 STITUTE ACCREDITATION.—The President may
7 accredit, or accept for purposes of accreditation
8 under this subsection, verifiers accredited under
9 the American National Standards Institute
10 (ANSI) accreditation program in accordance
11 with ISO 14065. The President shall accredit,
12 or accept for accreditation, verifiers under this
13 subparagraph only if the President finds that
14 the American National Standards Institute ac-
15 creditation program provides sufficient assur-
16 ance that the requirements of this part will be
17 met.

18 “(B) EPA ACCREDITATION.—As part of
19 the regulations promulgated under section
20 732(a), the President may establish accredita-
21 tion standards for verifiers under this sub-
22 section, and may establish related training and
23 testing programs and requirements.

24 “(3) PUBLIC ACCESSIBILITY.—Each verifier
25 meeting the requirements for accreditation in ac-

1 cordance with this subsection shall be listed in a
2 publicly accessible database, which shall be main-
3 tained and updated by the President.

4 “(4) REVOCATION.—The regulations concerning
5 accreditation of third-party verifiers required under
6 paragraph (1) shall establish a process for the Presi-
7 dent to revoke the accreditation of any third-party
8 verifier that the President finds fails to maintain
9 professional qualifications or to avoid a conflict of
10 interest, or for other good cause.

11 **“SEC. 737. ISSUANCE OF OFFSET CREDITS.**

12 “(a) DETERMINATION AND NOTIFICATION.—Not
13 later than 90 days after receiving a complete verification
14 report under section 736, the President shall—

15 “(1) make the report publicly available on the
16 Internet;

17 “(2) make a determination of the quantity of
18 greenhouse gas emissions reduced or avoided, or
19 greenhouse gases sequestered, resulting from an off-
20 set project approved under section 735; and

21 “(3) notify the offset project developer in writ-
22 ing of such determination and make such determina-
23 tion publicly available on the Internet.

24 “(b) ISSUANCE OF OFFSET CREDITS.—The Presi-
25 dent shall issue one offset credit to an offset project devel-

1 oper for each ton of carbon dioxide equivalent that the
2 President has determined has been reduced, avoided, or
3 sequestered during the period covered by a verification re-
4 port submitted in accordance with section 736, only if—

5 “(1) the President has approved the offset
6 project pursuant to section 735; and

7 “(2) the relevant emissions reduction, avoid-
8 ance, or sequestration has—

9 “(A) already occurred, during the offset
10 project’s crediting period; and

11 “(B) occurred after January 1, 2009.

12 “(c) APPEAL.—The President shall establish proce-
13 dures for appeal and review of determinations made under
14 subsection (a).

15 “(d) TIMING.—Offset credits meeting the criteria es-
16 tablished in subsection (b) shall be issued not later than
17 2 weeks following the verification determination made by
18 the President under subsection (a).

19 “(e) REGISTRATION.—The President shall assign a
20 unique serial number to and register each offset credit to
21 be issued in the Offset Registry established under section
22 732(d).

23 **“SEC. 738. AUDITS.**

24 “(a) IN GENERAL.—The President shall, on an ongo-
25 ing basis, conduct random audits of offset projects and

1 offset credits. The President shall conduct audits of the
2 practices of third-party verifiers. In each year, the Presi-
3 dent shall conduct audits, at minimum, for a representa-
4 tive sample of project types and geographic areas.

5 “(b) DELEGATION.—The President may delegate to
6 a State or tribal government the responsibility for con-
7 ducting audits under this section if the President finds
8 that the program proposed by the State or tribal govern-
9 ment provides assurances equivalent to those provided by
10 the auditing program of the President, and that the integ-
11 rity of the offset program under this part will be main-
12 tained. Nothing in this subsection shall prevent the Presi-
13 dent from conducting any audit the President considers
14 necessary and appropriate.

15 “(c) AUDIT REQUIREMENTS.—As part of the regula-
16 tions promulgated under section 732(a), the appropriate
17 officials shall establish requirements and protocols for an
18 auditing program, whether undertaken by the appropriate
19 officials or an authorized representative, concerning
20 project developers, third party verifiers, and various com-
21 ponents of the offsets program. Such regulations shall in-
22 clude—

23 “(1) the components of the offset project, which
24 shall be evaluated against the offset approval peti-
25 tion and the verification report;

1 “(2) the minimum experience or training of the
2 auditors;

3 “(3) the form in which reports shall be com-
4 pleted;

5 “(4) requirements for delegating auditing func-
6 tions to States or tribal governments, including re-
7 quiring periodic reports from State or tribal govern-
8 ments on their auditing activities and findings; and

9 “(5) any other information that the appropriate
10 officials considers to be necessary to achieve the pur-
11 pose of the Act.

12 **“SEC. 739. PROGRAM REVIEW AND REVISION.**

13 “At least once every 5 years, the President shall re-
14 view and, based on new or updated information and taking
15 into consideration the recommendations of the Advisory
16 Board, update and revise—

17 “(1) the list of eligible project types established
18 under section 733;

19 “(2) the methodologies established, including
20 specific activity baselines, under section 734(a);

21 “(3) the reversal requirements and mechanisms
22 established or prescribed under section 734(b);

23 “(4) measures to improve the accountability of
24 the offsets program; and

1 “(5) any other requirements established under
2 this part to ensure the environmental integrity and
3 effective operation of this part.

4 **“SEC. 740. EARLY OFFSET SUPPLY.**

5 “(a) PROJECTS REGISTERED UNDER OTHER GOV-
6 ERNMENT-RECOGNIZED PROGRAMS.—Except as provided
7 in subsection (b) or (c), after public notice and oppor-
8 tunity for comment, the President shall issue one offset
9 credit for each ton of carbon dioxide equivalent emissions
10 reduced, avoided, or sequestered—

11 “(1) under an offset project that was started
12 after January 1, 2001;

13 “(2) for which a credit was issued under any
14 regulatory or voluntary greenhouse gas emission off-
15 set program that the President determines—

16 “(A) was established under State or tribal
17 law or regulation prior to January 1, 2009, or
18 has been approved by the President pursuant to
19 subsection (e);

20 “(B) has developed offset project type
21 standards, methodologies, and protocols
22 through a public consultation process or a peer
23 review process;

24 “(C) has made available to the public
25 standards, methodologies, and protocols that re-

1 quire that credited emission reductions, avoid-
2 ance, or sequestration are permanent, addi-
3 tional, verifiable, and enforceable;

4 “(D) requires that all emission reductions,
5 avoidance, or sequestration be verified by a
6 State regulatory agency or an accredited third-
7 party independent verification body;

8 “(E) requires that all credits issued are
9 registered in a publicly accessible registry, with
10 individual serial numbers assigned for each ton
11 of carbon dioxide equivalent emission reduc-
12 tions, avoidance, or sequestration; and

13 “(F) ensures that no credits are issued for
14 activities for which the entity administering the
15 program, or a program administrator or rep-
16 resentative, has funded, solicited, or served as a
17 fund administrator for the development of, the
18 project or activity that caused the emission re-
19 duction, avoidance, or sequestration; and

20 “(3) for which the credit described in para-
21 graph (2) is transferred to the President.

22 “(b) INELIGIBLE CREDITS.—Subsection (a) shall not
23 apply to offset credits that have expired or have been re-
24 tired, canceled, or used for compliance under a program
25 established under State or tribal law or regulation.

1 “(c) LIMITATION.—Notwithstanding subsection
2 (a)(1), offset credits shall be issued under this section—

3 “(1) only for reductions or avoidance of green-
4 house gas emissions, or sequestration of greenhouse
5 gases, that occur after January 1, 2009; and

6 “(2) only until the date that is 3 years after the
7 date of enactment of this title, or the date that regu-
8 lations promulgated under section 732(a) take ef-
9 fect, whichever occurs sooner.

10 “(d) RETIREMENT OF CREDITS.—The President
11 shall seek to ensure that offset credits described in sub-
12 section (a)(2) are retired for purposes of use under a pro-
13 gram described in subsection (b).

14 “(e) OTHER PROGRAMS.—

15 “(1) IN GENERAL.—Offset programs that ei-
16 ther—

17 “(A) were not established under State or
18 tribal law; or

19 “(B) were not established prior to January
20 1, 2009;

21 but that otherwise meet all of the criteria of sub-
22 section (a)(2) may apply to the President to be ap-
23 proved under this subsection as an eligible program
24 for early offset credits under this section.

1 “(2) APPROVAL.—The President shall approve
2 any such program that the President determines has
3 criteria and methodologies of at least equal string-
4 gency to the criteria and methodologies of the pro-
5 grams established under State or tribal law that the
6 President determines meet the criteria of subsection
7 (a)(2). The President may approve types of offsets
8 under any such program that are subject to criteria
9 and methodologies of at least equal stringency to the
10 criteria and methodologies for such types of offsets
11 applied under the programs established under State
12 or tribal law that the President determines meet the
13 criteria of subsection (a)(2). The President shall
14 make a determination on any application received
15 under this subsection by not later than 180 days
16 from the date of receipt of the application.

17 **“SEC. 741. ENVIRONMENTAL CONSIDERATIONS.**

18 “If the President lists forestry or other relevant land
19 management-related offset projects as eligible offset
20 project types under section 733, the President, in con-
21 sultation with appropriate Federal agencies, shall promul-
22 gate regulations to establish criteria for such offset
23 projects—

24 “(1) to ensure that native species are given pri-
25 mary consideration in such projects;

1 “(2) to enhance biological diversity in such
2 projects;

3 “(3) to prohibit the use of federally designated
4 or State-designated noxious weeds;

5 “(4) to prohibit the use of a species listed by
6 a regional or State invasive plant authority within
7 the applicable region or State;

8 “(5) in the case of forestry offset projects, in
9 accordance with widely accepted, environmentally
10 sustainable forestry practices;

11 “(6) to ensure that the offset project area was
12 not converted from native ecosystems, such as a for-
13 est, grassland, scrubland or wetland, to generate off-
14 sets, unless such conversion took place at least 10
15 years prior to the date of enactment of this title or
16 before January 1, 2009, whichever date is earlier;
17 and

18 “(7) to the maximum extent practicable, ensure
19 that the use of offset credits would be eligible to sat-
20 isfy emission reduction commitments made by the
21 United States in multilateral agreements, such as
22 the United Nations Framework Convention on Cli-
23 mate Change, done at New York on May 9, 1992 (or
24 any successor agreement).

1 **“SEC. 742. TRADING.**

2 “Section 724 shall apply to the trading of offset cred-
3 its.

4 **“SEC. 743. OFFICE OF OFFSETS INTEGRITY.**

5 “(a) **ESTABLISHMENT.**—There is established within
6 the Office of the Assistant Attorney General of the Envi-
7 ronment and Natural Resources Division in the Depart-
8 ment of Justice a Carbon Offsets Integrity Unit, to be
9 headed by a Special Counsel (hereinafter referred to as
10 the ‘Special Counsel’). The Carbon Offsets Integrity Unit
11 and the Special Counsel shall be responsible to and shall
12 report directly to the Assistant Attorney General of the
13 Environment and Natural Resources Division.

14 “(b) **APPOINTMENT.**—The Special Counsel shall be
15 appointed by the President, by and with the advice and
16 consent of the Senate.

17 “(c) **RESPONSIBILITIES.**—The Special Counsel
18 shall—

19 “(1) supervise and coordinate investigations
20 and civil enforcement within the Department of Jus-
21 tice of the carbon offsets program under this part;

22 “(2) ensure that Federal law relating to civil
23 enforcement of the carbon offsets program is used to
24 the fullest extent authorized; and

1 “(3) ensure that adequate resources are made
2 available for the investigation and enforcement of
3 civil violations of the carbon offsets program.

4 “(d) COMPENSATION.—The Special Counsel shall be
5 paid at the basic pay payable for level V of the Executive
6 Schedule under section 5316 of title 5, United States
7 Code.

8 “(e) ASSIGNMENT OF PERSONNEL.—There shall be
9 assigned to the Carbon Offsets Integrity Unit such per-
10 sonnel as the Attorney General determines to be necessary
11 to provide an appropriate level of enforcement activity in
12 the area of carbon offsets.

13 **“SEC. 744. INTERNATIONAL OFFSET CREDITS.**

14 “(a) IN GENERAL.—The Administrator, in consulta-
15 tion with the Secretary of State and the Administrator
16 of the United States Agency for International Develop-
17 ment, may issue, in accordance with this section, inter-
18 national offset credits based on activities that reduce or
19 avoid greenhouse gas emissions, or increase sequestration
20 of greenhouse gases, in a developing country. Such credits
21 may be issued for projects pursuant to the requirements
22 of this part or as provided in subsection (c), (d), or (e).

23 “(b) ISSUANCE.—

24 “(1) REGULATIONS.—Not later than 2 years
25 after the date of enactment of this title, the Admin-

1 istrator, in consultation with the Secretary of State,
2 the Administrator of the United States Agency for
3 International Development, and any other appro-
4 priate Federal agency, and taking into consideration
5 the recommendations of the Advisory Board, shall
6 promulgate regulations for implementing this sec-
7 tion, taking into consideration specific factors rel-
8 evant to the determination of eligible international
9 offset project types and the implementation of inter-
10 national methodologies for each offset type ap-
11 proved. Except as otherwise provided in this section,
12 the issuance of international offset credits under this
13 section shall be subject to the requirements of this
14 part.

15 “(2) REQUIREMENTS FOR INTERNATIONAL
16 OFFSET CREDITS.—The Administrator may issue
17 international offset credits only if—

18 “(A) the United States is a party to a bi-
19 lateral or multilateral agreement or arrange-
20 ment that includes the country in which the
21 project or measure achieving the relevant green-
22 house gas emission reduction or avoidance, or
23 greenhouse gas sequestration, has occurred;

24 “(B) such country is a developing country;
25 and

1 “(C) such agreement or arrangement—

2 “(i) ensures that all of the require-
3 ments of this part apply to the issuance of
4 international offset credits under this sec-
5 tion;

6 “(ii) provides for the appropriate dis-
7 tribution of international offset credits
8 issued; and

9 “(iii) provides that the offset project
10 developer be eligible to receive service of
11 process in the United States for the pur-
12 pose of all civil and regulatory actions in
13 Federal courts, if such service is made in
14 accordance with the Federal rules for serv-
15 ice of process in the States in which the
16 case or regulatory action is brought.

17 “(3) SUPPLEMENTAL INTERNATIONAL OFFSET
18 CATEGORIES.—

19 “(A) IN GENERAL.—In order to ensure a
20 sufficient supply of international offsets and to
21 reduce the cost of compliance with this title, the
22 Administrator may establish categories of inter-
23 national offsets in addition to those described in
24 subsections (c), (d), and (e), if—

1 “(i) for 2 consecutive years, the auc-
2 tion price for allowances reaches the mar-
3 ket stability reserve auction price under
4 section 726(c); and

5 “(ii) the Administrator determines
6 that the total amount of international off-
7 sets held by covered entities for each of the
8 2 years referred to in clause (i) does not
9 exceed the limit on international offsets es-
10 tablished under section 722(d)(3).

11 “(B) SUPPLEMENTAL CATEGORIES.—

12 “(i) IN GENERAL.—Any supplemental
13 categories of international offsets estab-
14 lished pursuant to subparagraph (A)
15 shall—

16 “(I) satisfy all applicable provi-
17 sions of this part, including subsection
18 (b)(2) of this section and sections 733
19 and 734; and

20 “(II) meet the criteria described
21 in clause (ii).

22 “(ii) CRITERIA.—The criteria referred
23 to in clause (i)(II) are that—

24 “(I) the country in which the ac-
25 tivities in the offset category would

1 take place has developed and is imple-
2 menting a low carbon development
3 plan that includes provisions for the
4 activities described in the offset cat-
5 egory;

6 “(II) the activities in the offset
7 category are not activities included
8 under subsection (c), (d) or (e); and

9 “(III) the activities in the offset
10 category satisfy specific criteria rel-
11 evant to methodologies and institu-
12 tional and technical capacities associ-
13 ated with developing country contexts
14 to ensure adequate treatment of leak-
15 age, additionality, and permanence.

16 “(c) SECTOR-BASED CREDITS.—

17 “(1) IN GENERAL.—In order to minimize the
18 potential for leakage and to encourage countries to
19 take nationally appropriate mitigation actions to re-
20 duce or avoid greenhouse gas emissions, or sequester
21 greenhouse gases, the Administrator, in consultation
22 with the Secretary of State and the Administrator of
23 the United States Agency for International Develop-
24 ment, shall—

1 “(A) identify sectors, or combinations of
2 sectors, within specific countries with respect to
3 which the issuance of international offset cred-
4 its on a sectoral basis is appropriate; and

5 “(B) issue international offset credits for
6 such sectors only on a sectoral basis.

7 “(2) IDENTIFICATION OF SECTORS.—

8 “(A) GENERAL RULE.—For purposes of
9 paragraph (1)(A), a sectoral basis shall be ap-
10 propriate for activities—

11 “(i) in countries that have compara-
12 tively high greenhouse gas emissions, or
13 comparatively greater levels of economic
14 development; and

15 “(ii) that, if located in the United
16 States, would be within a sector subject to
17 the compliance obligation under section
18 722.

19 “(B) FACTORS.—In determining the sec-
20 tors and countries for which international offset
21 credits should be awarded only on a sectoral
22 basis, the Administrator, in consultation with
23 the Secretary of State and the Administrator of
24 the United States Agency for International De-
25 velopment, shall consider the following factors:

1 “(i) The country’s gross domestic
2 product.

3 “(ii) The country’s total greenhouse
4 gas emissions.

5 “(iii) Whether the comparable sector
6 of the United States economy is covered by
7 the compliance obligation under section
8 722.

9 “(iv) The heterogeneity or homo-
10 geneity of sources within the relevant sec-
11 tor.

12 “(v) Whether the relevant sector pro-
13 vides products or services that are sold in
14 internationally competitive markets.

15 “(vi) The risk of leakage if inter-
16 national offset credits were issued on a
17 project-level basis, instead of on a sectoral
18 basis, for activities within the relevant sec-
19 tor.

20 “(vii) The capability of accurately
21 measuring, monitoring, reporting, and
22 verifying the performance of sources across
23 the relevant sector.

24 “(viii) Such other factors as the Ad-
25 ministrators, in consultation with the Sec-

1 retary of State and the Administrator of
2 the United States Agency for International
3 Development, determines are appropriate
4 to—

5 “(I) ensure the integrity of the
6 United States greenhouse gas emis-
7 sions limitations established under
8 section 703; and

9 “(II) encourage countries to take
10 nationally appropriate mitigation ac-
11 tions to reduce or avoid greenhouse
12 gas emissions, or sequester green-
13 house gases.

14 “(ix) The issuance of offsets for ac-
15 tivities that are—

16 “(I) in addition to nationally ap-
17 propriate mitigation actions taken by
18 developing countries pursuant to the
19 low-carbon development plans of the
20 countries; and

21 “(II) on a sectoral basis.

22 “(3) SECTORAL BASIS.—

23 “(A) DEFINITION.—In this subsection, the
24 term ‘sectoral basis’ means the issuance of
25 international offset credits only for the quantity

1 of sector-wide reductions or avoidance of green-
2 house gas emissions, or sector-wide increases in
3 sequestration of greenhouse gases, achieved
4 across the relevant sector or sectors of the econ-
5 omy relative to a baseline level of emissions es-
6 tablished in an agreement or arrangement de-
7 scribed in subsection (b)(2)(A) for the sector.

8 “(B) BASELINE.—The baseline for a sec-
9 tor shall—

10 “(i) be established at levels of green-
11 house gas emissions lower than would
12 occur under a business-as-usual scenario,
13 taking into account relevant domestic or
14 international policies or incentives to re-
15 duce greenhouse gas emissions;

16 “(ii) be used to determine
17 additionality and performance;

18 “(iii) account for all significant
19 sources of emissions from a sector;

20 “(iv) be adjusted over time to reflect
21 changing circumstances;

22 “(v) be developed taking into consid-
23 eration such factors as—

24 “(I) any established emissions
25 performance level for the sector;

1 “(II) the current performance of
2 the sector in the country;

3 “(III) expected future trends of
4 the sector in the country; and

5 “(IV) historical data and other
6 factors to ensure additionality; and

7 “(vi) be designed to produce signifi-
8 cant deviations from business-as-usual
9 emissions, consistent with nationally appro-
10 prium mitigation commitments or actions,
11 in a way that equitably contributes to
12 meeting thresholds identified in section
13 705(e)(2).

14 “(d) CREDITS ISSUED BY AN INTERNATIONAL
15 BODY.—

16 “(1) IN GENERAL.—The Administrator, in con-
17 sultation with the Secretary of State, may issue
18 international offset credits in exchange for instru-
19 ments in the nature of offset credits that are issued
20 by an international body established pursuant to the
21 United Nations Framework Convention on Climate
22 Change, to a protocol to such Convention, or to a
23 treaty that succeeds such Convention. The Adminis-
24 trator may issue international offset credits under
25 this subsection only if, in addition to the require-

1 ments of subsection (b), the Administrator has de-
2 termined that the international body that issued the
3 instruments has implemented substantive and proce-
4 dural requirements for the relevant project type that
5 provide equal or greater assurance of the integrity of
6 such instruments as is provided by the requirements
7 of this part. Beginning on January 1, 2016, the Ad-
8 ministrator shall issue no offset credit pursuant to
9 this subsection if the activity generating the green-
10 house gas emission reductions or avoidance, or
11 greenhouse gas sequestration, occurs in a country
12 and sector identified by the Administrator under
13 subsection (c), unless the offset credit issued by the
14 international body is consistent with section 744(c).

15 “(2) RETIREMENT.—The Administrator, in
16 consultation with the Secretary of State, shall seek,
17 by whatever means appropriate, including agree-
18 ments, arrangements, or technical cooperation with
19 the international issuing body described in para-
20 graph (1), to ensure that such body—

21 “(A) is notified of the Administrator’s
22 issuance, under this subsection, of an inter-
23 national offset credit in exchange for an instru-
24 ment issued by such international body; and

1 “(B) provides, to the extent feasible, for
2 the disqualification of the instrument issued by
3 such international body for subsequent use
4 under any relevant foreign or international
5 greenhouse gas regulatory program, regardless
6 of whether such use is a sale, exchange, or sub-
7 mission to satisfy a compliance obligation.

8 “(e) OFFSETS FROM REDUCED DEFORESTATION.—

9 “(1) REQUIREMENTS.—The Administrator, in
10 accordance with the regulations promulgated under
11 subsection (b)(1) and an agreement or arrangement
12 described in subsection (b)(2)(A), shall issue inter-
13 national offset credits for greenhouse gas emission
14 reductions achieved through activities to reduce de-
15 forestation only if, in addition to the requirements of
16 subsection (b)—

17 “(A) the activity occurs in—

18 “(i) a country listed by the Adminis-
19 trator pursuant to paragraph (2);

20 “(ii) a state or province listed by the
21 Administrator pursuant to paragraph (5);

22 or

23 “(iii) a country listed by the Adminis-
24 trator pursuant to paragraph (6);

1 “(B) except as provided in paragraph (5)
2 or (6), the quantity of the international offset
3 credits is determined by comparing the national
4 emissions from deforestation relative to a na-
5 tional deforestation baseline for that country es-
6 tablished, in accordance with an agreement or
7 arrangement described in subsection (b)(2)(A),
8 pursuant to paragraph (4);

9 “(C) the reduction in emissions from de-
10 forestation has occurred before the issuance of
11 the international offset credit and, taking into
12 consideration relevant international standards,
13 has been demonstrated using ground-based in-
14 ventories, remote sensing technology, and other
15 methodologies to ensure that all relevant carbon
16 stocks are accounted;

17 “(D) the Administrator has made appro-
18 priate adjustments, such as discounting for any
19 additional uncertainty, to account for cir-
20 cumstances specific to the country, including its
21 technical capacity described in paragraph
22 (2)(A);

23 “(E) the Administrator has determined
24 that the country within which the activity oc-
25 curs has in place a publicly available strategic

1 plan that includes the criteria listed in para-
2 graph (2)(C);

3 “(F) the activity is designed, carried out,
4 and managed—

5 “(i) in accordance with forest manage-
6 ment practices that—

7 “(I) improve the livelihoods of
8 forest communities;

9 “(II) maintain the natural bio-
10 diversity, resilience, and carbon stor-
11 age capacity of forests; and

12 “(III) do not adversely impact
13 the permanence of forest carbon
14 stocks or emission reductions;

15 “(ii) to promote or restore native for-
16 est species and ecosystems where prac-
17 ticable, and to avoid the introduction of
18 invasive nonnative species;

19 “(iii) in a manner that gives due re-
20 gard to the rights and interests of local
21 communities, indigenous peoples, forest-de-
22 pendent communities, and vulnerable social
23 groups;

24 “(iv) with consultations with, and full
25 participation of, local communities, indige-

1 nous peoples, and forest-dependent com-
2 munities, in affected areas, as partners
3 and primary stakeholders, prior to and
4 during the design, planning, implementa-
5 tion, and monitoring and evaluation of ac-
6 tivities;

7 “(v) with transparent and equitable
8 sharing of profits and benefits derived
9 from offset credits with local communities,
10 indigenous peoples, and forest-dependent
11 communities;

12 “(vi) with full transparency, third-
13 party independent oversight, and public
14 dissemination of related financial and con-
15 tractual arrangements, and

16 “(vii) so that the social and environ-
17 mental impacts of these activities are mon-
18 itored and reported in sufficient detail to
19 allow appropriate officials to determine
20 compliance with the requirements of this
21 section;

22 “(G) the reduction otherwise satisfies and
23 is consistent with any relevant requirements es-
24 tablished by an agreement reached under the
25 auspices of the United Nations Framework

1 Convention on Climate Change, done at New
2 York on May 9, 1992; and

3 “(H) in the case that offsets are deter-
4 mined by comparing the national emissions
5 from deforestation relative to a national, state-
6 level, or province-level deforestation baseline as
7 provided in paragraph (4) or (5)—

8 “(i) a list of activities to reduce defor-
9 estation is provided to the Administrator
10 and made publicly available;

11 “(ii) the social and environmental im-
12 pacts of these activities are monitored and
13 reported in sufficient detail to allow the
14 Administrator to determine compliance
15 with the requirements of this section; and

16 “(iii) the distribution of revenues for
17 activities to reduce deforestation is trans-
18 parent, subject to independent third-party
19 oversight, and publicly disseminated.

20 “(2) ELIGIBLE COUNTRIES.—The Adminis-
21 trator, in consultation with the Secretary of State
22 and the Administrator of the United States Agency
23 for International Development, and in accordance
24 with an agreement or arrangement described in sub-
25 section (b)(2)(A), shall establish, and periodically re-

1 view and update, a list of the developing countries
2 that have the capacity to participate in deforestation
3 reduction activities at a national level, including—

4 “(A) the technical capacity to monitor,
5 measure, report, and verify forest carbon fluxes
6 for all significant sources of greenhouse gas
7 emissions from deforestation with an acceptable
8 level of uncertainty, as determined taking into
9 account relevant internationally accepted meth-
10 odologies, such as those established by the
11 Intergovernmental Panel on Climate Change;

12 “(B) the institutional capacity to reduce
13 emissions from deforestation, including strong
14 forest governance and mechanisms to ensure
15 transparency and third-party independent over-
16 sight of offset activities and revenues, and the
17 transparent and equitable distribution of offset
18 revenues for local actions; and

19 “(C) a land use or forest sector strategic
20 plan that—

21 “(i) assesses national and local drivers
22 of deforestation and forest degradation and
23 identifies reforms to national policies need-
24 ed to address them;

1 “(ii) estimates the country’s emissions
2 from deforestation and forest degradation;

3 “(iii) identifies improvements in and a
4 timeline for data collection, monitoring,
5 and institutional capacity necessary to im-
6 plement an effective national deforestation
7 reduction program that meets the criteria
8 set forth in this section (including a na-
9 tional deforestation baseline);

10 “(iv) establishes a timeline for imple-
11 menting the program and transitioning
12 forest-based economies to low-emissions de-
13 velopment pathways with respect to emis-
14 sions from forest and land use activities;

15 “(v) includes a national policy for con-
16 sultations with, and full participation of,
17 all stakeholders, especially indigenous and
18 forest-dependent communities, in its de-
19 sign, planning, and implementation of ac-
20 tivities, whether at the national or local
21 level, to reduce deforestation in the country
22 (including a national process for address-
23 ing grievances if stakeholders have been
24 caused social, environmental, or economic
25 harm);

1 “(vi) provides for the distribution of
2 revenues for activities to reduce deforest-
3 ation transparently and publicly, subject to
4 independent third-party oversight; and

5 “(vii) includes a national platform or
6 a type of registry for information relating
7 to deforestation and degradation policy and
8 program implementation processes, includ-
9 ing a mechanism for the monitoring and
10 reporting of the social and environmental
11 impacts of those activities.

12 “(3) PROTECTION OF INTERESTS.—With re-
13 spect to an agreement or arrangement described in
14 subsection (b)(2)(A) with a country that addresses
15 international offset credits under this subsection, the
16 Administrator, in consultation with the Secretary of
17 State and the Administrator of the United States
18 Agency for International Development, shall under-
19 take due diligence to ensure the establishment and
20 enforcement by such country of legal regimes, proc-
21 esses, standards, and safeguards that—

22 “(A) give due regard to the rights and in-
23 terests of local communities, indigenous peoples,
24 forest-dependent communities, and vulnerable
25 social groups;

1 “(B) promote consultations with, and full
2 participation of, forest-dependent communities
3 and indigenous peoples in affected areas, as
4 partners and primary stakeholders, prior to and
5 during the design, planning, implementation,
6 and monitoring and evaluation of activities; and

7 “(C) encourage transparent and equitable
8 sharing of profits and benefits derived from
9 international offset credits with local commu-
10 nities, indigenous peoples, and forest-dependent
11 communities.

12 “(4) NATIONAL DEFORESTATION BASELINE.—A
13 national deforestation baseline established under this
14 subsection shall—

15 “(A) be national in scope;

16 “(B) be consistent with nationally appro-
17 priate mitigation commitments or actions with
18 respect to deforestation, taking into consider-
19 ation the average annual historical deforestation
20 rates of the country during a period of at least
21 5 years, the applicable drivers of deforestation,
22 and other factors to ensure that only reductions
23 that are in addition to such commitments or ac-
24 tions will generate offsets;

1 “(C) establish a trajectory that would re-
2 sult in zero net deforestation by not later than
3 20 years after the national deforestation base-
4 line has been established, including a spatially
5 explicit land use plan that identifies intact and
6 primary forest areas and managed forest areas
7 that are to remain while the country is reaching
8 the zero net deforestation trajectory;

9 “(D) be adjusted over time to take account
10 of changing national circumstances;

11 “(E) be designed to account for all signifi-
12 cant sources of greenhouse gas emissions from
13 deforestation in the country; and

14 “(F) be consistent with the national defor-
15 estation baseline, if any, established for such
16 country under section 753.

17 “(5) STATE-LEVEL OR PROVINCE-LEVEL AC-
18 TIVITIES.—

19 “(A) ELIGIBLE STATES OR PROVINCES.—

20 The Administrator, in consultation with the
21 Secretary of State and the Administrator of the
22 United States Agency for International Devel-
23 opment, shall establish, and periodically review
24 and update, a list of states or provinces in de-
25 veloping countries where—

1 “(i) the developing country is not in-
2 cluded on the list of countries established
3 pursuant to paragraph (6)(A);

4 “(ii) the State or province is under-
5 taking deforestation reduction activities;

6 “(iii) the state or province has the ca-
7 pacity to engage in deforestation reduction
8 activities at the state or province level, in-
9 cluding—

10 “(I) the technical capacity to
11 monitor and measure forest carbon
12 fluxes for all significant sources of
13 greenhouse gas emissions from defor-
14 estation with an acceptable amount of
15 uncertainty, including a spatially ex-
16 plicit land use plan that identifies in-
17 tact and primary forest areas and
18 managed forest areas that are to re-
19 main while the country is reaching the
20 zero net deforestation trajectory; and

21 “(II) the institutional capacity to
22 reduce emissions from deforestation,
23 including strong forest governance
24 and mechanisms to deliver forest con-
25 servation resources for local actions;

1 “(iv) the state or province meets the
2 eligibility criteria in paragraphs (2) and
3 (3) for the geographic area under its juris-
4 diction; and

5 “(v) the country—

6 “(I) demonstrates that efforts
7 are underway to transition to a na-
8 tional program within 5 years; or

9 “(II) in the determination of the
10 Administrator, is making a good-faith
11 effort to develop a land use or forest
12 sector strategic national plan or pro-
13 gram that meets the criteria described
14 in paragraph (2)(C).

15 “(B) ACTIVITIES.—The Administrator may
16 issue international offset credits for greenhouse
17 gas emission reductions achieved through activi-
18 ties to reduce deforestation at a state or provin-
19 cial level that meet the requirements of this sec-
20 tion. Such credits shall be determined by com-
21 paring the emissions from deforestation within
22 that state or province relative to the state or
23 province deforestation baseline for that state or
24 province established, in accordance with an
25 agreement or arrangement described in sub-

1 section (b)(2)(A), pursuant to subparagraph
2 (C) of this paragraph.

3 “(C) STATE-LEVEL OR PROVINCE-LEVEL
4 DEFORESTATION BASELINE.—A state-level or
5 province-level deforestation baseline shall—

6 “(i) be consistent with any existing
7 nationally appropriate mitigation commit-
8 ments or actions for the country in which
9 the activity is occurring, so that only re-
10 ductions that are in addition to those com-
11 mitments or actions will generate offsets;

12 “(ii) be developed taking into consid-
13 eration the average annual historical defor-
14 estation rates of the state or province dur-
15 ing a period of at least 5 years, relevant
16 drivers of deforestation, and other factors
17 to ensure additionality;

18 “(iii) establish a trajectory that would
19 result in zero net deforestation by not later
20 than 20 years after the state-level or prov-
21 ince-level deforestation baseline has been
22 established; and

23 “(iv) be designed to account for all
24 significant sources of greenhouse gas emis-
25 sions from deforestation in the state or

1 province and adjusted to fully account for
2 emissions leakage outside the state or
3 province through monitoring of major for-
4 ested areas in the host country and other
5 areas of the host country susceptible to
6 leakage.

7 “(D) PHASE OUT.—Beginning 5 years
8 after the first calendar year for which a covered
9 entity must demonstrate compliance with sec-
10 tion 722(a), the Administrator shall issue no
11 further international offset credits for eligible
12 state-level or province-level activities to reduce
13 deforestation pursuant to this paragraph.

14 “(6) PROJECTS AND PROGRAMS TO REDUCE
15 DEFORESTATION.—

16 “(A) ELIGIBLE COUNTRIES.—The Admin-
17 istrator, in consultation with the Secretary of
18 State and the Administrator of the United
19 States Agency for International Development,
20 shall establish, and periodically review and up-
21 date, a list of developing countries that—

22 “(i) the Administrator determines,
23 based on recent, credible, and reliable
24 emissions data, account for less than 1
25 percent of global greenhouse gas emissions

1 and less than 3 percent of global forest-
2 sector and land use change greenhouse gas
3 emissions;

4 “(ii) have, or in the determination of
5 the Administrator are making a good faith
6 effort to develop, a land use or forest sec-
7 tor strategic plan that meets the criteria
8 described in paragraph (2)(C); and

9 “(iii) has made, or in the determina-
10 tion of the Administrator, is making, a
11 good-faith effort to develop, through the
12 implementation of activities under this sec-
13 tion, a monitoring program for major for-
14 ested areas in a host country and other
15 areas in a host country susceptible to leak-
16 age, including a spatially explicit land use
17 plan that identifies intact and primary for-
18 est areas and managed forest areas that
19 are to remain while country is reaching the
20 zero net deforestation trajectory.

21 “(B) ACTIVITIES.—The Administrator may
22 issue international offset credits for greenhouse
23 gas emission reductions achieved through
24 project or program level activities to reduce de-
25 forestation in countries listed under subpara-

1 graph (A) that meet the requirements of this
2 section. The quantity of international offset
3 credits shall be determined by comparing the
4 project-level or program-level emissions from
5 deforestation to a deforestation baseline for
6 such project or program established pursuant to
7 subparagraph (C).

8 “(C) PROJECT-LEVEL OR PROGRAM-LEVEL
9 BASELINE.—A project-level or program-level de-
10 forestation baseline shall—

11 “(i) be consistent with any existing
12 nationally appropriate mitigation commit-
13 ments or actions for the country in which
14 the project or program is occurring, so
15 that only reductions that are in addition to
16 such commitments or actions will generate
17 offsets;

18 “(ii) be developed taking into consid-
19 eration the average annual historical defor-
20 estation rates in the project or program
21 boundary during a period of at least 5
22 years, applicable drivers of deforestation,
23 and other factors to ensure additionality;

24 “(iii) be designed to account for all
25 significant sources of greenhouse gas emis-

1 sions from deforestation in the project or
2 program boundary; and

3 “*(iv)* be adjusted to fully account for
4 emissions leakage outside the project or
5 program boundary, including—

6 “(I) estimation through moni-
7 toring of major forested areas in a
8 host country and other areas in a host
9 country susceptible to leakage, pursu-
10 ant to section 744(e)(5); and

11 “(II) a spatially explicit land use
12 plan that identifies intact and primary
13 forest areas and managed forest areas
14 that are to remain while country is
15 reaching the zero net deforestation
16 trajectory

17 “(D) PHASE-OUT.—

18 “(i) IN GENERAL.—Beginning on the
19 date that is 8 years after the first calendar
20 year for which a covered entity must dem-
21 onstrate compliance with section 722(a),
22 the Administrator shall issue no further
23 international offset credits for project-level
24 or program-level activities as described in

1 this paragraph, except as provided in
2 clause (ii).

3 “(ii) EXTENSION.—The Administrator
4 may extend the phase out deadline for the
5 issuance of international offset credits
6 under this section by up to 5 years with re-
7 spect to eligible activities taking place in a
8 least developed country, which is a foreign
9 country that the United Nations has iden-
10 tified as among the least developed of de-
11 veloping countries at the time that the Ad-
12 ministrator determines to provide an exten-
13 sion, provided that the Administrator, in
14 consultation with the Secretary of State
15 and the Administrator of the United States
16 Agency for International Development, de-
17 termines the country—

18 “(I) lacks sufficient capacity to
19 adopt and implement effective pro-
20 grams to achieve reductions in defor-
21 estation measured against national
22 baselines;

23 “(II) is receiving support under
24 part E to develop such capacity; and

1 “(III) has developed and is work-
2 ing to implement a credible national
3 strategy or plan to reduce deforest-
4 ation.

5 “(7) EXPANSION OF SCOPE.—In implementing
6 this subsection, the Administrator, taking into con-
7 sideration the recommendations of the Advisory
8 Board, may—

9 “(A) expand credible activities to include
10 forest degradation; and

11 “(B) include soil carbon losses associated
12 with forested wetlands or peatlands.

13 “(f) MODIFICATION OF REQUIREMENTS.—In promul-
14 gating regulations under subsection (b)(1) with respect to
15 the issuance of international offset credits under sub-
16 section (c), (d), or (e), the Administrator, in consultation
17 with the Secretary of State and the Administrator of the
18 United States Agency for International Development, may
19 modify or omit a requirement of this part (excluding the
20 requirements of this section) if the Administrator deter-
21 mines that the application of that requirement to such
22 subsection is not feasible or would result in the creation
23 of offset credits that would not be eligible to satisfy emis-
24 sions reduction commitments made by the United States
25 pursuant to the United Nations Framework Convention

1 on Climate Change, done at New York on May 9, 1992
2 (or any successor agreement). In modifying or omitting
3 such a requirement on the basis of infeasibility, the Ad-
4 ministrator, in consultation with the Secretary of State
5 and the Administrator of the United States Agency for
6 International Development, shall ensure, with an adequate
7 margin of safety, the integrity of international offset cred-
8 its issued under this section and of the greenhouse gas
9 emissions limitations established pursuant to section 703.

10 “(g) AVOIDING DOUBLE COUNTING.—The Adminis-
11 trator, in consultation with the Secretary of State, shall
12 seek, by whatever means appropriate, including agree-
13 ments, arrangements, or technical cooperation, to ensure
14 that activities on the basis of which international offset
15 credits are issued under this section are not used for com-
16 pliance with an obligation to reduce or avoid greenhouse
17 gas emissions, or increase greenhouse gas sequestration,
18 under a foreign or international regulatory system. In ad-
19 dition, no international offset credits shall be issued for
20 emission reductions from activities with respect to which
21 emission allowances were allocated under section 771(d)
22 for distribution under part E.

23 “(h) LIMITATION.—The Administrator shall not issue
24 international offset credits generated by projects based on
25 the destruction of hydrofluorocarbons.”.

1 **SEC. 102. DEFINITIONS.**

2 Title VII of the Clean Air Act (as added by section
3 101 of this division) is amended by inserting before part
4 A the following:

5 **“SEC. 700. DEFINITIONS.**

6 “In this title:

7 “(1) **ADDITIONAL.**—The term ‘additional’,
8 when used with respect to reductions or avoidance of
9 greenhouse gas emissions, or to sequestration of
10 greenhouse gases, means reductions, avoidance, or
11 sequestration that result in a lower level of net
12 greenhouse gas emissions or atmospheric concentra-
13 tions than would occur in the absence of an offset
14 credit.

15 “(2) **ADDITIONALITY.**—The term ‘additionality’
16 means the extent to which reductions or avoidance
17 of greenhouse gas emissions, or sequestration of
18 greenhouse gases, are additional.

19 “(3) **ADVISORY BOARD.**—The term ‘Advisory
20 Board’ means the Offsets Integrity Advisory Board
21 established under section 731.

22 “(4) **AFFILIATED.**—The term ‘affiliated’—

23 “(A) when used in relation to an entity,
24 means owned or controlled by, or under com-
25 mon ownership or control with, another entity,
26 as determined by the Administrator; and

1 “(B) when used in relation to a natural
2 gas local distribution company, means owned or
3 controlled by, or under common ownership or
4 control with, another natural gas local distribu-
5 tion company, as determined by the Adminis-
6 trator.

7 “(5) ALLOWANCE.—The term ‘allowance’
8 means a limited authorization to emit, or have at-
9 tributable greenhouse gas emissions in an amount
10 of, 1 ton of carbon dioxide equivalent of a green-
11 house gas in accordance with this title; it includes an
12 emission allowance, a compensatory allowance, or an
13 international emission allowance.

14 “(6) ATTRIBUTABLE GREENHOUSE GAS EMIS-
15 SIONS.—The term ‘attributable greenhouse gas emis-
16 sions’ means—

17 “(A) for a covered entity that is a fuel pro-
18 ducer or importer described in paragraph
19 (13)(B), greenhouse gases that would be emit-
20 ted from the combustion of any petroleum-
21 based or coal-based liquid fuel, petroleum coke,
22 or natural gas liquid, produced or imported by
23 that covered entity for sale or distribution in
24 interstate commerce, assuming no capture and
25 sequestration of any greenhouse gas emissions;

1 “(B) for a covered entity that is an indus-
2 trial gas producer or importer described in
3 paragraph (13)(C), the tons of carbon dioxide
4 equivalent of fossil fuel-based carbon dioxide,
5 nitrous oxide, any fluorinated gas, other than
6 nitrogen trifluoride, that is a greenhouse gas, or
7 any combination thereof—

8 “(i) produced or imported by such
9 covered entity during the previous calendar
10 year for sale or distribution in interstate
11 commerce; or

12 “(ii) released as fugitive emissions in
13 the production of fluorinated gas; and

14 “(C) for a natural gas local distribution
15 company described in paragraph (13)(J), green-
16 house gases that would be emitted from the
17 combustion of the natural gas, and any other
18 gas meeting the specifications for commingling
19 with natural gas for purposes of delivery, that
20 such entity delivered during the previous cal-
21 endar year to customers that are not covered
22 entities, assuming no capture and sequestration
23 of that greenhouse gas.

24 “(7) BIOLOGICAL SEQUESTRATION; BIO-
25 LOGICALLY SEQUESTERED.—The terms ‘biological

1 sequestration’ and ‘biologically sequestered’ mean
2 the removal of greenhouse gases from the atmos-
3 phere by terrestrial biological means, such as by
4 growing plants, and the storage of those greenhouse
5 gases in plants or soils.

6 “(8) CAPPED EMISSIONS.—The term ‘capped
7 emissions’ means greenhouse gas emissions to which
8 section 722 applies, including emissions from the
9 combustion of natural gas, petroleum-based or coal-
10 based liquid fuel, petroleum coke, or natural gas liq-
11 uid to which section 722(b)(2) or (8) applies.

12 “(9) CAPPED SOURCE.—The term ‘capped
13 source’ means a source that directly emits capped
14 emissions.

15 “(10) CARBON DIOXIDE EQUIVALENT.—The
16 term ‘carbon dioxide equivalent’ means the unit of
17 measure, expressed in metric tons, of greenhouse
18 gases as provided under section 711 or 712.

19 “(11) CARBON STOCK.—The term ‘carbon
20 stock’ means the quantity of carbon contained in a
21 biological reservoir or system which has the capacity
22 to accumulate or release carbon.

23 “(12) COMPENSATORY ALLOWANCE.—The term
24 ‘compensatory allowance’ means an allowance issued
25 under section 721(f).

1 “(ii) nitrous oxide;

2 “(iii) except as otherwise provided in
3 section 714, perfluorocarbons;

4 “(iv) sulfur hexafluoride;

5 “(v) any other fluorinated gas, except
6 for nitrogen trifluoride, that is a green-
7 house gas, as designated by the Adminis-
8 trator under section 711(b) or (c); or

9 “(vi) any combination of greenhouse
10 gases described in clauses (i) through (v).

11 “(D) Any stationary source that has emit-
12 ted 25,000 or more tons of carbon dioxide
13 equivalent of nitrogen trifluoride in 2008 or any
14 subsequent year.

15 “(E) Any geologic sequestration site.

16 “(F) Any stationary source in the following
17 industrial sectors:

18 “(i) Adipic acid production.

19 “(ii) Primary aluminum production.

20 “(iii) Ammonia manufacturing.

21 “(iv) Cement production, excluding
22 grinding-only operations.

23 “(v) Hydrochlorofluorocarbon produc-
24 tion.

25 “(vi) Lime manufacturing.

1 “(vii) Nitric acid production.

2 “(viii) Petroleum refining.

3 “(ix) Phosphoric acid production.

4 “(x) Silicon carbide production.

5 “(xi) Soda ash production.

6 “(xii) Titanium dioxide production.

7 “(xiii) Coal-based liquid or gaseous
8 fuel production.

9 “(G) Any stationary source in the chemical
10 or petrochemical sector that, in 2008 or any
11 subsequent year—

12 “(i) produces acrylonitrile, carbon
13 black, ethylene, ethylene dichloride, ethyl-
14 ene oxide, or methanol; or

15 “(ii) produces a chemical or petro-
16 chemical product if producing that product
17 results in annual combustion plus process
18 emissions of 25,000 or more tons of carbon
19 dioxide equivalent.

20 “(H) Any stationary source that—

21 “(i) is in one of the following indus-
22 trial sectors: ethanol production; ferroalloy
23 production; fluorinated gas production;
24 food processing; glass production; hydrogen
25 production; metal ore production or other

1 processing; iron and steel production; lead
2 production; pulp and paper manufacturing;
3 and zinc production; and

4 “(ii) has emitted 25,000 or more tons
5 of carbon dioxide equivalent in 2008 or
6 any subsequent year.

7 “(I) Any fossil fuel-fired combustion device
8 (such as a boiler) or grouping of such devices
9 that—

10 “(i) is all or part of an industrial
11 source not specified in subparagraph (D),
12 (F), (G), or (H); and

13 “(ii) has emitted 25,000 or more tons
14 of carbon dioxide equivalent in 2008 or
15 any subsequent year.

16 “(J) Any natural gas local distribution
17 company that (or any group of 2 or more affili-
18 ated natural gas local distribution companies
19 that, in the aggregate) in 2008 or any subse-
20 quent year, delivers 460,000,000 cubic feet or
21 more of natural gas to customers that are not
22 covered entities.

23 “(14) CREDITING PERIOD.—The term ‘crediting
24 period’ means the period with respect to which an

1 offset project is eligible to earn offset credits under
2 part D, as determined under section 734(c).

3 “(15) DESIGNATED REPRESENTATIVE.—The
4 term ‘designated representative’ means, with respect
5 to a covered entity, a reporting entity, an offset
6 project developer, or any other entity receiving or
7 holding allowances or offset credits under this title,
8 an individual authorized, through a certificate of
9 representation submitted to the Administrator by
10 the owners and operators or similar entity official, to
11 represent the owners and operators or similar entity
12 official in all matters pertaining to this title (includ-
13 ing the holding, transfer, or disposition of allowances
14 or offset credits), and to make all submissions to the
15 Administrator under this title.

16 “(16) DEVELOPING COUNTRY.—The term ‘de-
17 veloping country’ means a country eligible to receive
18 official development assistance according to the in-
19 come guidelines of the Development Assistance Com-
20 mittee of the Organization for Economic Coopera-
21 tion and Development.

22 “(17) DOMESTIC OFFSET CREDIT.—

23 “(A) IN GENERAL.—The term ‘domestic
24 offset credit’ means an offset credit issued

1 under part D, other than an international offset
2 credit.

3 “(B) EXCLUSION.—The term ‘domestic
4 offset credit’ does not include a term offset
5 credit.

6 “(18) ELECTRICITY SOURCE.—The term ‘elec-
7 tricity source’ means a stationary source that in-
8 cludes one or more utility units.

9 “(19) EMISSION.—The term ‘emission’ means
10 the release of a greenhouse gas into the ambient air.
11 Such term does not include gases that are captured
12 and sequestered, except to the extent that they are
13 later released into the atmosphere, in which case
14 compliance must be demonstrated pursuant to sec-
15 tion 722(b)(5).

16 “(20) EMISSION ALLOWANCE.—The term ‘emis-
17 sion allowance’ means an allowance established
18 under section 721(a) or 726(g)(2).

19 “(21) FAIR MARKET VALUE.—The term ‘fair
20 market value’ means the average daily closing price
21 on registered exchanges or, if such a price is un-
22 available, the average price as determined by the Ad-
23 ministrator, during a specified time period, of an
24 emission allowance.

1 “(22) FEDERAL LAND.—The term ‘Federal
2 land’ means land that is owned by the United
3 States, other than land held in trust for an Indian
4 or Indian tribe.

5 “(23) FOSSIL FUEL.—The term ‘fossil fuel’
6 means natural gas, petroleum, or coal, or any form
7 of solid, liquid, or gaseous fuel derived from such
8 material, including consumer products that are de-
9 rived from such materials and are combusted.

10 “(24) FOSSIL FUEL-FIRED.—The term ‘fossil
11 fuel-fired’ means powered by combustion of fossil
12 fuel, alone or in combination with any other fuel, re-
13 gardless of the percentage of fossil fuel consumed.

14 “(25) FUGITIVE EMISSIONS.—The term ‘fugi-
15 tive emissions’ means emissions from leaks, valves,
16 joints, or other small openings in pipes, ducts, or
17 other equipment, or from vents.

18 “(26) GEOLOGIC SEQUESTRATION; GEOLOGI-
19 CALLY SEQUESTERED.—The terms ‘geologic seques-
20 tration’ and ‘geologically sequestered’ mean the se-
21 questration of greenhouse gases in subsurface geo-
22 logic formations for purposes of permanent storage.

23 “(27) GEOLOGIC SEQUESTRATION SITE.—The
24 term ‘geologic sequestration site’ means a site where
25 carbon dioxide is geologically sequestered.

1 “(28) GREENHOUSE GAS.—The term ‘green-
2 house gas’ means any gas described in section
3 711(a) or designated under section 711(b), (c), or
4 (e), except to the extent that it is regulated under
5 title VI.

6 “(29) HIGH CONSERVATION PRIORITY LAND.—
7 The term ‘high conservation priority land’ means
8 land that is not Federal land and is—

9 “(A) globally or State ranked as critically
10 imperiled or imperiled under a State Natural
11 Heritage Program; or

12 “(B) old-growth or late-successional forest,
13 as identified by the office of the State Forester
14 or relevant State agency with regulatory juris-
15 diction over forestry activities.

16 “(30) HOLD.—The term ‘hold’ means, with re-
17 spect to an allowance, offset credit, or term offset
18 credit, to have in the appropriate account in the al-
19 lowance tracking system, or submit to the Adminis-
20 trator for recording in such account.

21 “(31) INDUSTRIAL SOURCE.—The term ‘indus-
22 trial source’ means any stationary source that—

23 “(A) is not an electricity source; and

24 “(B) is in—

1 “(i) the manufacturing sector (as de-
2 fined in North American Industrial Classi-
3 fication System codes 31, 32, and 33); or

4 “(ii) the natural gas processing or
5 natural gas pipeline transportation sector
6 (as defined in North American Industrial
7 Classification System codes 211112 or
8 486210).

9 “(32) INTERNATIONAL EMISSION ALLOW-
10 ANCE.—The term ‘international emission allowance’
11 means a tradable authorization to emit 1 ton of car-
12 bon dioxide equivalent of greenhouse gas that is
13 issued by a national or supranational foreign govern-
14 ment pursuant to a qualifying international program
15 designated by the Administrator pursuant to section
16 728(a).

17 “(33) INTERNATIONAL OFFSET CREDIT.—The
18 term ‘international offset credit’ means an offset
19 credit issued by the Administrator under section
20 744.

21 “(34) LEAKAGE.—The term ‘leakage’ means a
22 significant increase in greenhouse gas emissions, or
23 significant decrease in sequestration, which is caused
24 by an offset project and occurs outside the bound-
25 aries of the offset project.

1 “(35) MARKET STABILITY RESERVE ALLOW-
2 ANCE.—The term ‘market stability reserve allow-
3 ance’ means an emission allowance reserved for,
4 transferred to, or deposited in the market stability
5 reserve, or established, under section 726.

6 “(36) MINERAL SEQUESTRATION.—The term
7 ‘mineral sequestration’ means sequestration of car-
8 bon dioxide from the atmosphere by capturing car-
9 bon dioxide into a permanent mineral, such as the
10 aqueous precipitation of carbonate minerals that re-
11 sults in the storage of carbon dioxide in a mineral
12 form.

13 “(37) NATURAL GAS LIQUID.—The term ‘nat-
14 ural gas liquid’ means ethane, butane, isobutane,
15 natural gasoline, and propane which is ready for
16 commercial sale or use.

17 “(38) NATURAL GAS LOCAL DISTRIBUTION
18 COMPANY.—The term ‘natural gas local distribution
19 company’ has the meaning given the term ‘local dis-
20 tribution company’ in section 2(17) of the Natural
21 Gas Policy Act of 1978 (15 U.S.C. 3301(17)).

22 “(39) OFFSET CREDIT.—

23 “(A) IN GENERAL.—The term ‘offset cred-
24 it’ means an offset credit issued under part D.

1 “(B) EXCLUSION.—The term ‘offset credit’
2 does not include a term offset credit.

3 “(40) OFFSET PROJECT.—The term ‘offset
4 project’ means a project or activity that reduces or
5 avoids greenhouse gas emissions, or sequesters
6 greenhouse gases, and for which offset credits are or
7 may be issued under part D.

8 “(41) OFFSET PROJECT DEVELOPER.—The
9 term ‘offset project developer’ means the individual
10 or entity designated as the offset project developer
11 in an offset project approval petition under section
12 735(c)(1).

13 “(42) QUALIFIED R&D FACILITY.—The term
14 ‘qualified R&D facility’ means a facility that con-
15 ducts research and development, that was in oper-
16 ation as of the date of enactment of this title, and
17 that is part of a covered entity subject to paragraphs
18 (1) through (8) of section 722(b).

19 “(43) PETROLEUM.—The term ‘petroleum’ in-
20 cludes crude oil, tar sands, oil shale, and heavy oils.

21 “(44) REPEATED INTENTIONAL REVERSALS.—
22 The term ‘repeated intentional reversals’ means at
23 least 3 intentional reversals, as determined by the
24 Administrator or a court under section
25 734(b)(3)(B)(ii).

1 “(45) RESEARCH AND DEVELOPMENT.—The
2 term ‘research and development’ means activities—

3 “(A) that are conducted in process units or
4 at laboratory bench-scale settings;

5 “(B) whose purpose is to conduct research
6 and development for new processes, tech-
7 nologies, or products that contribute to lower
8 greenhouse gas emissions; and

9 “(C) that do not manufacture products for
10 sale.

11 “(46) RENEWABLE BIOMASS.—The term ‘re-
12 newable biomass’ means any of the following:

13 “(A) Plant material, including waste mate-
14 rial, harvested or collected from actively man-
15 aged agricultural land that was in cultivation,
16 cleared, or fallow and nonforested on January
17 1, 2009.

18 “(B) Plant material, including waste mate-
19 rial, harvested or collected from pastureland
20 that was nonforested on January 1, 2009.

21 “(C) Nonhazardous vegetative matter de-
22 rived from waste, including separated yard
23 waste, landscape right-of-way trimmings, con-
24 struction and demolition debris, or food waste
25 (but not municipal solid waste, recyclable waste

1 paper, painted, treated or pressurized wood, or
2 wood contaminated with plastic or metals).

3 “(D) Animal waste or animal byproducts,
4 including products of animal waste digesters.

5 “(E) Algae.

6 “(F) Trees, brush, slash, residues, or any
7 other vegetative matter removed from within
8 600 feet of any building, campground, or route
9 designated for evacuation by a public official
10 with responsibility for emergency preparedness,
11 or from within 300 feet of a paved road, electric
12 transmission line, utility tower, or water supply
13 line.

14 “(G) Residues from or byproducts of
15 milled logs.

16 “(H) Any of the following removed from
17 forested land that is not Federal and is not
18 high conservation priority land:

19 “(i) Trees, brush, slash, residues,
20 interplanted energy crops, or any other
21 vegetative matter removed from an actively
22 managed tree plantation established—

23 “(I) prior to January 1, 2009; or

1 “(II) on land that, as of January
2 1, 2009, was cultivated or fallow and
3 non-forested.

4 “(ii) Trees, logging residue, thinnings,
5 cull trees, pulpwood, and brush removed
6 from naturally regenerated forests or other
7 non-plantation forests, including for the
8 purposes of hazardous fuel reduction or
9 preventative treatment for reducing or con-
10 taining insect or disease infestation.

11 “(iii) Logging residue, thinnings, cull
12 trees, pulpwood, brush, and species that
13 are non-native and noxious, from stands
14 that were planted and managed after Jan-
15 uary 1, 2009, to restore or maintain native
16 forest types.

17 “(iv) Dead or severely damaged trees
18 removed within 5 years of fire, blowdown,
19 or other natural disaster, and badly in-
20 fested trees.

21 “(I) Materials, pre-commercial thinnings,
22 or removed invasive species from National For-
23 est System land and public lands (as defined in
24 section 103 of the Federal Land Policy and
25 Management Act of 1976 (43 U.S.C. 1702)),

1 including those that are byproducts of preven-
2 tive treatments (such as trees, wood, brush,
3 thinnings, chips, and slash), that are removed
4 as part of a federally recognized timber sale, or
5 that are removed to reduce hazardous fuels, to
6 reduce or contain disease or insect infestation,
7 or to restore ecosystem health, and that are—

8 “(i) not from components of the Na-
9 tional Wilderness Preservation System,
10 Wilderness Study Areas, Inventoried
11 Roadless Areas, old growth or mature for-
12 est stands, components of the National
13 Landscape Conservation System, National
14 Monuments, National Conservation Areas,
15 Designated Primitive Areas; or Wild and
16 Scenic Rivers corridors;

17 “(ii) harvested in environmentally sus-
18 tainable quantities, as determined by the
19 appropriate Federal land manager; and

20 “(iii) are harvested in accordance with
21 Federal and State law, and applicable land
22 management plans.

23 “(47) RETIRE.—The term ‘retire’, with respect
24 to an allowance, offset credit, or term offset credit
25 established or issued under this title, means to dis-

1 qualify such allowance or offset credit for any subse-
2 quent use under this title, regardless of whether the
3 use is a sale, exchange, or submission of the allow-
4 ance, offset credit, or term offset credit to satisfy a
5 compliance obligation.

6 “(48) REVERSAL.—The term ‘reversal’ means
7 an intentional or unintentional loss of sequestered
8 greenhouse gases to the atmosphere.

9 “(49) SEQUESTERED AND SEQUESTRATION.—
10 The terms ‘sequestered’ and ‘sequestration’ mean
11 the separation, isolation, or removal of greenhouse
12 gases from the atmosphere, as determined by the
13 Administrator. The terms include biological, geo-
14 logic, and mineral sequestration, but do not include
15 ocean fertilization techniques.

16 “(50) STATIONARY SOURCE.—The term ‘sta-
17 tionary source’ means any integrated operation com-
18 prising any plant, building, structure, or stationary
19 equipment, including support buildings and equip-
20 ment, that is located within one or more contiguous
21 or adjacent properties, is under common control of
22 the same person or persons, and emits or may emit
23 a greenhouse gas.

24 “(51) TON.—The term ‘ton’ means a metric
25 ton.

1 “(52) UNCAPPED EMISSIONS.—The term ‘un-
2 capped emissions’ means emissions of greenhouse
3 gases emitted after December 31, 2011, that are not
4 capped emissions.

5 “(53) UNITED STATES GREENHOUSE GAS EMIS-
6 SIONS.—The term ‘United States greenhouse gas
7 emissions’ means the total quantity of annual green-
8 house gas emissions from the United States, as cal-
9 culated by the Administrator and reported to the
10 United Nations Framework Convention on Climate
11 Change Secretariat.

12 “(54) UTILITY UNIT.—The term ‘utility unit’
13 means a combustion device that, on January 1,
14 2009, or any date thereafter, is fossil fuel-fired and
15 serves a generator that produces electricity for sale,
16 unless such combustion device, during the 12-month
17 period starting the later of January 1, 2009, or the
18 commencement of commercial operation and each
19 calendar year starting after such later date—

20 “(A) is part of an integrated cycle system
21 that cogenerates steam and electricity during
22 normal operation and that supplies one-third or
23 less of its potential electric output capacity and
24 25 MW or less of electrical output for sale; or

1 “(B) combusts materials of which more
2 than 95 percent is municipal solid waste on a
3 heat input basis.

4 “(55) VINTAGE YEAR.—The term ‘vintage year’
5 means the calendar year for which an emission al-
6 lowance is established under section 721(a) or which
7 is assigned to an emission allowance under section
8 726(g)(3)(A), except that the vintage year for a
9 market stability reserve allowance shall be the year
10 in which such allowance is purchased at auction.”.

11 **SEC. 103. OFFSET REPORTING REQUIREMENTS.**

12 Section 114 of Clean Air Act (42 U.S.C. 7414) is
13 amended by adding at the end the following:

14 “(e) RECORDKEEPING FOR CARBON OFFSETS PRO-
15 GRAM.—For the purpose of implementing the carbon off-
16 sets program set forth in subtitle D of title VII, the Ad-
17 ministrators shall require any person who is an offset
18 project developer, and may require any person who is a
19 third party verifier, to establish and maintain records, for
20 a period of not less than the crediting period under section
21 734(e) plus 5 years, relating to—

22 “(1) any offset project approval petition sub-
23 mitted to the appropriate officials under section 735;

24 “(2) any reversals which occur with respect to
25 an offset project;

1 “(3) any verification reports; and

2 “(4) any other aspect of the offset project that
3 the appropriate officials determines is appropriate.”.

4 **Subtitle B—Disposition of**
5 **Allowances**

6 **SEC. 111. DISPOSITION OF ALLOWANCES FOR GLOBAL**
7 **WARMING POLLUTION REDUCTION PRO-**
8 **GRAM.**

9 Title VII of the Clean Air Act (as amended by section
10 141 of this division) is amended by adding at the end the
11 following:

12 **“PART H—DISPOSITION OF ALLOWANCES**

13 **“SEC. 771. ALLOCATION OF EMISSION ALLOWANCES.**

14 “(a) ALLOCATION.—The Administrator shall allocate
15 emission allowances for the following purposes:

16 “(1) The program for electricity consumers pur-
17 suant to section 772.

18 “(2) The program for natural gas consumers
19 pursuant to section 773.

20 “(3) The program for home heating oil and pro-
21 pane consumers pursuant to section 774.

22 “(4) The program for domestic fuel production,
23 including petroleum refiners and small business re-
24 finers, under section 775.

1 “(5) The program to ensure real reductions in
2 industrial emissions under part F.

3 “(6) The program for commercial deployment
4 of carbon capture and sequestration technologies
5 under section 780.

6 “(7) The program for early action recognition
7 pursuant to section 782.

8 “(8) The program for State and local invest-
9 ment in energy efficiency and renewable energy
10 under section 202 of division B of the Clean Energy
11 Jobs and American Power Act.

12 “(9) The program for energy efficiency in build-
13 ing codes under section 163 of division A, and sec-
14 tion 203 of division B, of the Clean Energy Jobs
15 and American Power Act

16 “(10) The program for retrofit for energy and
17 environmental performance under section 164 of di-
18 vision A, and 204 of division B, of the Clean Energy
19 Jobs and American Power Act.

20 “(11) The program for Energy Innovation
21 Hubs pursuant to section 205 of division B of the
22 Clean Energy Jobs and American Power Act.

23 “(12) The program for ARPA-E research pur-
24 suant to section 206 of division B of the Clean En-
25 ergy Jobs and American Power Act.

1 “(13) The International Clean Energy Deploy-
2 ment Program under section 323 of division A, and
3 section 207 of division B, of the Clean Energy Jobs
4 and American Power Act.

5 “(14) The international climate change adapta-
6 tion and global security program under section 324
7 of division A, and section 208 of division B, of the
8 Clean Energy Jobs and American Power Act.

9 “(b) AUCTIONS.—The Administrator shall auction,
10 pursuant to section 778, emission allowances for the fol-
11 lowing purposes:

12 “(1) The Market Stability Reserve Fund under
13 section 726.

14 “(2) The program for climate change consumer
15 refunds and low- and moderate-income consumers
16 pursuant to section 776, including—

17 “(A) consumer rebates under section
18 776(a); and

19 “(B) energy refunds under section 776(b).

20 “(3) The program for investment in clean vehi-
21 cle technology under section 201 of division B of the
22 Clean Energy Jobs and American Power Act.

23 “(4) The program for State and local invest-
24 ment in energy efficiency and renewable energy

1 under section 202 of division B of the Clean Energy
2 Jobs and American Power Act.

3 “(5) The program for energy efficiency and re-
4 newable energy worker training under section 209 of
5 division B of the Clean Energy Jobs and American
6 Power Act.

7 “(6) The program for worker transition under
8 part 2 of subtitle A of title III of division A, and
9 section 210 of division B, of the Clean Energy Jobs
10 and American Power Act.

11 “(7) The State programs for greenhouse gas re-
12 duction and climate adaptation pursuant to section
13 211 of division B of the Clean Energy Jobs and
14 American Power Act.

15 “(8) The program for public health and climate
16 change under subpart B of part 1 of subtitle C of
17 title III of division A, and section 212 of division B,
18 of the Clean Energy Jobs and American Power Act.

19 “(9) The program for climate change safe-
20 guards for natural resources conservation under sub-
21 part C of part 1 of subtitle C of title III of division
22 A, and section 213 of division B, of the Clean En-
23 ergy Jobs and American Power Act.

1 “(10) Nuclear worker training under section
2 132 of division A, and section 214 of division B, of
3 the Clean Energy Jobs and American Power Act.

4 “(11) The supplemental agriculture and for-
5 estry greenhouse gas reduction and renewable en-
6 ergy program under section 155 of division A, and
7 section 215 of division B, of the Clean Energy Jobs
8 and American Power Act.

9 “(c) DEFICIT REDUCTION.—

10 “(1) IN GENERAL.—The Administrator shall—

11 “(A) auction, pursuant to section 778,
12 emission allowances for deficit reduction in the
13 amounts described in paragraph (2); and

14 “(B) deposit those proceeds immediately
15 on receipt in the Deficit Reduction Fund estab-
16 lished by section 783.

17 “(2) AMOUNTS.—For vintage years 2012
18 through 2050, 25.0 percent of emission allowances
19 established for each year under section 721(a) shall
20 be auctioned and the proceeds deposited pursuant to
21 paragraph (1) to ensure that this title does not con-
22 tribute to the deficit for that particular calendar
23 year.

24 “(d) SUPPLEMENTAL REDUCTIONS.—

1 “(1) IN GENERAL.—The Administrator shall al-
2 locate allowances for each vintage year to achieve
3 supplemental reductions pursuant to section 753.

4 “(2) ADJUSTMENT.—The Administrator shall
5 modify the allowances allocated under paragraph (1)
6 as necessary to ensure the achievement of the an-
7 nual supplemental emissions reduction objective for
8 2020 set forth in section 704.

9 **“SEC. 772. ELECTRICITY CONSUMERS.**

10 “(a) DEFINITIONS.—For purposes of this section:

11 “(1) CHP SAVINGS.—The term ‘CHP savings’
12 means—

13 “(A) CHP system savings from a combined
14 heat and power system that commences oper-
15 ation after the date of enactment of this sec-
16 tion; and

17 “(B) the increase in CHP system savings
18 from, at any time after the date of the enact-
19 ment of this section, upgrading, replacing, ex-
20 panding, or increasing the utilization of a com-
21 bined heat and power system that commenced
22 operation on or before the date of enactment of
23 this section.

24 “(2) CHP SYSTEM SAVINGS.—The term ‘CHP
25 system savings’ means the increment of electric out-

1 put of a combined heat and power system that is at-
2 tributable to the higher efficiency of the combined
3 system (as compared to the efficiency of separate
4 production of the electric and thermal outputs).

5 “(3) COAL-FUELED UNIT.—The term ‘coal-
6 fueled unit’ means a utility unit that derives at least
7 85 percent of its heat input from coal, petroleum
8 coke, or any combination of those 2 fuels.

9 “(4) COST-EFFECTIVE.—The term ‘cost-effec-
10 tive’, with respect to an energy efficiency program,
11 means that the program meets the total resource
12 cost test, which requires that the net present value
13 of economic benefits over the life of the program, in-
14 cluding avoided supply and delivery costs and de-
15 ferred or avoided investments, is greater than the
16 net present value of the economic costs over the life
17 of the program, including program costs and incre-
18 mental costs borne by the energy consumer.

19 “(5) ELECTRICITY LOCAL DISTRIBUTION COM-
20 PANY.—The term ‘electricity local distribution com-
21 pany’ means an electric utility—

22 “(A) that has a legal, regulatory, or con-
23 tractual obligation to deliver electricity directly
24 to retail consumers in the United States, re-
25 gardless of whether that entity or another enti-

1 ty sells the electricity as a commodity to those
2 retail consumers; and

3 “(B) the retail rates of which, except in
4 the case of an electric cooperative, are regulated
5 or set by—

6 “(i) a State regulatory authority;

7 “(ii) a State or political subdivision
8 thereof (or an agency or instrumentality
9 of, or corporation wholly owned by, either
10 of the foregoing); or

11 “(iii) an Indian tribe pursuant to trib-
12 al law.

13 “(6) ELECTRICITY SAVINGS.—The term ‘elec-
14 tricity savings’ means reductions in electricity con-
15 sumption, relative to business-as-usual projections,
16 achieved through measures implemented after the
17 date of enactment of this section, limited to—

18 “(A) customer facility savings of elec-
19 tricity, adjusted to reflect any associated in-
20 crease in fuel consumption at the facility;

21 “(B) reductions in distribution system
22 losses of electricity achieved by a retail elec-
23 tricity distributor, as compared to losses attrib-
24 utable to new or replacement distribution sys-
25 tem equipment of average efficiency;

1 “(C) CHP savings; and

2 “(D) fuel cell savings.

3 “(7) FUEL CELL.—The term ‘fuel cell’ means a
4 device that directly converts the chemical energy of
5 a fuel and an oxidant into electricity by electro-
6 chemical processes occurring at separate electrodes
7 in the device.

8 “(8) FUEL CELL SAVINGS.—The term ‘fuel cell
9 savings’ means the electricity saved by a fuel cell
10 that is installed after the date of enactment of this
11 section, or by upgrading a fuel cell that commenced
12 operation on or before the date of enactment of this
13 section, as a result of the greater efficiency with
14 which the fuel cell transforms fuel into electricity as
15 compared with sources of electricity delivered
16 through the grid, provided that—

17 “(A) the fuel cell meets such requirements
18 relating to efficiency and other operating char-
19 acteristics as the Federal Energy Regulatory
20 Commission may promulgate by regulation; and

21 “(B) the net sales of electricity from the
22 fuel cell to customers not consuming the ther-
23 mal output from the fuel cell, if any, do not ex-
24 ceed 50 percent of the total annual electricity
25 generation by the fuel cell.

1 “(9) INDEPENDENT POWER PRODUCTION FA-
2 CILITY.—The term ‘independent power production
3 facility’ means a facility—

4 “(A) that is used for the generation of
5 electric energy, at least 80 percent of which is
6 sold at wholesale; and

7 “(B) the sales of the output of which are
8 not subject to retail rate regulation or setting
9 of retail rates by—

10 “(i) a State regulatory authority;

11 “(ii) a State or political subdivision
12 thereof (or an agency or instrumentality
13 of, or corporation wholly owned by, either
14 of the foregoing);

15 “(iii) an electric cooperative; or

16 “(iv) an Indian tribe pursuant to trib-
17 al law.

18 “(10) LONG-TERM CONTRACT GENERATOR.—

19 The term ‘long-term contract generator’ means a
20 qualifying small power production facility, a quali-
21 fying cogeneration facility), an independent power
22 production facility, or a facility for the production of
23 electric energy for sale to others that is owned and
24 operated by an electric cooperative that is—

25 “(A) a covered entity; and

1 that such agreements are not between enti-
2 ties that are affiliates of one another.

3 “(11) MERCHANT COAL UNIT.—The term ‘mer-
4 chant coal unit’ means a coal-fueled unit that—

5 “(A) is or is part of a covered entity;

6 “(B) is not owned by a Federal, State, or
7 regional agency or power authority; and

8 “(C) generates electricity solely for sale to
9 others, provided that all or a portion of such
10 sales are made by a separate legal entity that—

11 “(i) has a full or partial ownership or
12 leasehold interest in the unit, as certified
13 in accordance with such requirements as
14 the Administrator shall prescribe; and

15 “(ii) is not subject to retail rate regu-
16 lation or setting of retail rates by—

17 “(I) a State regulatory authority;

18 “(II) a State or political subdivi-
19 sion thereof (or an agency or instru-
20 mentality of, or corporation wholly
21 owned by, either of the foregoing);

22 “(III) an electric cooperative; or

23 “(IV) an Indian tribe pursuant
24 to tribal law.

1 “(12) MERCHANT COAL UNIT SALES.—The
2 term ‘merchant coal unit sales’ means sales to oth-
3 ers of electricity generated by a merchant coal unit
4 that are made by the owner or leaseholder described
5 in paragraph (11)(C).

6 “(13) NEW COAL-FUELED UNIT.—The term
7 ‘new coal-fueled unit’ means a coal-fueled unit that
8 commenced operation on or after January 1, 2009
9 and before January 1, 2013.

10 “(14) NEW MERCHANT COAL UNIT.—The term
11 ‘new merchant coal unit’ means a merchant coal
12 unit—

13 “(A) that commenced operation on or after
14 January 1, 2009 and before January 1, 2013;
15 and

16 “(B) the actual, on-site construction of
17 which commenced prior to January 1, 2009.

18 “(15) QUALIFIED HYDROPOWER.—The term
19 ‘qualified hydropower’ means—

20 “(A) energy produced from increased effi-
21 ciency achieved, or additions of capacity made,
22 on or after January 1, 1988, at a hydroelectric
23 facility that was placed in service before that
24 date and does not include additional energy
25 generated as a result of operational changes not

1 directly associated with efficiency improvements
2 or capacity additions; or

3 “(B) energy produced from generating ca-
4 pacity added to a dam on or after January 1,
5 1988, provided that the Federal Energy Regu-
6 latory Commission certifies that—

7 “(i) the dam was placed in service be-
8 fore the date of the enactment of this sec-
9 tion and was operated for flood control,
10 navigation, or water supply purposes and
11 was not producing hydroelectric power
12 prior to the addition of such capacity;

13 “(ii) the hydroelectric project installed
14 on the dam is licensed (or is exempt from
15 licensing) by the Federal Energy Regu-
16 latory Commission and is in compliance
17 with the terms and conditions of the li-
18 cense or exemption, and with other appli-
19 cable legal requirements for the protection
20 of environmental quality, including applica-
21 ble fish passage requirements; and

22 “(iii) the hydroelectric project in-
23 stalled on the dam is operated so that the
24 water surface elevation at any given loca-
25 tion and time that would have occurred in

1 the absence of the hydroelectric project is
2 maintained, subject to any license or ex-
3 emption requirements that require changes
4 in water surface elevation for the purpose
5 of improving the environmental quality of
6 the affected waterway.

7 “(16) QUALIFYING SMALL POWER PRODUCTION
8 FACILITY; QUALIFYING COGENERATION FACILITY.—
9 The terms ‘qualifying small power production facil-
10 ity’ and ‘qualifying cogeneration facility’ have the
11 meanings given those terms in section 3(17)(C) and
12 3(18)(B) of the Federal Power Act (16 U.S.C.
13 796(17)(C) and 796(18)(B)).

14 “(17) RENEWABLE ENERGY RESOURCE.—The
15 term ‘renewable energy resource’ means each of the
16 following:

17 “(A) Wind energy.

18 “(B) Solar energy.

19 “(C) Geothermal energy.

20 “(D) Renewable biomass.

21 “(E) Biogas derived exclusively from re-
22 newable biomass.

23 “(F) Biofuels derived exclusively from re-
24 newable biomass.

25 “(G) Qualified hydropower.

1 “(H) Marine and hydrokinetic renewable
2 energy, as that term is defined in section 632
3 of the Energy Independence and Security Act
4 of 2007 (42 U.S.C. 17211).

5 “(18) SMALL LDC.—The term ‘small LDC’
6 means, for any given year, an electricity local dis-
7 tribution company that delivered less than 4,000,000
8 megawatt hours of electric energy directly to retail
9 consumers in the preceding year.

10 “(19) STATE REGULATORY AUTHORITY.—The
11 term ‘State regulatory authority’ has the meaning
12 given that term in section 3(17) of the Public Utility
13 Regulatory Policies Act of 1978 (16 U.S.C.
14 2602(17)).

15 “(20) USEFUL THERMAL ENERGY.—The term
16 ‘useful thermal energy’ has the meaning given that
17 term in section 371(7) of the Energy Policy and
18 Conservation Act (42 U.S.C. 6341(7)).

19 “(b) ELECTRICITY LOCAL DISTRIBUTION COMPA-
20 NIES.—

21 “(1) DISTRIBUTION OF ALLOWANCES.—The
22 Administrator shall distribute to electricity local dis-
23 tribution companies for the benefit of retail rate-
24 payers the quantity of emission allowances allocated
25 for the following vintage year pursuant to section

1 771(a)(1). Notwithstanding the preceding sentence,
2 the Administrator shall withhold from distribution
3 under this subsection a quantity of emission allow-
4 ances equal to the lesser of 14.3 percent of the
5 quantity of emission allowances allocated under sec-
6 tion 771(a)(1) for the relevant vintage year, or 105
7 percent of the emission allowances for the relevant
8 vintage year that the Administrator anticipates will
9 be distributed to merchant coal units and to long-
10 term contract generators, respectively, under sub-
11 sections (c) and (d). If not required by subsections
12 (c) and (d) to distribute all of these reserved allow-
13 ances, the Administrator shall distribute any remain-
14 ing emission allowances to electricity local distribu-
15 tion companies in accordance with this subsection.

16 “(2) DISTRIBUTION BASED ON EMISSIONS.—

17 “(A) IN GENERAL.—For each vintage year,
18 50 percent of the emission allowances available
19 for distribution under paragraph (1), after re-
20 serving allowances for distribution under sub-
21 sections (c) and (d), shall be distributed by the
22 Administrator among individual electricity local
23 distribution companies ratably based on the an-
24 nual average carbon dioxide emissions attrib-
25 utable to generation of electricity delivered at

1 retail by each such company during the base
2 period determined under subparagraph (B).

3 “(B) BASE PERIOD.—

4 “(i) VINTAGE YEARS 2012 AND 2013.—

5 For vintage years 2012 and 2013, an elec-
6 tricity local distribution company’s base
7 period shall be—

8 “(I) calendar years 2006 through
9 2008; or

10 “(II) any 3 consecutive calendar
11 years between 1999 and 2008, inclu-
12 sive, that such company selects, pro-
13 vided that the company timely informs
14 the Administrator of such selection.

15 “(ii) VINTAGE YEARS 2014 AND
16 THEREAFTER.—For vintage years 2014
17 and thereafter, the base period shall be—

18 “(I) the base period selected
19 under clause (i); or

20 “(II) calendar year 2012, in the
21 case of an electricity local distribution
22 company that owns, co-owns, or pur-
23 chases through a power purchase
24 agreement (whether directly or
25 through a cooperative arrangement) a

1 substantial portion of the electricity
2 generated by a new coal-fueled unit,
3 provided that such company timely in-
4 forms the Administrator of its election
5 to use 2012 as its base period.

6 “(C) DETERMINATION OF EMISSIONS.—

7 “(i) DETERMINATION FOR 1999–
8 2008.—As part of the regulations promul-
9 gated pursuant to subsection (g), the Ad-
10 ministrator, after consultation with the
11 Energy Information Administration, shall
12 determine the average amount of carbon
13 dioxide emissions attributable to genera-
14 tion of electricity delivered at retail by
15 each electricity local distribution company
16 for each of the years 1999 through 2008,
17 taking into account entities’ electricity gen-
18 eration, electricity purchases, and elec-
19 tricity sales. In the case of any electricity
20 local distribution company that owns, co-
21 owns, or purchases through a power pur-
22 chase agreement (whether directly or
23 through a cooperative arrangement) a sub-
24 stantial portion of the electricity generated
25 by, a coal-fueled unit that commenced op-

1 eration after January 1, 2006, and before
2 December 31, 2008, the Administrator
3 shall adjust the emissions attributable to
4 such company's retail deliveries in calendar
5 years 2006 through 2008 to reflect the
6 emissions that would have occurred if the
7 relevant unit were in operation during the
8 entirety of such 3-year period.

9 “(ii) ADJUSTMENTS FOR NEW COAL-
10 FUELED UNITS.—

11 “(I) VINTAGE YEARS 2012 AND
12 2013.—For purposes of emission al-
13 lowance distributions for vintage years
14 2012 and 2013, in the case of any
15 electricity local distribution company
16 that owns, co-owns, or purchases
17 through a power purchase agreement
18 (whether directly or through a cooper-
19 ative arrangement) a substantial por-
20 tion of the electricity generated by, a
21 new coal-fueled unit, the Adminis-
22 trator shall adjust the emissions at-
23 tributable to such company's retail de-
24 liveries in the applicable base period
25 to reflect the emissions that would

1 have occurred if the new coal-fueled
2 unit were in operation during such pe-
3 riod.

4 “(II) VINTAGE YEAR 2014 AND
5 THEREAFTER.—Not later than nec-
6 essary for use in making emission al-
7 lowance distributions under this sub-
8 section for vintage year 2014, the Ad-
9 ministrator shall, for any electricity
10 local distribution company that owns,
11 co-owns, or purchases through a
12 power purchase agreement (whether
13 directly or through a cooperative ar-
14 rangement) a substantial portion of
15 the electricity generated by a new
16 coal-fueled unit and has selected cal-
17 endar year 2012 as its base period
18 pursuant to subparagraph (B)(ii)(II),
19 determine the amount of carbon diox-
20 ide emissions attributable to genera-
21 tion of electricity delivered at retail by
22 such company in calendar year 2012.
23 If the relevant new coal-fueled unit
24 was not yet operational by January 1,
25 2012, the Administrator shall adjust

1 such determination to reflect the
2 emissions that would have occurred if
3 such unit were in operation for all of
4 calendar year 2012.

5 “(iii) REQUIREMENTS.—Determina-
6 tions under this paragraph shall be as pre-
7 cise as practicable, taking into account the
8 nature of data currently available and the
9 nature of markets and regulation in effect
10 in various regions of the country. The fol-
11 lowing requirements shall apply to such de-
12 terminations:

13 “(I) The Administrator shall de-
14 termine the amount of fossil fuel-
15 based electricity delivered at retail by
16 each electricity local distribution com-
17 pany, and shall use appropriate emis-
18 sion factors to calculate carbon diox-
19 ide emissions associated with the gen-
20 eration of such electricity.

21 “(II) Where it is not practical to
22 determine the precise fuel mix for the
23 electricity delivered at retail by an in-
24 dividual electricity local distribution
25 company, the Administrator may use

1 the best available data, including aver-
2 age data on a regional basis with ref-
3 erence to Regional Transmission Or-
4 ganizations or regional entities (as
5 that term is defined in section
6 215(a)(7) of the Federal Power Act
7 (16 U.S.C. 824o(a)(7)), to estimate
8 fuel mix and emissions. Different
9 methodologies may be applied in dif-
10 ferent regions if appropriate to obtain
11 the most accurate estimate.

12 “(3) DISTRIBUTION BASED ON DELIVERIES.—

13 “(A) INITIAL FORMULA.—Except as pro-
14 vided in subparagraph (B), for each vintage
15 year, the Administrator shall distribute 50 per-
16 cent of the emission allowances available for
17 distribution under paragraph (1), after reserv-
18 ing allowances for distribution under sub-
19 sections (c) and (d), among individual elec-
20 tricity local distribution companies ratably
21 based on each electricity local distribution com-
22 pany’s annual average retail electricity deliv-
23 eries for calendar years 2006 through 2008, un-
24 less the owner or operator of the company se-
25 lects 3 other consecutive years between 1999

1 and 2008, inclusive, and timely notifies the Ad-
2 ministrator of its selection.

3 “(B) UPDATING.—Prior to distributing
4 2015 vintage year emission allowances under
5 this paragraph and at 3-year intervals there-
6 after, the Administrator shall update the dis-
7 tribution formula under this paragraph to re-
8 flect changes in each electricity local distribu-
9 tion company’s service territory since the most
10 recent formula was established. For each suc-
11 cessive 3-year period, the Administrator shall
12 distribute allowances ratably among individual
13 electricity local distribution companies based on
14 the product of—

15 “(i) each electricity local distribution
16 company’s average annual deliveries per
17 customer during calendar years 2006
18 through 2008, or during the 3 alternative
19 consecutive years selected by such company
20 under subparagraph (A); and

21 “(ii) the number of customers of such
22 electricity local distribution company in the
23 most recent year in which the formula is
24 updated under this subparagraph.

1 “(4) PROHIBITION AGAINST EXCESS DISTRIBUTU-
2 TIONS.—The regulations promulgated under sub-
3 section (g) shall ensure that, notwithstanding para-
4 graphs (2) and (3), no electricity local distribution
5 company shall receive a greater quantity of allow-
6 ances under this subsection than is necessary to off-
7 set any increased electricity costs to such company’s
8 retail ratepayers, including increased costs attrib-
9 utable to purchased power costs, due to enactment
10 of this title. Any emission allowances withheld from
11 distribution to an electricity local distribution com-
12 pany pursuant to this paragraph shall be distributed
13 among all remaining electricity local distribution
14 companies ratably based on emissions pursuant to
15 paragraph (2).

16 “(5) USE OF ALLOWANCES.—

17 “(A) RATEPAYER BENEFIT.—Emission al-
18 lowances distributed to an electricity local dis-
19 tribution company under this subsection shall
20 be used exclusively for the benefit of retail rate-
21 payers of such electricity local distribution com-
22 pany and may not be used to support electricity
23 sales or deliveries to entities or persons other
24 than such ratepayers.

1 “(B) RATEPAYER CLASSES.—In using
2 emission allowances distributed under this sub-
3 section for the benefit of ratepayers, an elec-
4 tricity local distribution company shall ensure
5 that ratepayer benefits are distributed—

6 “(i) among ratepayer classes ratably
7 based on electricity deliveries to each class;
8 and

9 “(ii) equitably among individual rate-
10 payers within each ratepayer class, includ-
11 ing entities that receive emission allow-
12 ances pursuant to part F.

13 “(C) LIMITATION.—In general, an elec-
14 tricity local distribution company shall not use
15 the value of emission allowances distributed
16 under this subsection to provide to any rate-
17 payer a rebate that is based solely on the quan-
18 tity of electricity delivered to such ratepayer.
19 To the extent an electricity local distribution
20 company uses the value of emission allowances
21 distributed under this subsection to provide re-
22 bates, it shall, to the maximum extent prac-
23 ticable, provide such rebates with regard to the
24 fixed portion of ratepayers’ bills or as a fixed
25 credit or rebate on electricity bills.

1 “(D) RESIDENTIAL AND INDUSTRIAL
2 RATEPAYERS.—Notwithstanding subparagraph
3 (C), if compliance with the requirements of this
4 title results (or would otherwise result) in an
5 increase in electricity costs for residential or in-
6 dustrial retail ratepayers of any given electricity
7 local distribution company (including entities
8 that receive emission allowances pursuant to
9 part F), such electricity local distribution com-
10 pany—

11 “(i) shall pass through to residential
12 retail ratepayers as a class their ratable
13 share (based on deliveries to each rate-
14 payer class) of the value of the emission al-
15 lowances that reduce electricity cost im-
16 pacts on such ratepayers; and

17 “(ii) shall pass through to industrial
18 ratepayers as a class their ratable share
19 (based on deliveries to each ratepayer
20 class) of the value of the emission allow-
21 ances that reduce electricity cost impacts
22 on such ratepayers. The electricity local
23 distribution company may do so based on
24 the quantity of electricity delivered to indi-
25 vidual industrial retail ratepayers.

1 “(E) GUIDELINES.—As part of the regula-
2 tions promulgated under subsection (g), the Ad-
3 ministrators shall, after consultation with State
4 regulatory authorities, prescribe guidelines for
5 the implementation of the requirements of this
6 paragraph. Such guidelines shall include—

7 “(i) requirements to ensure that resi-
8 dential and industrial retail ratepayers (in-
9 cluding entities that receive emission allow-
10 ances under part F) receive their ratable
11 share of the value of the allowances dis-
12 tributed to each electricity local distribu-
13 tion company pursuant to this subsection;
14 and

15 “(ii) requirements for measurement,
16 verification, reporting, and approval of
17 methods used to assure the use of allow-
18 ance values to benefit retail ratepayers.

19 “(6) REGULATORY PROCEEDINGS.—

20 “(A) REQUIREMENT.—No electricity local
21 distribution company shall be eligible to receive
22 emission allowances under this subsection or
23 subsection (e) unless the State regulatory au-
24 thority with authority over such company’s re-
25 tail rates, or the entity with authority to regu-

1 late or set retail electricity rates of an elec-
2 tricity local distribution company not regulated
3 by a State regulatory authority, has—

4 “(i) after public notice and an oppor-
5 tunity for comment, promulgated a regula-
6 tion or completed a rate proceeding (or the
7 equivalent, in the case of a ratemaking en-
8 tity other than a State regulatory author-
9 ity) that provides for the full implementa-
10 tion of the requirements of paragraph (5)
11 of this subsection and the requirements of
12 subsection (e); and

13 “(ii) made available to the Adminis-
14 trator and the public a report describing,
15 in adequate detail, the manner in which
16 the requirements of paragraph (5) and the
17 requirements of subsection (e) will be im-
18 plemented.

19 “(B) UPDATING.—The Administrator shall
20 require, as a condition of continued receipt of
21 emission allowances under this subsection by an
22 electricity local distribution company, that a
23 new regulation be promulgated or rate pro-
24 ceeding be completed , after public notice and
25 an opportunity for comment, and a new report

1 be made available to the Administrator and the
2 public, pursuant to subparagraph (A), not less
3 frequently than every 5 years.

4 “(7) PLANS AND REPORTING.—

5 “(A) REGULATIONS.—As part of the regu-
6 lations promulgated under subsection (g), the
7 Administrator shall prescribe requirements gov-
8 erning plans and reports to be submitted in ac-
9 cordance with this paragraph.

10 “(B) PLANS.—Not later than April 30 of
11 2011 and every 5 years thereafter through
12 2026, each electricity local distribution com-
13 pany shall submit to the Administrator a plan,
14 approved by the State regulatory authority or
15 other entity charged with regulating tor setting
16 the retail rates of such company, describing
17 such company’s plans for the disposition of the
18 value of emission allowances to be received pur-
19 suant to this subsection and subsection (e), in
20 accordance with the requirements of this sub-
21 section and subsection (e). Such plan shall in-
22 clude a description of the manner in which the
23 company will provide to industrial retail rate-
24 payers (including entities that receive emission

1 allowances under part F) their ratable share of
2 the value of such allowances.

3 “(C) REPORTS.—Not later than June 30,
4 2013, and each calendar year thereafter
5 through 2031, each electricity local distribution
6 company shall submit a report to the Adminis-
7 trator, and to the relevant State regulatory au-
8 thority or other entity charged with regulating
9 or setting the retail electricity rates of such
10 company, describing the disposition of the value
11 of any emission allowances received by such
12 company in the prior calendar year pursuant to
13 this subsection and subsection (e), including—

14 “(i) a description of sales, transfer,
15 exchange, or use by the company for com-
16 pliance with obligations under this title, of
17 any such emission allowances;

18 “(ii) the monetary value received by
19 the company, whether in money or in some
20 other form, from the sale, transfer, or ex-
21 change of any such emission allowances;

22 “(iii) the manner in which the com-
23 pany’s disposition of any such emission al-
24 lowances complies with the requirements of
25 this subsection and of subsection (e), in-

1 cluding each of the requirements of para-
2 graph (5) of this subsection, including the
3 requirement that industrial retail rate-
4 payers (including entities that receive
5 emission allowances under part F) receive
6 their ratable share of the value of such al-
7 lowances; and

8 “(iv) such other information as the
9 Administrator may require pursuant to
10 subparagraph (A).

11 “(D) PUBLICATION.—The Administrator
12 shall make available to the public all plans and
13 reports submitted under this subsection, includ-
14 ing by publishing such plans and reports on the
15 Internet.

16 “(8) ADMINISTRATOR AUDIT REPORTS.—

17 “(A) IN GENERAL.—Each year, the Ad-
18 ministrator shall audit a representative sample
19 of electricity local distribution companies to en-
20 sure that emission allowances distributed under
21 this subsection have been used exclusively for
22 the benefit of retail ratepayers and that such
23 companies are complying with the requirements
24 of this subsection and of subsection (e), includ-
25 ing the requirement that residential and indus-

1 trial retail ratepayers (including entities that
2 receive emission allowances under part F) re-
3 ceive their ratable share of the value of such al-
4 lowances. The Administrator shall assess the
5 degree to which electric local distribution com-
6 panies have maintained a marginal electric
7 price signal while protecting consumers on total
8 cost using the value of emissions allowances. In
9 selecting companies for audit, the Adminis-
10 trator shall take into account any credible evi-
11 dence of noncompliance with such requirements.
12 The Administrator shall make available to the
13 public a report describing the results of each
14 such audit, including by publishing such report
15 on the Internet.

16 “(B) GAO AUDIT REPORT.—Not later
17 than April 30, 2015, and every 3 years there-
18 after through 2026, the Comptroller General of
19 the United States, incorporating results from
20 the Administrators’ audit report and other rel-
21 evant information including distribution com-
22 pany reports, shall conduct an in-depth evalua-
23 tion and make available to the public a report
24 on the investments made pursuant to paragraph
25 (5). Said report shall be made available to the

1 State regulatory authority, or the entity with
2 authority to regulate or set retail electricity
3 rates in the case of an electricity distribution
4 company that is not regulated by a State regu-
5 latory authority, and shall include a description
6 of how the distribution companies in the audit
7 meet or fail to meet the requirement of para-
8 graph (5), including for investments made in
9 cost-effective end-use energy efficiency pro-
10 grams, the lifetime and annual energy saving
11 benefits, and capacity benefits of said pro-
12 grams.

13 “(C) ADMINISTRATOR COST CONTAINMENT
14 REPORT.—Not later than April 30, 2015 and
15 every 3 years thereafter through 2026, the Ad-
16 ministrator shall transmit a report to Congress
17 containing an evaluation of the disposition of
18 the value of emission allowances received pursu-
19 ant to this subsection and subsection (e) and
20 recommendations of ways to more effectively di-
21 rect the value of allowances to reduce costs for
22 consumers, contain the overall costs of the
23 greenhouse gas emissions reduction program,
24 and meet the pollution reduction targets of the
25 Act. The Administrator shall make available to

1 the public such report, including by publishing
2 such report on the Internet.

3 “(9) ENFORCEMENT.—A violation of any re-
4 quirement of this subsection or of subsection (e), ir-
5 respective of approval by a State regulatory author-
6 ity, shall be a violation of this Act. Each emission
7 allowance the value of which is used in violation of
8 the requirements of this subsection or of subsection
9 (e) shall be a separate violation.

10 “(c) MERCHANT COAL UNITS.—

11 “(1) QUALIFYING EMISSIONS.—The qualifying
12 emissions for a merchant coal unit for a given cal-
13 endar year shall be the product of the number of
14 megawatt hours of merchant coal unit sales gen-
15 erated by such unit in such calendar year and the
16 average carbon dioxide emissions per megawatt hour
17 generated by such unit during the base period under
18 paragraph (2), provided that the number of mega-
19 watt hours in a given calendar year for purposes of
20 such calculation shall be reduced in proportion to
21 the portion of such unit’s carbon dioxide emissions
22 that are either—

23 “(A) captured and sequestered in such cal-
24 endar year; or

1 “(B) attributable to the combustion or gas-
2 fication of biomass, to the extent that the
3 owner or operator of the unit is not required to
4 hold emission allowances for such emissions.

5 “(2) BASE PERIOD.—For purposes of this sub-
6 section, the base period for a merchant coal unit
7 shall be—

8 “(A) calendar years 2006 through 2008; or

9 “(B) in the case of a new merchant coal
10 unit—

11 “(i) the first full calendar year of op-
12 eration of such unit, if such unit com-
13 mences operation before January 1, 2012;

14 “(ii) calendar year 2012, if such unit
15 commences operation on or after January
16 1, 2012, and before October 1, 2012; or

17 “(iii) calendar year 2013, if such unit
18 commences operation on or after October
19 1, 2012, and before January 1, 2013.

20 “(3) PHASE-DOWN SCHEDULE.—The Adminis-
21 trator shall identify an annual phase-down factor,
22 applicable to distributions to merchant coal units for
23 each of vintage years 2012 through 2029, that cor-
24 responds to the overall decline in the amount of
25 emission allowances allocated to the electricity sector

1 in such years pursuant to section 771(a)(1). Such
2 factor shall—

3 “(A) for vintage year 2012, be equal to
4 1.0;

5 “(B) for each of vintage years 2013
6 through 2029, correspond to the quotient of—

7 “(i) the quantity of emission allow-
8 ances allocated under section 771(a)(1) for
9 such vintage year; divided by

10 “(ii) the quantity of emission allow-
11 ances allocated under section 771(a)(1) for
12 vintage year 2012.

13 “(4) DISTRIBUTION OF EMISSION ALLOW-
14 ANCES.—Not later than March 1 of 2013 and each
15 calendar year through 2030, the Administrator shall
16 distribute emission allowances of the preceding vin-
17 tage year to the owner or operator of each merchant
18 coal unit described in subsection (a)(11)(C) in an
19 amount equal to the product of—

20 “(A) 0.5;

21 “(B) the qualifying emissions for such
22 merchant coal unit for the preceding year, as
23 determined under paragraph (1); and

1 “(C) the phase-down factor for the pre-
2 ceding calendar year, as identified under para-
3 graph (3).

4 “(5) ADJUSTMENT.—

5 “(A) STUDY.—Not later than July 1,
6 2014, the Administrator, in consultation with
7 the Federal Energy Regulatory Commission,
8 shall complete a study to determine whether the
9 allocation formula under paragraph (3) is re-
10 sulting in, or is likely to result in, windfall prof-
11 its to merchant coal generators or substantially
12 disparate treatment of merchant coal genera-
13 tors operating in different markets or regions.

14 “(B) REGULATION.—If the Administrator,
15 in consultation with the Federal Energy Regu-
16 latory Commission, makes an affirmative find-
17 ing of windfall profits or disparate treatment
18 under subparagraph (A), the Administrator
19 shall, not later than 18 months after the com-
20 pletion of the study described in subparagraph
21 (A), promulgate regulations providing for the
22 adjustment of the allocation formula under
23 paragraph (3) to mitigate, to the extent prac-
24 ticable, such windfall profits, if any, and such
25 disparate treatment, if any.

1 “(6) LIMITATION ON ALLOWANCES.—Notwith-
2 standing paragraph (4) or (5), for each vintage year
3 the Administrator shall distribute under this sub-
4 section no more than 10 percent of the total quan-
5 tity of emission allowances available for such vintage
6 year for distribution to the electricity sector under
7 section 771(a)(1). If the quantity of emission allow-
8 ances that would otherwise be distributed pursuant
9 to paragraph (4) or (5) for any vintage year would
10 exceed such limit, the Administrator shall distribute
11 10 percent of the total emission allowances available
12 for distribution under section 771(a)(1) for such vin-
13 tage year ratably among merchant coal generators
14 based on the applicable formula under paragraph (4)
15 or (5).

16 “(7) ELIGIBILITY.—The owner or operator of a
17 merchant coal unit shall not be eligible to receive
18 emission allowances under this subsection for any
19 vintage year for which such owner or operator has
20 elected to receive emission allowances for the same
21 unit under subsection (d).

22 “(d) LONG-TERM CONTRACT GENERATORS.—

23 “(1) DISTRIBUTION.—Not later than March 1,
24 2013, and each calendar year through 2030, the Ad-
25 ministrator shall distribute to the owner or operator

1 of each long-term contract generator a quantity of
2 emission allowances of the preceding vintage year
3 that is equal to the sum of—

4 “(A) the number of tons of carbon dioxide
5 emitted as a result of a qualifying electricity
6 sales agreement referred to in subsection
7 (a)(10)(B)(i); and

8 “(B) the incremental number of tons of
9 carbon dioxide emitted solely as a result of a
10 qualifying thermal sales agreement referred to
11 in subsection (a)(10)(B)(ii), provided that in no
12 event shall the Administrator distribute more
13 than 1 emission allowance for the same ton of
14 emissions.

15 “(2) LIMITATION ON ALLOWANCES.—Notwith-
16 standing paragraph (1), for each vintage year the
17 Administrator shall distribute under this subsection
18 no more than 4.3 percent of the total quantity of
19 emission allowances available for such vintage year
20 for distribution to the electricity sector under section
21 771(a)(1). If the quantity of emission allowances
22 that would otherwise be distributed pursuant to
23 paragraph (1) for any vintage year would exceed
24 such limit, the Administrator shall distribute 4.3
25 percent of the total emission allowances available for

1 distribution under section 771(a)(1) for such vintage
2 year ratably among long-term contract generators
3 based on paragraph (1).

4 “(3) ELIGIBILITY.—

5 “(A) FACILITY ELIGIBILITY.—The owner
6 or operator of a facility shall cease to be eligible
7 to receive emission allowances under this sub-
8 section upon the earliest date on which the fa-
9 cility no longer meets each and every element of
10 the definition of a long-term contract generator
11 under subsection (a)(10).

12 “(B) CONTRACT ELIGIBILITY.—The owner
13 or operator of a facility shall cease to be eligible
14 to receive emission allowances under this sub-
15 section based on an electricity or thermal sales
16 agreement referred to in subsection (a)(10)(B)
17 upon the earliest date that such agreement—

18 “(i) expires;

19 “(ii) is terminated; or

20 “(iii) is amended in any way that
21 changes the location of the facility, the
22 price (whether a fixed price or price for-
23 mula) for electricity or thermal energy sold
24 under such agreement, the quantity of
25 electricity or thermal energy sold under the

1 agreement, or the expiration or termi-
2 nation date of the agreement.

3 “(4) DEMONSTRATION OF ELIGIBILITY.—To be
4 eligible to receive allowance distributions under this
5 subsection, the owner or operator of a long-term
6 contract generator shall submit each of the following
7 in writing to the Administrator within 180 days
8 after the date of enactment of this title, and not
9 later than September 30 of each vintage year for
10 which such generator wishes to receive emission al-
11 lowances:

12 “(A) A certificate of representation de-
13 scribed in section 700(15).

14 “(B) An identification of each owner and
15 each operator of the facility.

16 “(C) An identification of the units at the
17 facility and the location of the facility.

18 “(D) A written certification by the des-
19 ignated representative that the facility meets all
20 the requirements of the definition of a long-
21 term contract generator.

22 “(E) The expiration date of each quali-
23 fying electricity or thermal sales agreement re-
24 ferred to in subsection (a)(10)(B).

1 “(F) A copy of each qualifying electricity
2 or thermal sales agreement referred to in sub-
3 section (a)(10)(B).

4 “(5) NOTIFICATION.—Not later than 30 days
5 after, in accordance with paragraph (3), a facility or
6 an agreement ceases to meet the eligibility require-
7 ments for distribution of emission allowances pursu-
8 ant to this subsection, the designated representative
9 of such facility shall notify the Administrator in
10 writing when, and on what basis, such facility or
11 agreement ceased to meet such requirements.

12 “(e) SMALL LDCs.—

13 “(1) DISTRIBUTION.—The Administrator shall,
14 in accordance with this subsection, distribute emis-
15 sion allowances allocated pursuant to section
16 771(a)(1) for the following vintage year. Such allow-
17 ances shall be distributed ratably among small
18 LDCs based on historic emissions in accordance with
19 the same measure of such emissions applied to each
20 such small LDC for the relevant vintage year under
21 subsection (b)(2) of this section.

22 “(2) USES.—A small LDC receiving allowances
23 under this section shall use such allowances exclu-
24 sively for the following purposes:

1 “(A) Cost-effective programs to achieve
2 electricity savings, provided that such savings
3 shall not be transferred or used for compliance
4 with any renewable electricity standard estab-
5 lished under the Public Utility Regulatory Poli-
6 cies Act of 1978 (16 U.S.C. 2601 et seq.).

7 “(B) Deployment of technologies to gen-
8 erate electricity from renewable energy re-
9 sources, provided that any Federal renewable
10 electricity credits issued based on generation
11 supported under this section shall be submitted
12 to the Federal Energy Regulatory Commission
13 for voluntary retirement and shall not be used
14 for compliance with the Public Utility Regu-
15 latory Policies Act of 1978 (16 U.S.C. 2601 et
16 seq.).

17 “(C) Assistance programs to reduce elec-
18 tricity costs for low-income residential rate-
19 payers of such small LDC, provided that such
20 assistance is made available equitably to all res-
21 idential ratepayers below a certain income level,
22 which shall not be higher than 200 percent of
23 the poverty line (as that term is defined in sec-
24 tion 673(2) of the Community Services Block
25 Grant Act (42 U.S.C. 9902(2)).

1 “(3) REQUIREMENTS.—As part of the regula-
2 tions promulgated under subsection (g), the Admin-
3 istrator shall prescribe—

4 “(A) after consultation with the Federal
5 Energy Regulatory Commission, requirements
6 to ensure that programs and projects under
7 paragraph (2)(A) and (B) are consistent with
8 the standards established by, and effectively
9 supplement electricity savings and generation of
10 electricity from renewable energy resources
11 achieved by, the Combined Efficiency and Re-
12 newable Electricity Standard established by
13 law;

14 “(B) eligibility criteria and guidelines for
15 consumer assistance programs for low-income
16 residential ratepayers under paragraph (2)(C);
17 and

18 “(C) such other requirements as the Ad-
19 ministrator determines appropriate to ensure
20 compliance with the requirements of this sub-
21 section.

22 “(4) REPORTING.—Reports submitted under
23 subsection (b)(7) shall include, in accordance with
24 such requirements as the Administrator may pre-
25 scribe—

1 “(A) a description of any facilities de-
2 ployed under paragraph (2)(A), the quantity of
3 resulting electricity generation from renewable
4 energy resources;

5 “(B) an assessment demonstrating the
6 cost-effectiveness of, and electricity savings
7 achieved by, programs supported under para-
8 graph (2)(B); and

9 “(C) a description of assistance provided to
10 low-income retail ratepayers under paragraph
11 (2)(C).

12 “(f) CERTAIN COGENERATION FACILITIES.—

13 “(1) ELIGIBLE COGENERATION FACILITIES.—
14 For purposes of this subsection, an ‘eligible cogen-
15 eration facility’ is a facility that—

16 “(A) is a qualifying co-generation facility
17 (as that term is defined in section 3(18)(B) of
18 the Federal Power Act (16 U.S.C. 796(18)(B));

19 “(B) derives 80 percent or more of its heat
20 input from coal, petroleum coke, or any com-
21 bination of these 2 fuels;

22 “(C) has a nameplate capacity of 100
23 megawatts or greater;

24 “(D) was in operation as of January 1,
25 2009, and remains in operation as of the date

1 of any distribution of emission allowances under
2 this subsection;

3 “(E) in calendar years 2006 through 2008
4 sold, and as of the date of any distribution of
5 emission allowances under this section sells,
6 steam or electricity directly and solely to mul-
7 tiple, separately-owned industrial or commercial
8 facilities co-located at the same site with the co-
9 generation facility; and

10 “(F) is not eligible to receive allowances
11 under any other subsection of this section or
12 under part F of this title.

13 “(2) DISTRIBUTION.—The Administrator shall
14 distribute the emission allowances allocated pursuant
15 to section 771(a)(1) to owners or operators of eligi-
16 ble cogeneration facilities ratably based on the car-
17 bon dioxide emissions of each such facility in cal-
18 endar years 2006 through 2008. The Adminis-
19 trator—

20 “(A) shall not, in any year, distribute
21 emission allowances under this subsection to the
22 owner or operator of any eligible cogeneration
23 facility in excess of the amount necessary to
24 offset such facility’s cost of compliance with the
25 requirements of this title in that year; and

1 “(B) may distribute such allowances over a
2 period of years if annual distributions under
3 this subsection would otherwise exceed the limi-
4 tation in subparagraph (A), provided that in no
5 event shall distributions be made under this
6 subsection after calendar year 2025.

7 “(3) REQUIREMENTS.—The Administrator
8 shall, by regulation, establish requirements to ensure
9 that the value of any emission allowances distributed
10 pursuant to this subsection are passed through, on
11 an equitable basis, to the facilities to which the rel-
12 evant cogeneration facility provides electricity or
13 steam deliveries, including any facility owned or op-
14 erated by the owner or operator of the cogeneration
15 facility.

16 “(g) REGULATIONS.—Not later than 2 years after
17 the date of enactment of this title, the Administrator, in
18 consultation with the Federal Energy Regulatory Commis-
19 sion, shall promulgate regulations to implement the re-
20 quirements of this section.

21 **“SEC. 773. NATURAL GAS CONSUMERS.**

22 “(a) DEFINITION.—For purposes of this section, the
23 term ‘cost-effective’, with respect to an energy efficiency
24 program, means that the program meets the Total Re-
25 source Cost Test, which requires that the net present

1 value of economic benefits over the life of the program,
2 including avoided supply and delivery costs and deferred
3 or avoided investments, is greater than the net present
4 value of the economic costs over the life of the program,
5 including program costs and incremental costs borne by
6 the energy consumer.

7 “(b) ALLOCATION.—Not later than June 30, 2015,
8 and each calendar year thereafter through 2028, the Ad-
9 ministrator shall distribute to natural gas local distribu-
10 tion companies for the benefit of retail ratepayers the
11 quantity of emission allowances allocated for the following
12 vintage year pursuant to section 771(a)(2). Such allow-
13 ances shall be distributed among local natural gas dis-
14 tribution companies based on the following formula:

15 “(1) INITIAL FORMULA.—Except as provided in
16 paragraph (2), for each vintage year, the Adminis-
17 trator shall distribute emission allowances among
18 natural gas local distribution companies on a pro
19 rata basis based on each such company’s annual av-
20 erage retail natural gas deliveries for 2006 through
21 2008, unless the owner or operator of the company
22 selects 3 other consecutive years between 1999 and
23 2008, inclusive, and timely notifies the Adminis-
24 trator of its selection.

1 “(2) UPDATING.—Prior to distributing 2019
2 vintage emission allowances and at 3-year intervals
3 thereafter, the Administrator shall update the dis-
4 tribution formula under this subsection to reflect
5 changes in each natural gas local distribution com-
6 pany’s service territory since the most recent for-
7 mula was established. For each successive 3-year pe-
8 riod, the Administrator shall distribute allowances
9 on a pro rata basis among natural gas local distribu-
10 tion companies based on the product of—

11 “(A) each natural gas local distribution
12 company’s average annual natural gas deliveries
13 per customer during calendar years 2006
14 through 2008, or during the 3 alternative con-
15 secutive years selected by such company under
16 paragraph (1); and

17 “(B) the number of customers of such nat-
18 ural gas local distribution company in the most
19 recent year in which the formula is updated
20 under this paragraph.

21 “(c) USE OF ALLOWANCES.—

22 “(1) RATEPAYER BENEFIT.—Emission allow-
23 ances distributed to a natural gas local distribution
24 company under this section shall be used exclusively
25 for the benefit of retail ratepayers of such natural

1 gas local distribution company and may not be used
2 to support natural gas sales or deliveries to entities
3 or persons other than such ratepayers.

4 “(2) RATEPAYER CLASSES.—In using emission
5 allowances distributed under this section for the ben-
6 efit of ratepayers, a natural gas local distribution
7 company shall ensure that ratepayer benefits are
8 distributed—

9 “(A) among ratepayer classes on a pro
10 rata basis based on natural gas deliveries to
11 each class; and

12 “(B) equitably among individual ratepayers
13 within each ratepayer class.

14 “(3) LIMITATION.—A natural gas local dis-
15 tribution company shall not use the value of emis-
16 sion allowances distributed under this section to pro-
17 vide to any ratepayer a rebate that is based solely
18 on the quantity of natural gas delivered to such
19 ratepayer. To the extent a natural gas local distribu-
20 tion company uses the value of emission allowances
21 distributed under this section to provide rebates, it
22 shall, to the maximum extent practicable, provide
23 such rebates with regard to the fixed portion of rate-
24 payers’ bills or as a fixed creditor rebate on natural
25 gas bills.

1 “(4) ENERGY EFFICIENCY PROGRAMS.—The
2 value of no less than one-third of the emission allow-
3 ances distributed to natural gas local distribution
4 companies pursuant to this section in any calendar
5 year shall be used for cost-effective energy efficiency
6 programs for natural gas consumers. Such programs
7 must be authorized and overseen by the State regu-
8 latory authority, or by the entity with regulatory au-
9 thority over retail natural gas rates in the case of
10 a natural gas local distribution company that is not
11 regulated by a State regulatory authority.

12 “(5) GUIDELINES.—As part of the regulations
13 promulgated under subsection (h), the Administrator
14 shall prescribe specific guidelines for the implemen-
15 tation of the requirements of this subsection.

16 “(d) REGULATORY PROCEEDINGS.—

17 “(1) REQUIREMENT.—No natural gas local dis-
18 tribution company shall be eligible to receive emis-
19 sion allowances under this section unless the State
20 regulatory authority with authority over such com-
21 pany, or the entity with authority to regulate retail
22 rates of a natural gas local distribution company not
23 regulated by a State regulatory authority, has—

24 “(A) promulgated a regulation or com-
25 pleted a rate proceeding (or the equivalent, in

1 the case of a ratemaking entity other than a
2 State regulatory authority) that provides for
3 the full implementation of the requirements of
4 subsection (c); and

5 “(B) made available to the Administrator
6 and the public a report describing, in adequate
7 detail, the manner in which the requirements of
8 subsection (c) will be implemented.

9 “(2) UPDATING.—The Administrator shall re-
10 quire, as a condition of continued receipt of emission
11 allowances under this section, that a new regulation
12 be promulgated or rate proceeding be completed, and
13 a new report be made available to the Administrator
14 and the public, pursuant to paragraph (1), not less
15 frequently than every 5 years.

16 “(e) PLANS AND REPORTING.—

17 “(1) REGULATIONS.—As part of the regulations
18 promulgated under subsection (h), the Administrator
19 shall prescribe requirements governing plans and re-
20 ports to be submitted in accordance with this sub-
21 section.

22 “(2) PLANS.—Not later than April 30, 2015,
23 and every 5 years thereafter through 2025, each
24 natural gas local distribution company shall submit
25 to the Administrator a plan, approved by the State

1 regulatory authority or other entity charged with
2 regulating the retail rates of such company, describ-
3 ing such company's plans for the disposition of the
4 value of emission allowances to be received pursuant
5 to this section, in accordance with the requirements
6 of this section.

7 “(3) REPORTS.—Not later than June 30, 2017,
8 and each calendar year thereafter through 2031,
9 each natural gas local distribution company shall
10 submit a report to the Administrator, approved by
11 the relevant State regulatory authority or other enti-
12 ty charged with regulating the retail natural gas
13 rates of such company, describing the disposition of
14 the value of any emission allowances received by
15 such company in the prior calendar year pursuant to
16 this subsection, including—

17 “(A) a description of sales, transfer, ex-
18 change, or use by the company for compliance
19 with obligations under this title, of any such
20 emission allowances;

21 “(B) the monetary value received by the
22 company, whether in money or in some other
23 form, from the sale, transfer, or exchange of
24 emission allowances received by the company
25 under this section;

1 “(C) the manner in which the company’s
2 disposition of emission allowances received
3 under this subsection complies with the require-
4 ments of this section, including each of the re-
5 quirements of subsection (c);

6 “(D) the cost-effectiveness of, and energy
7 savings achieved by, energy efficiency programs
8 supported through such emission allowances;
9 and

10 “(E) such other information as the Admin-
11 istrator may require pursuant to paragraph (1).

12 “(4) PUBLICATION.—The Administrator shall
13 make available to the public all plans and reports
14 submitted by natural gas local distribution compa-
15 nies under this subsection, including by publishing
16 such plans and reports on the Internet.

17 “(f) AUDITING.—

18 “(1) ADMINISTRATOR AUDIT REPORT.—Each
19 year, the Administrator shall audit a significant rep-
20 resentative sample of natural gas local distribution
21 companies to ensure that emission allowances dis-
22 tributed under this section have been used exclu-
23 sively for the benefit of retail ratepayers and that
24 such companies are complying with the requirements
25 of this section. In selecting companies for audit, the

1 Administrator shall take into account any credible
2 evidence of noncompliance with such requirements.
3 The Administrator shall make available to the public
4 a report describing the results of each such audit,
5 including by publishing such report on the Internet.

6 “(2) GAO AUDIT REPORT.—Not later April 30,
7 2015 and every 3 years thereafter through April 30,
8 2026, the Comptroller General of the United States,
9 incorporating results from the Administrators’ audit
10 report and other relevant information including dis-
11 tribution company reports, shall conduct an in-depth
12 evaluation and make available to the public a report
13 on the investments made pursuant to subsection (c).
14 Said report shall be made available to the State reg-
15 ulatory authority, or the entity with authority to
16 regulate or set retail natural gas rates in the case
17 of a natural gas distribution company that is not
18 regulated by a State regulatory authority, and shall
19 include a description how the distribution companies
20 in the audit meet or fail to meet the requirement of
21 subsection (c), including for investments made in
22 cost-effective end-use energy efficiency programs, the
23 lifetime and annual energy saving benefits, and ca-
24 pacity benefits of said programs.

1 “(3) ADMINISTRATOR COST CONTAINMENT RE-
2 PORT.—Not later April 30, 2015, and every 3 years
3 thereafter through April 30, 2026, the Adminis-
4 trator shall transmit a report to Congress containing
5 an evaluation of the disposition of the value of emis-
6 sion allowances received pursuant to this subsection
7 and recommendations of ways to more effectively di-
8 rect the value of allowances to reduce costs for con-
9 sumers, contain the overall costs of the greenhouse
10 gas emissions reduction program, and meet the pol-
11 lution reduction targets of the Act. The Adminis-
12 trator shall make available to the public such report,
13 including by publishing such report on the Internet.

14 “(g) ENFORCEMENT.—A violation of any require-
15 ment of this section, irrespective of approval by a State
16 regulatory authority, shall be a violation of this Act. Each
17 emission allowance the value of which is used in violation
18 of the requirements of this section shall be a separate vio-
19 lation.

20 “(h) REGULATIONS.—Not later than January 1,
21 2014, the Administrator, in consultation with the Federal
22 Energy Regulatory Commission, shall promulgate regula-
23 tions to implement the requirements of this section.

24 **“SEC. 774. HOME HEATING OIL AND PROPANE CONSUMERS.**

25 “(a) DEFINITIONS.—For purposes of this section:

1 “(1) CARBON CONTENT.—The term ‘carbon
2 content’ means the amount of carbon dioxide that
3 would be emitted as a result of the combustion of a
4 fuel.

5 “(2) COST-EFFECTIVE.—The term ‘cost-effec-
6 tive’ has the meaning given that term in section
7 773(a).

8 “(b) ALLOCATION.—The Administrator shall dis-
9 tribute among the States, in accordance with this section,
10 the quantity of emission allowances allocated pursuant to
11 section 771(a)(3). The Administrator shall distribute a
12 percentage of such allowances determined by the Adminis-
13 trator, after consultation with the Secretary of the Inte-
14 rior, pursuant to subsection (f).

15 “(c) DISTRIBUTION AMONG STATES.—The Adminis-
16 trator shall distribute emission allowances among the
17 States under this section each year on a pro rata basis
18 based on the ratio of—

19 “(1) the carbon content of home heating oil and
20 propane sold to consumers within each State in the
21 preceding year for residential or commercial uses; to

22 “(2) the carbon content of home heating oil and
23 propane sold to consumers within the United States
24 in the preceding year for residential or commercial
25 uses.

1 “(d) USE OF ALLOWANCES.—

2 “(1) IN GENERAL.—States shall use emission
3 allowances distributed under this section exclusively
4 for the benefit of consumers of home heating oil or
5 propane for residential or commercial purposes.
6 Such proceeds shall be used exclusively for—

7 “(A) cost-effective energy efficiency pro-
8 grams for consumers that use home heating oil
9 or propane for residential or commercial pur-
10 poses; or

11 “(B) rebates or other direct financial as-
12 sistance programs for consumers of home heat-
13 ing oil or propane used for residential or com-
14 mercial purposes.

15 “(2) ADMINISTRATION AND DELIVERY MECHA-
16 NISMS.—In administering programs supported by
17 this section, States shall—

18 “(A) use no less than 50 percent of the
19 value of emission allowances received under this
20 section for cost-effective energy efficiency pro-
21 grams to reduce consumers’ overall fuel costs;

22 “(B) to the extent practicable, deliver con-
23 sumer support under this section through exist-
24 ing energy efficiency and consumer energy as-
25 sistance programs or delivery mechanisms, in-

1 including, where appropriate, programs or mecha-
2 nisms administered by parties other than the
3 State; and

4 “(C) seek to coordinate the administration
5 and delivery of energy efficiency and consumer
6 energy assistance programs supported under
7 this section, with one another and with existing
8 programs for various fuel types, so as to deliver
9 comprehensive, fuel-blind, coordinated programs
10 to consumers.

11 “(e) REPORTING.—Each State receiving emission al-
12 lowances under this section shall submit to the Adminis-
13 trator, within 12 months of each receipt of such allow-
14 ances, a report, in accordance with such requirements as
15 the Administrator may prescribe, that—

16 “(1) describes the State’s use of emission allow-
17 ances distributed under this section, including a de-
18 scription of the energy efficiency and consumer as-
19 sistance programs supported with such allowances;

20 “(2) demonstrates the cost-effectiveness of, and
21 the energy savings achieved by, energy efficiency
22 programs supported under this section; and

23 “(3) includes a report prepared by an inde-
24 pendent third party, in accordance with such regula-
25 tions as the Administrator may promulgate, evalu-

1 ating the performance of the energy efficiency and
2 consumer assistance programs supported under this
3 section.

4 “(f) ENFORCEMENT.—If the Administrator deter-
5 mines that a State is not in compliance with this section,
6 the Administrator may withhold a portion of the emission
7 allowances, the quantity of which is equal to up to twice
8 the quantity of the allowances that the State failed to use
9 in accordance with the requirements of this section, that
10 such State would otherwise be eligible to receive under this
11 section in later years. Allowances withheld pursuant to
12 this subsection shall be distributed among the remaining
13 States on a pro rata basis in accordance with the formula
14 in subsection (c).

15 **“SEC. 775. DOMESTIC FUEL PRODUCTION.**

16 “(a) PURPOSE.—The purpose of this section is to
17 provide emission allowance rebates to petroleum refineries
18 in the United States in a manner that promotes energy
19 efficiency and a reduction in greenhouse gas emissions at
20 such facilities.

21 “(b) DEFINITIONS.—In this section:

22 “(1) EMISSIONS.—The term ‘emissions’ in-
23 cludes direct emissions from fuel combustion, proc-
24 ess emissions, and indirect emissions from the gen-
25 eration of electricity, steam, and hydrogen used to

1 produce the output of a petroleum refinery or the
2 petroleum refinery sector.

3 “(2) PETROLEUM REFINERY.—The term ‘petro-
4 leum refinery’ means a facility classified under code
5 324110 of the North American Industrial Classifica-
6 tion System of 2002.

7 “(3) SMALL BUSINESS REFINER.—The term
8 ‘small business refiner’ means a refiner that meets
9 the applicable Federal refinery capacity and em-
10 ployee limitations criteria described in section
11 45H(c)(1) of the Internal Revenue Code of 1986 (as
12 in effect on the date of enactment of this section and
13 without regard to section 45H(d)). Eligibility of a
14 small business refiner under this paragraph shall not
15 be recalculated or disallowed on account of (i) its
16 merger with another small business refiner or refin-
17 ers after December 31, 2002 or (ii) its acquisition
18 of another small business refiner (or refinery of such
19 refiner) after December 31, 2002.

20 “(c) IN GENERAL.—The Administrator shall dis-
21 tribute allowances pursuant to this section to owners and
22 operators of petroleum refineries, including small business
23 refiners, in the United States.

24 “(d) DISTRIBUTION SCHEDULE.—The Administrator
25 shall distribute emission allowances pursuant to the regu-

1 lations issued under subsection (e) for each vintage year
2 no later than October 31 of the preceding calendar year.

3 “(e) REGULATIONS.—Not later than 3 years after the
4 date of enactment of this title, the Administrator, in con-
5 sultation with the Administrator of the Energy Informa-
6 tion Administration, shall promulgate regulations that es-
7 tablish a formula for distributing emission allowances con-
8 sistent with the purpose of this section. In establishing
9 such formula, the Administrator shall consider the relative
10 complexity of refinery processes and appropriate mecha-
11 nisms to take energy efficiency and greenhouse gas reduc-
12 tions into account. If a petroleum refinery’s electricity pro-
13 vider received a free allocation of emission allowances pur-
14 suant to section 771(a)(1), the Administrator shall take
15 this free allocation into account when establishing such
16 formula to avoid rebates to a petroleum refinery for costs
17 that the Administrator determines were not incurred by
18 the petroleum refinery because the allowances were freely
19 allocated to the petroleum refinery’s electricity provider
20 and used for the benefit of the petroleum refinery. This
21 formula shall apply separately to the distribution of allow-
22 ances allocated pursuant to section 771(a)(4), including
23 for petroleum refiners and small business refiners.

24 **“SEC. 776. CONSUMER PROTECTION.**

25 “(a) CONSUMER REBATES.—

1 “(1) ESTABLISHMENT OF FUND.—There is es-
2 tablished in the Treasury a separate account, to be
3 known as the ‘Consumer Rebate Fund’).

4 “(2) AVAILABILITY OF AMOUNTS.—All amounts
5 deposited in the Consumer Rebate Fund shall be
6 available without further appropriation or fiscal year
7 limitation.

8 “(3) DISTRIBUTION OF AMOUNTS.—Beginning
9 in 2026, for each year after deposits are made in the
10 Consumer Rebate Fund pursuant to section
11 771(b)(2)(A), the President shall use the funds in
12 accordance with Federal statutory authority to pro-
13 vide relief to consumers and others affected by the
14 enactment of the Clean Energy Jobs and American
15 Power Act (and amendments made by that Act).

16 “(b) ENERGY REFUND PROGRAM.—

17 “(1) ESTABLISHMENT OF FUND.—There is es-
18 tablished in the Treasury a separate account, to be
19 known as the ‘Energy Refund Account’).

20 “(2) AVAILABILITY OF AMOUNTS.—All amounts
21 deposited in the Energy Refund Account shall be
22 available without further appropriation or fiscal year
23 limitation.

24 “(3) DISTRIBUTION OF AMOUNTS.—For each
25 year after deposits are made to the Energy Refund

1 Account pursuant to section 771(b)(2)(B), the
2 President shall use the funds in accordance with
3 Federal statutory authority to offset energy cost im-
4 pacts on low- and moderate-income households.

5 **“SEC. 777. EXCHANGE FOR STATE-ISSUED ALLOWANCES.**

6 “(a) IN GENERAL.—Not later than 1 year after the
7 date of enactment of this title, the Administrator shall
8 issue regulations allowing any person in the United States
9 to exchange greenhouse gas emission allowances issued be-
10 fore the later of December 31, 2011, or the date that is
11 9 months after the first auction under section 778, by the
12 State of California or for the Regional Greenhouse Gas
13 Initiative, or the Western Climate Initiative (in this sec-
14 tion referred to as ‘State allowances’) for emission allow-
15 ances established by the Administrator under section
16 721(a).

17 “(b) REGULATIONS.—Regulations issued under sub-
18 section (a) shall—

19 “(1) provide that a person exchanging State al-
20 lowances under this section receive emission allow-
21 ances established under section 721(a) in the
22 amount that is sufficient to compensate for the cost
23 of obtaining and holding such State allowances;

24 “(2) establish a deadline by which persons must
25 exchange the State allowances;

1 “(3) provide that the Federal emission allow-
2 ances disbursed pursuant to this section shall be de-
3 ducted from the allowances to be auctioned pursuant
4 to section 771(b); and

5 “(4) require that, once exchanged, the credit or
6 other instrument be retired for purposes of use
7 under the program by or for which it was originally
8 issued.

9 “(c) COST OF OBTAINING STATE ALLOWANCE.—For
10 purposes of this section, the cost of obtaining a State al-
11 lowance shall be the average auction price, for emission
12 allowances issued in the year in which the State allowance
13 was issued, under the program under which the State al-
14 lowance was issued.

15 **“SEC. 778. AUCTION PROCEDURES.**

16 “(a) IN GENERAL.—To the extent that auctions of
17 emission allowances by the Administrator are authorized
18 by this part, such auctions shall be carried out pursuant
19 to this section and the regulations established hereunder.

20 “(b) INITIAL REGULATIONS.—Not later than 12
21 months after the date of enactment of this title, the Ad-
22 ministrator, in consultation with other agencies, as appro-
23 priate, shall promulgate regulations governing the auction
24 of allowances under this section. Such regulations shall in-
25 clude the following requirements:

1 “(1) FREQUENCY; FIRST AUCTION.—Auctions
2 shall be held four times per year at regular intervals,
3 with the first auction to be held no later than March
4 31, 2011.

5 “(2) AUCTION SCHEDULE; CURRENT AND FU-
6 TURE VINTAGES.—The Administrator shall, at each
7 quarterly auction under this section, offer for sale
8 both a portion of the allowances with the same vin-
9 tage year as the year in which the auction is being
10 conducted and a portion of the allowances with vin-
11 tage years from future years. The preceding sen-
12 tence shall not apply to auctions held before 2012,
13 during which period, by necessity, the Administrator
14 shall auction only allowances with a vintage year
15 that is later than the year in which the auction is
16 held. Beginning with the first auction and at each
17 quarterly auction held thereafter, the Administrator
18 may offer for sale allowances with vintage years of
19 up to 4 years after the year in which the auction is
20 being conducted.

21 “(3) AUCTION FORMAT.—Auctions shall follow
22 a single-round, sealed-bid, uniform price format.

23 “(4) PARTICIPATION; FINANCIAL ASSURANCE.—
24 Auctions shall be open to any person, except that
25 the Administrator may establish financial assurance

1 requirements to ensure that auction participants can
2 and will perform on their bids.

3 “(5) DISCLOSURE OF BENEFICIAL OWNER-
4 SHIP.—Each bidder in the auction shall be required
5 to disclose the person or entity sponsoring or bene-
6 fitting from the bidder’s participation in the auction
7 if such person or entity is, in whole or in part, other
8 than the bidder.

9 “(6) PURCHASE LIMITS.—No person may, di-
10 rectly or in concert with another participant, pur-
11 chase more than 5 percent of the allowances offered
12 for sale at any quarterly auction.

13 “(7) PUBLICATION OF INFORMATION.—After
14 the auction, the Administrator shall, in a timely
15 fashion, publish the identities of winning bidders,
16 the quantity of allowances obtained by each winning
17 bidder, and the auction clearing price.

18 “(8) OTHER REQUIREMENTS.—The Adminis-
19 trator may include in the regulations such other re-
20 quirements or provisions as the Administrator, in
21 consultation with other agencies, as appropriate,
22 considers appropriate to promote effective, efficient,
23 transparent, and fair administration of auctions
24 under this section.

1 “(c) REVISION OF REGULATIONS.—The Adminis-
2 trator may, in consultation with other agencies, as appro-
3 priate, at any time, revise the initial regulations promul-
4 gated under subsection (b) by promulgating new regula-
5 tions. Such revised regulations need not meet the require-
6 ments identified in subsection (b) if the Administrator de-
7 termines that an alternative auction design would be more
8 effective, taking into account factors including costs of ad-
9 ministration, transparency, fairness, and risks of collusion
10 or manipulation. In determining whether and how to re-
11 vise the initial regulations under this subsection, the Ad-
12 ministrator shall not consider maximization of revenues to
13 the Federal Government.

14 “(d) RESERVE AUCTION PRICE.—The minimum re-
15 serve auction price shall be \$10 (in constant 2005 dollars)
16 for auctions occurring in 2012. The minimum reserve
17 price for auctions occurring in years after 2012 shall be
18 the minimum reserve auction price for the previous year
19 increased by 5 percent plus the rate of inflation (as meas-
20 ured by the Consumer Price Index for all urban con-
21 sumers).

22 “(e) DELEGATION OR CONTRACT.—Pursuant to reg-
23 ulations under this section, the Administrator may by del-
24 egation or contract provide for the conduct of auctions
25 under the Administrator’s supervision by other depart-

1 ments or agencies of the Federal Government or by non-
2 governmental agencies, groups, or organizations.

3 “(f) SMALL BUSINESS REFINER RESERVE.—The Ad-
4 ministrator shall, in accordance with this subsection, issue
5 regulations setting aside a specified number of allowances,
6 as determined by the Administrator, that small business
7 refiners may purchase at the average auction price and
8 may use to demonstrate compliance pursuant to section
9 722. These regulations shall provide the following:

10 “(1) ALLOWED PURCHASES.—From January 1
11 of the calendar year that matches the vintage year
12 for which allowances have been placed in the reserve,
13 through January 14 of the following year, small
14 business refiners (as defined in section 775(b)) may
15 purchase allowances from this reserve at the price
16 determined pursuant to paragraph (2).

17 “(2) PRICE.—The price for allowances pur-
18 chased from this reserve shall be the average auction
19 price for allowances of the same vintage year pur-
20 chased at auctions conducted pursuant to this sec-
21 tion during the 12 months preceding the purchase of
22 the allowances.

23 “(3) USE OF ALLOWANCES.—Allowances pur-
24 chased from this reserve shall only be used by the
25 purchaser to demonstrate compliance pursuant to

1 section 722 for attributable greenhouse gas emis-
2 sions in the calendar year that matches the vintage
3 year of the purchased allowance. Allowances pur-
4 chased from this reserve may not be banked, traded
5 or borrowed.

6 “(4) LIMITATIONS ON PURCHASE AMOUNT.—
7 The Administrator, by regulation adopted after pub-
8 lic notice and an opportunity for comment, shall es-
9 tablish procedures to distribute the ability to pur-
10 chase allowances from the reserve fairly among all
11 small business refiners interested in purchasing al-
12 lowances from this reserve so as to address the po-
13 tential that requests to purchase allowances exceed
14 the number of allowances available in the reserve.
15 This regulation may place limits on the number of
16 allowances a small business refiner may purchase
17 from the reserve.

18 “(5) UNSOLD ALLOWANCES.—Vintage year al-
19 lowances not sold from the reserve on or before Jan-
20 uary 15 of the calendar year following the vintage
21 year shall be sold at an auction conducted pursuant
22 to this section no later than March 31 of the cal-
23 endar year following the vintage year. If significantly
24 more allowances are being placed in the reserve than
25 are being purchased from the reserve several years

1 in a row, the Administrator may adjust either the
2 percent of allowances placed in the reserve or the
3 date by which allowances may be purchased from the
4 reserve.

5 **“SEC. 779. AUCTIONING ALLOWANCES FOR OTHER ENTI-**
6 **TIES.**

7 “(a) CONSIGNMENT.—Any entity holding emission al-
8 lowances or compensatory allowances may request that the
9 Administrator auction, pursuant to section 778, the allow-
10 ances on consignment.

11 “(b) PRICING.—When the Administrator acts under
12 this section as the agent of an entity in possession of emis-
13 sion allowances, the Administrator is not obligated to ob-
14 tain the highest price possible for the emission allowances,
15 and instead shall auction consignment allowances in the
16 same manner and pursuant to the same rules as auctions
17 of other allowances under section 778. The Administrator
18 may permit the entity offering the allowance for sale to
19 condition the sale of its allowances pursuant to this section
20 on a minimum reserve price that is different than the re-
21 serve auction price set pursuant to section 778(d).

22 “(c) PROCEEDS.—For emission allowances and com-
23 pensatory allowances auctioned pursuant to this section,
24 notwithstanding section 3302 of title 31, United States
25 Code, or any other provision of law, within 90 days of re-

1 ceipt, the United States shall transfer the proceeds from
2 the auction to the entity which held the allowances auc-
3 tioned. No funds transferred from a purchaser to a seller
4 of emission allowances or compensatory allowances under
5 this subsection shall be held by any officer or employee
6 of the United States or treated for any purpose as public
7 monies.

8 “(d) REGULATIONS.—The Administrator shall issue
9 regulations within 24 months after the date of enactment
10 of this title to implement this section.

11 **“SEC. 780. COMMERCIAL DEPLOYMENT OF CARBON CAP-
12 TURE AND SEQUESTRATION TECHNOLOGIES.**

13 “(a) DEFINITIONS.—In this section:

14 “(1) CARBON CAPTURE AND STORAGE.—The
15 term ‘carbon capture and sequestration’ shall—

16 “(A) have such term as Administrator
17 shall determine by regulation; and

18 “(B) include—

19 “(i) geological sequestration; and

20 “(ii) conversion of captured carbon di-
21 oxide to a stable form that will safely and
22 permanently sequester the carbon dioxide.

23 “(2) QUALIFYING ELECTRIC GENERATING
24 UNIT.—The term ‘qualifying electric generating unit’
25 means an electric utility unit that—

1 “(A) derives at least 50 percent of the an-
2 nual fuel input of the unit from—

3 “(i) coal or waste coal;

4 “(ii) petroleum coke; or

5 “(iii) any combination of those 2
6 fuels; and

7 “(B)(i) has a nameplate capacity of 200
8 megawatts or more; or

9 “(ii) in the case of retrofit applications, the
10 carbon capture and sequestration technology is
11 applied to the flue gas or fuel gas stream from
12 at least 200 megawatts of the total nameplate
13 generating capacity of the unit.

14 “(3) QUALIFYING INDUSTRIAL SOURCE.—The
15 term ‘qualifying industrial source’ means a source
16 that—

17 “(A) is not a qualifying electric generating
18 unit;

19 “(B) absent carbon capture and sequestra-
20 tion, would emit greater than 50,000 tons per
21 year of carbon dioxide; and

22 “(C) does not produce a liquid transpor-
23 tation fuel from a solid fossil-based feedstock.

24 “(4) TREATED GENERATING CAPACITY.—

1 “(A) IN GENERAL.—The term ‘treated
2 generating capacity’ means the portion of the
3 total generating capacity of an electric gener-
4 ating unit (or industrial source, measured by
5 such method as the Administrator may des-
6 ignate to be equivalent to the calculation under
7 subparagraph (B)) for which the flue gas or
8 fuel gas is treated by the carbon capture and
9 sequestration technology.

10 “(B) CALCULATION.—In determining the
11 treated portion of flue gas or fuel gas of an
12 electric generating unit under subparagraph
13 (A), the Administrator shall multiply the name-
14 plate capacity of the unit by the ratio that—

15 “(i) the mass of flue gas or fuel gas
16 that is treated by the carbon capture and
17 sequestration technology; bears to

18 “(ii) the total mass of the flue gas or
19 fuel gas that is produced when the unit is
20 operating at maximum capacity.

21 “(b) REGULATIONS.—Not later than 2 years after
22 the date of enactment of this title, the Administrator shall
23 promulgate regulations providing for the distribution of
24 emission allowances allocated under section 771(a)(6),
25 pursuant to the requirements of this section, to support

1 the commercial deployment of carbon capture and seques-
2 tration technologies in electric power generation and in-
3 dustrial operations.

4 “(c) ELIGIBILITY CRITERIA AND METHOD OF DIS-
5 TRIBUTION.—

6 “(1) ELIGIBILITY.—For an owner or operator
7 of a project to be eligible to receive emission allow-
8 ances under this section, the project shall—

9 “(A) implement carbon capture and se-
10 questration technology—

11 “(i) at a qualifying electric generating
12 unit that, upon implementation of the car-
13 bon capture and sequestration technology,
14 will achieve an emission limitation that is
15 at least a 50-percent reduction in emis-
16 sions of the carbon dioxide produced by—

17 “(I) the unit, measured on an
18 annual basis, as determined by the
19 Administrator; or

20 “(II) in the case of retrofit appli-
21 cations described in subsection
22 (a)(2)(B)(ii), the treated portion of
23 flue gas from the unit, measured on
24 an annual basis, as determined by the
25 Administrator; or

1 “(ii) at a qualifying industrial source
2 that, upon implementation, will achieve an
3 emission limitation that is at least a 50-
4 percent reduction in emissions of the car-
5 bon dioxide produced by the emission
6 point, measured on an annual basis, as de-
7 termined by the Administrator;

8 “(B)(i) geologically sequester carbon diox-
9 ide at a site that meets all applicable permitting
10 and certification requirements for geological se-
11 questration; or

12 “(ii) pursuant to such requirements as the
13 Administrator may prescribe by regulation, con-
14 vert captured carbon dioxide to a stable form
15 that will safely and permanently sequester the
16 carbon dioxide;

17 “(C) meet all other applicable State, tribal,
18 and Federal permitting requirements; and

19 “(D) be located in the United States.

20 “(2) METHOD OF DISTRIBUTION.—

21 “(A) PERIOD.—The Administrator shall
22 distribute emission allowances allocated under
23 section 771(a)(6) to eligible projects for each of
24 the first 10 calendar years for which each eligi-
25 ble project is in commercial operation.

1 “(B) BONUS ALLOWANCE FORMULA FOR
2 ELECTRIC GENERATING UNITS.—

3 “(i) PHASE I DISTRIBUTION.—For
4 each project that is certified under sub-
5 section (h), the quantity of emission allow-
6 ances that the Administrator shall dis-
7 tribute for a calendar year to the owner or
8 operator of the eligible project shall be
9 equal to the quotient obtained by divid-
10 ing—

11 “(I) the product obtained by mul-
12 tiplying—

13 “(aa) the number of metric
14 tons of carbon dioxide emissions
15 avoided through capture and se-
16 questration of emissions by the
17 project for a particular year, as
18 determined pursuant to such
19 methodology as the Adminis-
20 trator shall prescribe by regula-
21 tion; and

22 “(bb) a bonus allowance
23 value that is assigned to the
24 project under subsection (d)(2);
25 by

1 “(II) the average fair market
2 value of an emission allowance during
3 the calendar year preceding the year
4 during which the project captured and
5 sequestered the carbon dioxide emis-
6 sions.

7 “(ii) PHASE II DISTRIBUTION.—For
8 each project that qualifies under subsection
9 (e), the quantity of emission allowances
10 that the Administrator shall distribute for
11 a calendar year to the owner or operator of
12 the eligible project shall be determined
13 through—

14 “(I) reverse auction, as pre-
15 scribed by regulation under subsection
16 (e)(3); or

17 “(II) if the Administrator decides
18 not to distribute allowances through a
19 reverse auction, an alternate distribu-
20 tion method established by regulation
21 under subsection (e)(4).

22 “(C) FORMULA FOR INDUSTRIAL
23 SOURCES.—For each project that qualifies
24 under subsection (g), the quantity of emission
25 allowances that the Administrator shall dis-

1 tribute for a calendar year to the owner or op-
2 erator of the eligible project shall be determined
3 in accordance with subsection (g)(2).

4 “(D) CONSISTENCY.—The Administrator
5 shall develop a method of distribution for each
6 category of eligible projects under this para-
7 graph in a manner that is consistent with the
8 certification and distribution requirements
9 under subsection (h).

10 “(d) PHASE I DISTRIBUTION TO ELECTRIC GENER-
11 ATING UNITS.—

12 “(1) APPLICABILITY.—

13 “(A) IN GENERAL.—Subject to subpara-
14 graph (B), this subsection shall apply to
15 projects that are undertaken at qualifying elec-
16 tric generating units that the Administrator de-
17 termines to be eligible to receive emission allow-
18 ances under this section.

19 “(B) CAPACITY.—The total cumulative
20 generating capacity of the projects described in
21 subparagraph (A) shall be equal to approxi-
22 mately 20 gigawatts of the treated generating
23 capacity.

24 “(2) BONUS ALLOWANCE VALUES.—

25 “(A) FIRST TRANCHE.—

1 “(i) IN GENERAL.—The first tranche
2 shall include the first 10 gigawatts of
3 treated generating capacity undertaken at
4 qualifying electric generating units that re-
5 ceive emission allowances under this sec-
6 tion.

7 “(ii) CERTAIN UNITS.—For an eligible
8 project achieving capture and sequestration
9 of 90 percent or more of the carbon diox-
10 ide that otherwise would be emitted by the
11 unit, the bonus allowance value shall be
12 \$96 per ton of carbon dioxide emissions
13 avoided through the use of capture and se-
14 questration.

15 “(iii) BONUS ALLOWANCE VALUE.—
16 The Administrator shall establish, by regu-
17 lation, a bonus allowance value for each
18 rate of capture and sequestration achieved
19 by an eligible project—

20 “(I) beginning at a minimum of
21 \$50 per ton for a 50-percent rate; and

22 “(II) varying in direct proportion
23 with increasing rates of capture and
24 sequestration up to \$96 per ton for an
25 90-percent rate.

1 “(B) SECOND TRANCHE.—

2 “(i) IN GENERAL.—The second
3 tranche shall include the second 10
4 gigawatts of treated generating capacity
5 undertaken at qualifying electric gener-
6 ating units that receive emission allow-
7 ances under this section.

8 “(ii) CERTAIN UNITS.—For an eligible
9 project achieving the capture and seques-
10 tration of 90 percent or more of the carbon
11 dioxide that otherwise would be emitted by
12 the eligible project, the bonus allowance
13 value shall be \$85 per ton of carbon diox-
14 ide emissions avoided through the use of
15 capture and sequestration.

16 “(iii) BONUS ALLOWANCE VALUE.—
17 The Administrator shall establish, by regu-
18 lation, a bonus allowance value for each
19 rate of capture and sequestration achieved
20 by an eligible project—

21 “(I) beginning at a minimum of
22 \$50 per ton for a 50-percent rate; and

23 “(II) varying in direct proportion
24 with increasing rates of capture and

1 sequestration up to \$85 per ton for a
2 90-percent rate.

3 “(C) INCREASE IN BONUS ALLOWANCE
4 VALUE.—For an eligible project that com-
5 mences commercial operation by not later than
6 January 1, 2017, and that meets the eligibility
7 criteria under subsection (c), the otherwise-ap-
8 plicable bonus allowance value under this para-
9 graph shall be increased by \$10, if the owner
10 or operator of the eligible project submits to the
11 Administrator by not later than January 1,
12 2012, a notification of the intent to implement
13 carbon capture and sequestration technology at
14 a qualifying electric generating unit in accord-
15 ance with subsection (c).

16 “(D) REDUCTION.—

17 “(i) IN GENERAL.—For a carbon cap-
18 ture and sequestration project sequestering
19 in a geological formation for purposes of
20 enhanced hydrocarbon recovery, the Ad-
21 ministrator, by regulation, shall reduce the
22 applicable bonus allowance value under
23 this paragraph to reflect the lower net cost
24 of the project, as compared to sequestra-

1 tion into geological formations solely for
2 purposes of sequestration.

3 “(ii) ASSESSMENT OF NET COST.—

4 For the purpose of this subparagraph, an
5 assessment of net cost of a project shall
6 account for the cost of the injection of car-
7 bon dioxide, or other method of enhanced
8 hydrocarbon recovery, that would have oth-
9 erwise been undertaken in the absence of
10 the carbon capture and sequestration
11 project under consideration.

12 “(E) ADJUSTMENTS.—The Administrator
13 shall annually adjust for monetary inflation the
14 bonus allowance values established under this
15 paragraph.

16 “(F) MEASUREMENT.—The Administrator
17 shall measure the tranches and capture levels
18 for assigning the bonus allowance values under
19 this subsection based on the treated generating
20 capacity of the qualifying electric generating
21 units and qualifying industrial sources that re-
22 ceive emission allowances under this subsection.

23 “(G) AVERAGE FAIR MARKET VALUE.—

24 “(i) IN GENERAL.—The Administrator
25 and the Secretary of Energy may jointly

1 determine that the average fair market
2 value for emission allowances or the bonus
3 allowances have been too low or too high to
4 achieve efficient and cost-effective commer-
5 cial deployment of carbon capture and se-
6 questration technology in a given calendar
7 year.

8 “(ii) ACTION ON DETERMINATION.—
9 On making a determination under clause
10 (i), the Administrator may—

11 “(I) promulgate regulations to
12 adjust the bonus allowance value
13 under this paragraph; or

14 “(II) distribute an appropriate
15 quantity of emission allowances allo-
16 cated under section 771(a)(6) from
17 any future vintage year.

18 “(e) PHASE II DISTRIBUTION TO ELECTRIC GENER-
19 ATING UNITS.—

20 “(1) APPLICATION.—This subsection shall
21 apply only to the distribution of emission allowances
22 for carbon capture and sequestration projects under-
23 taken at qualifying electric generating units and
24 qualifying industrial sources after the treated gener-

1 ating capacity threshold identified under subsection
2 (d)(1) is reached.

3 “(2) REGULATIONS.—Not later than 2 years
4 before the date on which the capacity threshold iden-
5 tified in subsection (d)(1) is projected to be reached,
6 the Administrator shall promulgate regulations to
7 govern the distribution of emission allowances to the
8 owners or operators of eligible projects under this
9 subsection.

10 “(3) REVERSE AUCTIONS.—

11 “(A) IN GENERAL.—Except as provided in
12 paragraph (4), the regulations promulgated
13 pursuant to paragraph (2) shall provide for the
14 distribution of emission allowances to the own-
15 ers or operators of eligible projects under this
16 subsection through at least 2 reverse auctions,
17 each of which shall be held not less frequently
18 than once each calendar year.

19 “(B) REQUIREMENTS.—

20 “(i) PROJECTS AT INDUSTRIAL
21 SOURCES.—The Administrator shall annu-
22 ally establish a reverse auction for projects
23 at industrial sources, which may not par-
24 ticipate in other auctions.

1 imum rates of capture and sequestration
2 for the treated generating capacity of a
3 project in implementing this subparagraph.

4 “(C) AUCTION PROCESS.—At each reverse
5 auction under this paragraph—

6 “(i) the Administrator shall solicit
7 bids from eligible projects;

8 “(ii) owners or operators of eligible
9 projects participating in the auction shall
10 submit a bid, including the desired level of
11 carbon dioxide sequestration incentive per
12 ton and the estimated quantity of carbon
13 dioxide that the project will permanently
14 sequester during a 10-year period; and

15 “(iii) the Administrator shall select
16 bids within each auction for the sequestra-
17 tion quantity submitted, beginning with
18 the eligible project for which the bid is
19 submitted for the lowest level of sequestra-
20 tion incentive on a per-ton basis and meet-
21 ing such other requirements as the Admin-
22 istrator may specify, until the amounts
23 available for the reverse auction are com-
24 mitted.

1 “(D) FORM OF DISTRIBUTION.—The Ad-
2 ministrators shall distribute emission allowances
3 to the owners or operators of eligible projects
4 selected through a reverse auction under this
5 paragraph pursuant to a formula equivalent to
6 the formula contained in subsection (c)(2)(B),
7 except that the bonus allowance value that is
8 bid by the applicable entity shall be substituted
9 for the bonus allowance values described in sub-
10 section (c)(2).

11 “(4) ALTERNATIVE DISTRIBUTION METHOD.—

12 “(A) IN GENERAL.—If the Administrator
13 determines that a reverse auction will not result
14 in efficient and cost-effective commercial de-
15 ployment of carbon capture and sequestration
16 technologies, the Administrator, pursuant to
17 regulations under paragraph (2) or (5), shall
18 prescribe a schedule for the provision of bonus
19 allowances to the owners or operators of eligible
20 projects under this subsection, in accordance
21 with the requirements of this paragraph.

22 “(B) MULTIPLE TRANCHES.—The Admin-
23 istrator shall divide emission allowances avail-
24 able for distribution to the owners or operators

1 of eligible projects into a series of tranches,
2 each of which—

3 “(i) shall support the deployment of a
4 specified quantity of cumulative electric
5 generating capacity using carbon capture
6 and sequestration technology; and

7 “(ii) shall not be greater than 10
8 gigawatts of treated generating capacity.

9 “(C) METHOD OF DISTRIBUTION.—The
10 Administrator shall distribute emission allow-
11 ances within each tranche, on a first-come,
12 first-served basis—

13 “(i) based on the date of full-scale op-
14 eration of capture and sequestration tech-
15 nology; and

16 “(ii) pursuant to a formula that—

17 “(I) is similar to the formula
18 contained in subsection (c)(2)(C), ex-
19 cept that the Administrator may pre-
20 scribe bonus allowance values dif-
21 ferent than those described in sub-
22 section (c)(2) based on the criteria es-
23 tablished under subparagraph (E);
24 and

1 “(II) establishes the number of
2 emission allowances to be distributed
3 per ton of carbon dioxide sequestered
4 by the project.

5 “(D) REQUIREMENTS.—For each tranche
6 established pursuant to subparagraph (B), the
7 Administrator shall establish a schedule for dis-
8 tributing emission allowances that—

9 “(i) is based on a sliding scale that
10 provides higher bonus allowance values for
11 projects achieving higher rates of capture
12 and sequestration for the treated genera-
13 tion capacity at the unit;

14 “(ii) for each capture and sequestra-
15 tion rate, establishes a bonus allowance
16 value that is lower than that established
17 for the applicable rate for the previous
18 tranche (or, in the case of the first
19 tranche, than that established for the ap-
20 plicable rate under subsection (d)(2)); and

21 “(iii) may establish different bonus al-
22 lowance levels for not more than 5 dif-
23 ferent project categories, as defined based
24 on—

25 “(I) coal type;

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1 “(II) capture and transportation
2 technology;

3 “(III) geological formation type;

4 “(IV) new unit versus retrofit ap-
5 plication;

6 “(V) such other factors as the
7 Administrator may prescribe; or

8 “(VI) any combination of the fac-
9 tors described in subclauses (I)
10 through (V).

11 “(E) CRITERIA FOR ESTABLISHING BONUS
12 ALLOWANCE VALUES.—In establishing bonus al-
13 lowance values under this paragraph, the Ad-
14 ministrators shall seek to cover not more than
15 the reasonable incremental capital and oper-
16 ating costs of a project that are attributable to
17 implementation of carbon capture, transpor-
18 tation, and sequestration technologies, taking
19 into account—

20 “(i) the reduced cost of compliance
21 with section 722;

22 “(ii) the reduced cost associated with
23 sequestering in a geological formation for
24 purposes of enhanced hydrocarbon recov-
25 ery, as compared to sequestration into geo-

1 logical formations solely for purposes of se-
2 questration;

3 “(iii) the relevant factors defining the
4 project category; and

5 “(iv) such other factors as the Admin-
6 istrator determines to be appropriate.

7 “(5) REVISION OF REGULATIONS.—The Admin-
8 istrator shall review and, as appropriate, revise the
9 applicable regulations under this subsection not less
10 frequently than once every 8 years.

11 “(f) LIMITS FOR CERTAIN ELECTRIC GENERATING
12 UNITS.—

13 “(1) DEFINITIONS.—In this subsection, the
14 terms ‘covered EGU’ and ‘initially permitted’ have
15 the meanings given those terms in section 812.

16 “(2) COVERED EGUS INITIALLY PERMITTED
17 FROM 2009 THROUGH 2014.—For a covered EGU
18 that is initially permitted during the period begin-
19 ning on January 1, 2009, and ending on December
20 31, 2014, the Administrator shall reduce the quan-
21 tity of emission allowances that the owner or oper-
22 ator of the covered EGU would otherwise be eligible
23 to receive under this section as follows:

24 “(A) In the case of a covered EGU com-
25 mencing operation on or before January 1,

1 2019, if the date in clause (ii)(I) is earlier than
2 the date in clause (ii)(II), by the product ob-
3 tained by multiplying—

4 “(i) 20 percent; and

5 “(ii) the number of years, if any, that
6 have elapsed between—

7 “(I) the earlier of—

8 “(aa) January 1, 2020; and

9 “(bb) the date that is 5
10 years after the commencement of
11 operation of the covered EGU;
12 and

13 “(II) the first year that the cov-
14 ered EGU achieves (and thereafter
15 maintains) an emission limitation that
16 is at least a 50-percent reduction in
17 emissions of carbon dioxide produced
18 by the unit, measured on an annual
19 basis, as determined in accordance
20 with section 812(b)(2).

21 “(B) In the case of a covered EGU com-
22 mencing operation after January 1, 2019, by
23 the product obtained by multiplying—

24 “(i) 20 percent; and

1 “(ii) the number of years, if any, that
2 have elapsed between—

3 “(I) the commencement of oper-
4 ation of the covered EGU; and

5 “(II) the first year that the cov-
6 ered EGU achieves (and thereafter
7 maintains) an emission limitation that
8 is at least a 50-percent reduction in
9 emissions of carbon dioxide produced
10 by the unit, measured on an annual
11 basis, as determined in accordance
12 with section 812(b)(2).

13 “(3) COVERED EGUS INITIALLY PERMITTED
14 FROM 2015 THROUGH 2019.—The owner or operator
15 of a covered EGU that is initially permitted during
16 the period beginning on January 1, 2015, and end-
17 ing on December 31, 2019, shall be ineligible to re-
18 ceive emission allowances under this section if the
19 covered EGU, on commencement of operations (and
20 thereafter), does not achieve and maintain an emis-
21 sion limitation that is at least a 50-percent reduction
22 in emissions of carbon dioxide produced by the cov-
23 ered EGU, measured on an annual basis, as deter-
24 mined in accordance with section 812(b)(2).

25 “(g) INDUSTRIAL SOURCES.—

1 “(1) EMISSION ALLOWANCES.—The Adminis-
2 trator—

3 “(A) may distribute not more than 15 per-
4 cent of the emission allowances allocated under
5 section 771(a)(6) for any vintage year to the
6 owners or operators of eligible industrial
7 sources to support the commercial-scale deploy-
8 ment of carbon capture and sequestration tech-
9 nologies at those sources; and

10 “(B) notwithstanding any other provision
11 of law—

12 “(i) may distribute to eligible indus-
13 trial sources not more than 15 percent of
14 the emission allowances allocated under
15 section 771(a)(6) for any vintage year in
16 the second tranche of phase I; but

17 “(ii) may not distribute those allow-
18 ances for any vintage year in the first
19 tranche of phase I.

20 “(2) DISTRIBUTION.—

21 “(A) IN GENERAL.—The Administrator
22 shall prescribe, by regulation, requirements for
23 the distribution of emission allowances to the
24 owners or operators of industrial sources under
25 this subsection, based on a bonus allowance for-

1 mula that awards emission allowances to quali-
2 fying projects on the basis of tons of carbon di-
3 oxide captured and permanently sequestered.

4 “(B) METHOD.—The Administrator may
5 provide for the distribution of emission allow-
6 ances pursuant to—

7 “(i) a reverse auction method similar
8 to the method described in subsection
9 (e)(3), including the use of separate auc-
10 tions for different project categories; or

11 “(ii) an incentive schedule similar to
12 the schedule described in subsection (e)(4),
13 which shall ensure that incentives are es-
14 tablished so as to satisfy the requirement
15 described in subsection (e)(4)(E).

16 “(3) REVISION OF REGULATIONS.—The Admin-
17 istrator shall review and, as appropriate, revise the
18 regulations under this subsection not less frequently
19 than once every 8 years.

20 “(h) CERTIFICATION AND DISTRIBUTION.—

21 “(1) CERTIFICATION.—

22 “(A) REQUEST.—

23 “(i) PHASE I; ALTERNATIVE DIS-
24 TRIBUTION METHOD.—In the case of a
25 qualifying project that is eligible to receive

1 allowances under phase I or under sub-
2 section (e)(4), the owner or operator of the
3 planned project may request from the Ad-
4 ministrator a certification that the project
5 is eligible to receive emission allowances
6 under this section.

7 “(ii) REVERSE AUCTIONS.—In the
8 case of a qualifying project that wins a re-
9 verse auction under subsection (e) or (g),
10 within a reasonably brief period following
11 completion of the auction (as specified by
12 the Administrator), the owner or operator
13 of the qualifying project shall request from
14 the Administrator a certification that the
15 project is eligible to receive emission allow-
16 ances under this section.

17 “(iii) ELIGIBLE PROJECTS.—Eligible
18 projects in phase I and phase II may re-
19 ceive certification under this paragraph.

20 “(iv) ISSUANCE.—The Administrator
21 shall issue a certification described in this
22 subparagraph if the owner or operator
23 demonstrates a commitment to construct
24 and operate a project that satisfies—

1 “(I) the eligibility criteria of sub-
2 section (c); and

3 “(II) the requirements of this
4 subsection.

5 “(B) DOCUMENTATION.—The Adminis-
6 trator shall prescribe, by regulation, the docu-
7 mentation necessary for making a determina-
8 tion of project eligibility for the certification
9 under subparagraph (A), including—

10 “(i) technical information regarding
11 the capture and sequestration technology,
12 coal type, geological formation type (if ap-
13 plicable), and other relevant design fea-
14 tures of the project;

15 “(ii) the annual reductions in carbon
16 dioxide emissions that the capture and se-
17 questration technology is projected to
18 achieve during each of the first 10 years of
19 the project’s commercial operation; and

20 “(iii) a demonstration that the owner
21 or operator is committed to both con-
22 structing and operating the planned
23 project on a timeline marked by reasonable
24 capture and sequestration milestones,

1 through the completion of 1 of the actions
2 specified in subparagraph (C)(iii).

3 “(C) COMMITMENT.—

4 “(i) IN GENERAL.—Subject to clause
5 (ii), the completion of any 1 of the quali-
6 fying actions specified under clause (iii)
7 shall constitute a commitment to construct
8 and operate a planned carbon capture and
9 sequestration project.

10 “(ii) CONDITION.—In the case of a
11 qualifying action specified in subclause (I)
12 or (II) of clause (iii), the completion of
13 such an action may be subject to a condi-
14 tion that the Administrator will issue a
15 certification under this paragraph for the
16 distribution of emission allowances to the
17 project.

18 “(iii) QUALIFYING ACTIONS.—Quali-
19 fying actions under this subparagraph
20 shall include—

21 “(I) the execution of—

22 “(aa) a commitment by
23 lenders or other appropriate enti-
24 ties to finance the project, which
25 may be subject to customary

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1 closing conditions that are associ-
2 ated with the execution of the
3 commitment; and

4 “(bb) a commitment by the
5 owner or operator of the project
6 to execute a surety bond in suffi-
7 cient amounts by not later than 2
8 years after the date on which the
9 Administrator issues the certifi-
10 cation for the project; or

11 “(II) an authorization by a State
12 regulatory authority to allow recovery,
13 from the retail customers of such elec-
14 tric utility, of the costs of the project
15 by a State-regulated electric utility
16 that plans to construct the project.

17 “(D) FAILURE TO REQUEST CERTIFI-
18 CATION.—

19 “(i) IN GENERAL.—An owner or oper-
20 ator may elect not to request a certifi-
21 cation on the eligibility of a planned
22 project under subparagraph (A) prior to
23 the commercial operation of the project.

24 “(ii) DETERMINATION BY ADMINIS-
25 TRATOR.—If an owner or operator elects

1 not to request a certification under clause
2 (i), the Administrator shall make a deter-
3 mination regarding whether the project
4 satisfies the eligibility requirements of sub-
5 section (c) at the time that the Adminis-
6 trator makes a determination regarding
7 the annual distribution of emission allow-
8 ances under paragraph (3)(A).

9 “(2) RESERVATION OF EMISSION ALLOW-
10 ANCES.—

11 “(A) AMOUNT.—

12 “(i) IN GENERAL.—For each project
13 that receives a certification of eligibility
14 under paragraph (1), the Administrator
15 shall reserve on a first-come, first-served
16 basis a portion of the emission allowances
17 that are allocated for the deployment of
18 carbon capture and sequestration tech-
19 nology under section 771(a)(6).

20 “(ii) DETERMINATION.—The reserva-
21 tion of emission allowances for a particular
22 eligible project under this paragraph shall
23 be equal to the number of emission allow-
24 ances that the project is entitled to receive
25 under the applicable distribution method

1 under this section upon commercial oper-
2 ation of the carbon capture and sequestra-
3 tion technology, as determined by the Ad-
4 ministrator based on—

5 “(I) the applicable bonus allow-
6 ance value;

7 “(II) the number of tons of car-
8 bon dioxide emissions projected to be
9 captured and sequestered each cal-
10 endar year under paragraph
11 (1)(B)(i)(II); and

12 “(III) a discount rate to account
13 for the monetary inflation that may
14 be expected to occur during each of
15 the relevant 10 calendar years, as de-
16 termined by the Administrator.

17 “(B) TERMINATION OF RESERVATION.—

18 “(i) IN GENERAL.—A reservation of
19 emission allowances for a particular project
20 under subparagraph (A) shall terminate if
21 the owner or operator fails to achieve rea-
22 sonable milestones for commencing con-
23 struction or commercial operation of the
24 project, as specified under paragraph
25 (1)(B)(i)(III).

1 “(ii) REDUCED QUANTITY OF CARBON
2 DIOXIDE CAPTURED AND SEQUESTERED.—
3 If the quantity of carbon dioxide captured
4 and sequestered by a project on average
5 over 3 consecutive vintage years is less
6 than the quantity estimated for those vin-
7 tage years under subparagraph (A), the
8 reservation of emission allowances for the
9 project under subparagraph (A) shall be
10 reduced in future years by the difference
11 between—

12 “(I) the quantity of carbon diox-
13 ide captured and sequestered on aver-
14 age over the applicable 3 consecutive
15 years; and

16 “(II) the quantity estimated
17 under subparagraph (A) for the appli-
18 cable years.

19 “(iii) AVAILABILITY.—The Adminis-
20 trator shall immediately make available to
21 other eligible projects emission allowances
22 for which the Administrator has termi-
23 nated an emission allowance reservation
24 for a particular project under this subpara-
25 graph.

1 “(3) DISTRIBUTION PROCESS.—

2 “(A) ANNUAL DISTRIBUTION.—The Ad-
3 ministrator shall distribute the emission allow-
4 ances to eligible projects on an annual basis.

5 “(B) BASIS.—The annual distribution of
6 emission allowances shall be based on the total
7 tons of carbon dioxide that the project annually
8 captures and sequesters during each of the first
9 10 years of commercial operation, in accordance
10 with subsection (c)(2).

11 “(C) TOTAL DISTRIBUTION AMOUNT.—The
12 total amount of emission allowances distributed
13 to an eligible project for each of the first 10
14 years of commercial operation may be greater
15 than, or less than, the quantity of emissions al-
16 lowances that the Administrator has reserved
17 for the eligible project under paragraph (2).

18 “(D) REPORTS.—

19 “(i) IN GENERAL.—Except as pro-
20 vided in subparagraph (B), the Adminis-
21 trator shall make each annual distribution
22 of emission allowances by not later than 90
23 days after the date on which the owner or
24 operator of a project submits to the Ad-
25 ministrator a report regarding the carbon

1 dioxide emissions captured and sequestered
2 for a particular year by the project.

3 “(ii) REQUIREMENT.—A report under
4 subclause (I) shall be verified in accord-
5 ance with regulations to be promulgated by
6 the Administrator.

7 “(i) LIMITATIONS.—

8 “(1) IN GENERAL.—Emission allowances shall
9 be distributed under this section only for tons of car-
10 bon dioxide emissions that have already been cap-
11 tured and sequestered.

12 “(2) PERIOD.—A qualifying project may receive
13 annual emission allowances under this section only
14 for the first 10 years of operation.

15 “(3) CAPACITY.—

16 “(A) IN GENERAL.—Approximately 72
17 gigawatts of total cumulative treated generating
18 capacity may receive emission allowances under
19 this section.

20 “(B) ALLOWANCE SURPLUS.—On reaching
21 the cumulative capacity described in subpara-
22 graph (A), any emission allowances that are al-
23 located for carbon capture and sequestration
24 deployment under section 771(a)(6) and are not
25 yet obligated under this section shall be treated

1 as emission allowances not designated for dis-
2 tribution for purposes of section 771(b)(2).

3 “(j) EXHAUSTION OF ACCOUNT AND ANNUAL ROLL-
4 OVER OF SURPLUS EMISSION ALLOWANCES.—

5 “(1) IN GENERAL.—In distributing emission al-
6 lowances under this section, the Administrator shall
7 ensure that eligible projects receive distributions of
8 emission allowances for the first 10 years of com-
9 mercial operation.

10 “(2) DIFFERENT VINTAGE YEARS.—

11 “(A) DETERMINATION.—If the Adminis-
12 trator determines that the emission allowances
13 allocated under section 771(a)(6) with a vintage
14 year that matches the year of distribution will
15 be exhausted once the estimated full 10-year
16 distributions will be provided to current eligible
17 participants, the Administrator shall provide to
18 new eligible projects emission allowances from
19 vintage years after the year of the distribution.

20 “(B) DIVERSITY FACTORS.—If the Admin-
21 istrator provides allowances to new eligible
22 projects under subparagraph (A), the Adminis-
23 trator shall promulgate regulations to prioritize
24 new eligible projects that are distinguished from
25 prior recipients of allowances by 1 or more of

1 the following diversity factors (without regard
2 to order):

3 “(i) Location in a coal-producing re-
4 gion that provides a majority of coal to the
5 project.

6 “(ii) Coal type, including waste coal.

7 “(iii) Capture and transportation
8 technologies.

9 “(iv) Geological formations.

10 “(v) New units and retrofit applica-
11 tions.

12 “(k) ALLOCATION OF ALLOWANCES FOR DEPLOY-
13 MENT OF CARBON CAPTURE AND SEQUESTRATION TECH-
14 NOLOGY.—

15 “(1) ANNUAL ALLOCATION.—The Adminis-
16 trator shall allocate emission allowances for the de-
17 ployment of carbon capture and sequestration tech-
18 nology in accordance with this section in the fol-
19 lowing quantities:

20 “(A) For each of vintage years 2014
21 through 2017, 1.75 percent of the emission al-
22 lowances established for each year under section
23 721(a).

1 “(B) For each of vintage years 2018 and
2 2019, 4.75 percent of the emission allowances
3 established for each year under section 721(a).

4 “(C) For each of vintage years 2020
5 through 2050, 5 percent of the emission allow-
6 ances established for each year under section
7 721(a).

8 “(2) CARRYOVER.—If the Administrator has
9 not distributed all of the allowances allocated pursu-
10 ant to this subsection for a given vintage year by the
11 end of that year, the Administrator shall—

12 “(A) auction those emission allowances in
13 accordance with section 778 by not later than
14 March 31 of the year following that vintage
15 year; and

16 “(B) increase the allocation under this
17 subsection for the vintage year after the vintage
18 year for which emission allowances were
19 undisbursed by the quantity of undisbursed
20 emission allowances, but only to the extent that
21 allowances for that later year are to be auc-
22 tioned.

23 “(1) DAVIS-BACON COMPLIANCE.—

24 “(1) IN GENERAL.—All laborers and mechanics
25 employed on projects funded directly by or assisted

1 in whole or in part by this section through the use
2 of emission allowances shall be paid wages at rates
3 not less than those prevailing on projects of a char-
4 acter similar in the locality as determined by the
5 Secretary of Labor in accordance with subchapter
6 IV of chapter 31 of title 40, United States Code.

7 “(2) **AUTHORITY.**—With respect to the labor
8 standards specified in this subsection, the Secretary
9 of Labor shall have the authority and functions set
10 forth in Reorganization Plan Numbered 14 of 1950
11 (64 Stat. 1267; 5 U.S.C. App.) and section 3145 of
12 title 40, United States Code.

13 **“SEC. 781. OVERSIGHT OF ALLOCATIONS.**

14 “(a) **IN GENERAL.**—Not later than January 1, 2014,
15 and every 2 years thereafter, the Comptroller General of
16 the United States shall carry out a review of programs
17 administered by the Federal Government that distribute
18 emission allowances or funds from any Federal auction of
19 allowances.

20 “(b) **CONTENTS.**—Each such report shall include a
21 comprehensive evaluation of the administration and effec-
22 tiveness of each program, including—

23 “(1) the efficiency, transparency, and sound-
24 ness of the administration of each program;

1 “(2) the performance of activities receiving as-
2 sistance under each program;

3 “(3) the cost-effectiveness of each program in
4 achieving the stated purposes of the program; and

5 “(4) recommendations, if any, for regulatory or
6 administrative changes to each program to improve
7 its effectiveness.

8 “(c) FOCUS.—In evaluating program performance,
9 each review under this section review shall address the ef-
10 fectiveness of such programs in—

11 “(1) creating and preserving jobs;

12 “(2) ensuring a manageable transition for
13 working families and workers;

14 “(3) reducing the emissions, or enhancing se-
15 questration, of greenhouse gases;

16 “(4) developing clean technologies; and

17 “(5) building resilience to the impacts of cli-
18 mate change.

19 **“SEC. 782. EARLY ACTION RECOGNITION.**

20 “(a) IN GENERAL.—Emission allowances allocated
21 pursuant to section 771(a)(7) shall be distributed by the
22 Administrator in accordance with this section. Not later
23 than 1 year after the date of enactment of this title, the
24 Administrator shall issue regulations allowing—

1 “(1) any person in the United States to ex-
2 change instruments in the nature of offset credits
3 issued before January 1, 2009, by a State, local, or
4 voluntary offset program with respect to which the
5 Administrator has made an affirmative determina-
6 tion under section 740(a)(2), for emission allowances
7 established by the Administrator under section
8 721(a); and

9 “(2) the Administrator to provide compensation
10 in the form of emission allowances to entities, in-
11 cluding units of local government, that do not meet
12 the criteria of paragraph (1) and meet the criteria
13 of this paragraph for documented early reductions or
14 avoidance of greenhouse gas emissions or greenhouse
15 gases sequestered before January 1, 2009, from
16 projects or process improvements begun before Jan-
17 uary 1, 2009, where—

18 “(A) the entity publicly stated greenhouse
19 gas reduction goals and publicly reported
20 against those goals;

21 “(B) the entity demonstrated entity-wide
22 net greenhouse gas reductions; and

23 “(C) the entity demonstrates the actual
24 projects or process improvements undertaken to
25 make reductions and documents the reductions

1 (such as through documentation of engineering
2 projects).

3 “(b) REGULATIONS.—Regulations issued under sub-
4 section (a) shall—

5 “(1) provide that a person exchanging credits
6 under subsection (a)(1) receive emission allowances
7 established under section 721(a) in an amount for
8 which the monetary value is equivalent to the aver-
9 age monetary value of the credits during the period
10 from January 1, 2006, to January 1, 2009, as ad-
11 justed for inflation to reflect current dollar values at
12 the time of the exchange;

13 “(2) provide that a person receiving compensa-
14 tion for documented early action under subsection
15 (a)(2) shall receive emission allowances established
16 under section 721(a) in an amount that is approxi-
17 mately equivalent in value to the carbon dioxide
18 equivalent per ton value received by entities in ex-
19 change for credits under paragraph (1) (as adjusted
20 for inflation to reflect current dollar values at the
21 time of the exchange), as determined by the Admin-
22 istrator;

23 “(3) provide that only reductions or avoidance
24 of greenhouse gas emissions, or sequestration of
25 greenhouse gases, achieved by activities in the

1 United States between January 1, 2001, and Janu-
2 ary 1, 2009, may be compensated under this section,
3 and only credits issued for such activities may be ex-
4 changed under this section;

5 “(4) provide that only credits that have not
6 been retired or otherwise used to meet a voluntary
7 or mandatory commitment, and have not expired,
8 may be exchanged under subsection (a)(1);

9 “(5) require that, once exchanged, the credit be
10 retired for purposes of use under the program by or
11 for which it was originally issued; and

12 “(6) establish a deadline by which persons must
13 exchange the credits or request compensation for
14 early action under this section.

15 “(c) PARTICIPATION.—Participation in an exchange
16 of credits for allowances or compensation for early action
17 authorized by this section shall not preclude any person
18 from participation in an offset credit program established
19 under part D.

20 “(d) DISTRIBUTION.—Of the emission allowances
21 distributed under this section, a quantity equal to 0.75
22 percent of vintage year 2012 emission allowances estab-
23 lished under section 721(a) shall be distributed pursuant
24 to subsection (a)(1), and a quantity equal to 0.25 percent
25 of vintage year 2012 emission allowances established

1 under section 721(a) shall be distributed pursuant to sub-
2 section (a)(2).

3 **“SEC. 783. ESTABLISHMENT OF DEFICIT REDUCTION FUND.**

4 “(a) DEFICIT REDUCTION FUND.—There is estab-
5 lished in the Treasury of the United States a fund, to be
6 known as the ‘Deficit Reduction Fund’.

7 “(b) DISBURSEMENTS.—No disbursement shall be
8 made from the Deficit Reduction Fund except pursuant
9 to an appropriation Act.”.

10 **Subtitle C—Additional Greenhouse**
11 **Gas Standards**

12 **SEC. 121. GREENHOUSE GAS STANDARDS.**

13 The Clean Air Act (42 U.S.C. 7401 et seq.), as
14 amended by subtitles A and B of this title, is further
15 amended by adding the following new title after title VII:

16 **“TITLE VIII—ADDITIONAL**
17 **GREENHOUSE GAS STANDARDS**

18 **“SEC. 801. DEFINITIONS.**

19 “For purposes of this title, terms that are defined
20 in title VII, except for the term ‘stationary source’, shall
21 have the meanings given those terms in title VII.

22 **“PART A—STATIONARY SOURCE STANDARDS**

23 **“SEC. 811. STANDARDS OF PERFORMANCE.**

24 “(a) DEFINITION OF UNCAPPED GREENHOUSE GAS
25 EMISSIONS.—In this section, the term ‘uncapped green-

1 house gas emissions’ means those greenhouse gas emis-
2 sions to which section 722 does not apply.

3 “(b) STANDARDS.—Before January 1, 2020, the Ad-
4 ministrator shall not promulgate new source performance
5 standards for greenhouse gases under section 111 that are
6 applicable to any stationary source that—

7 “(1) emits uncapped greenhouse gas emissions;
8 and

9 “(2) qualifies as an eligible offset project pursu-
10 ant to section 733 that is eligible to receive an offset
11 credit pursuant to section 737.”.

12 **SEC. 122. HFC REGULATION.**

13 (a) IN GENERAL.—Title VI of the Clean Air Act (42
14 U.S.C. 7671 et seq.) (relating to stratospheric ozone pro-
15 tection) is amended by adding at the end the following:

16 **“SEC. 619. HYDROFLUOROCARBONS (HFCS).**

17 “(a) TREATMENT AS CLASS II, GROUP II SUB-
18 STANCES.—Except as otherwise provided in this section,
19 hydrofluorocarbons shall be treated as class II substances
20 for purposes of applying the provisions of this title. The
21 Administrator shall establish two groups of class II sub-
22 stances. Class II, group I substances shall include all
23 hydrochlorofluorocarbons (HCFCs) listed pursuant to sec-
24 tion 602(b). Class II, group II substances shall include
25 each of the following:

- 1 “(1) Hydrofluorocarbon-23 (HFC-23).
 - 2 “(2) Hydrofluorocarbon-32 (HFC-32).
 - 3 “(3) Hydrofluorocarbon-41 (HFC-41).
 - 4 “(4) Hydrofluorocarbon-125 (HFC-125).
 - 5 “(5) Hydrofluorocarbon-134 (HFC-134).
 - 6 “(6) Hydrofluorocarbon-134a (HFC-134a).
 - 7 “(7) Hydrofluorocarbon-143 (HFC-143).
 - 8 “(8) Hydrofluorocarbon-143a (HFC-143a).
 - 9 “(9) Hydrofluorocarbon-152 (HFC-152).
 - 10 “(10) Hydrofluorocarbon-152a (HFC-152a).
 - 11 “(11) Hydrofluorocarbon-227ea (HFC-227ea).
 - 12 “(12) Hydrofluorocarbon-236cb (HFC-236cb).
 - 13 “(13) Hydrofluorocarbon-236ea (HFC-236ea).
 - 14 “(14) Hydrofluorocarbon-236fa (HFC-236fa).
 - 15 “(15) Hydrofluorocarbon-245ca (HFC-245ca).
 - 16 “(16) Hydrofluorocarbon-245fa (HFC-245fa).
 - 17 “(17) Hydrofluorocarbon-365mfc (HFC-
 - 18 365mfc).
 - 19 “(18) Hydrofluorocarbon-43-10mee (HFC-43-
 - 20 10mee).
 - 21 “(19) Hydrofluoroolefin-1234yf (HFO-1234yf).
 - 22 “(20) Hydrofluoroolefin-1234ze (HFO-1234ze).
- 23 Not later than 6 months after the date of enactment of
24 this title, the Administrator shall publish an initial list of
25 class II, group II substances, which shall include the sub-

1 stances listed in this subsection. The Administrator may
2 add to the list of class II, group II substances any other
3 substance used as a substitute for a class I or II substance
4 if the Administrator determines that 1 metric ton of the
5 substance makes the same or greater contribution to glob-
6 al warming over 100 years as 1 metric ton of carbon diox-
7 ide. Within 24 months after the date of enactment of this
8 section, the Administrator shall amend the regulations
9 under this title (including the regulations referred to in
10 sections 603, 608, 609, 610, 611, 612, and 613) to apply
11 to class II, group II substances.

12 “(b) CONSUMPTION AND PRODUCTION OF CLASS II,
13 GROUP II SUBSTANCES.—

14 “(1) IN GENERAL.—

15 “(A) CONSUMPTION PHASE DOWN.—In the
16 case of class II, group II substances, in lieu of
17 applying section 605 and the regulations there-
18 under, the Administrator shall promulgate reg-
19 ulations phasing down the consumption of class
20 II, group II substances in the United States,
21 and the importation of products containing any
22 class II, group II substance, in accordance with
23 this subsection within 18 months after the date
24 of enactment of this section. Effective January
25 1, 2012, it shall be unlawful for any person to

1 produce any class II, group II substance, im-
2 port any class II, group II substance, or import
3 any product containing any class II, group II
4 substance without holding one consumption al-
5 lowance or one destruction offset credit for each
6 carbon dioxide equivalent ton of the class II,
7 group II substance. Any person who exports a
8 class II, group II substance for which a con-
9 sumption allowance was retired may receive a
10 refund of that allowance from the Adminis-
11 trator following the export.

12 “(B) PRODUCTION.—If the United States
13 becomes a party or otherwise adheres to a mul-
14 tilateral agreement, including any amendment
15 to the Montreal Protocol on Substances That
16 Deplete the Ozone Layer, that restricts the pro-
17 duction of class II, group II substances, the Ad-
18 ministrators shall promulgate regulations estab-
19 lishing a baseline for the production of class II,
20 group II substances in the United States and
21 phasing down the production of class II, group
22 II substances in the United States, in accord-
23 ance with such multilateral agreement and sub-
24 ject to the same exceptions and other provisions
25 as are applicable to the phase down of con-

1 sumption of class II, group II substances under
2 this section (except that the Administrator shall
3 not require a person who obtains production al-
4 lowances from the Administrator to make pay-
5 ment for such allowances if the person is mak-
6 ing payment for a corresponding quantity of
7 consumption allowances of the same vintage
8 year). Upon the effective date of such regula-
9 tions, it shall be unlawful for any person to
10 produce any class II, group II substance with-
11 out holding one consumption allowance and one
12 production allowance, or one destruction offset
13 credit, for each carbon dioxide equivalent ton of
14 the class II, group II substance.

15 “(C) INTEGRITY OF LIMITS.—To maintain
16 the integrity of the class II, group II limits, the
17 Administrator may, through rulemaking, limit
18 the percentage of each person’s compliance obli-
19 gation that may be met through the use of de-
20 struction offset credits or banked allowances.

21 “(D) COUNTING OF VIOLATIONS.—Each
22 consumption allowance, production allowance,
23 or destruction offset credit not held as required
24 by this section shall be a separate violation of
25 this section.

1 “(2) SCHEDULE.—Pursuant to the regulations
 2 promulgated pursuant to paragraph (1)(A), the
 3 number of class II, group II consumption allowances
 4 established by the Administrator for each calendar
 5 year beginning in 2012 shall be the following per-
 6 centage of the baseline, as established by the Admin-
 7 istrator pursuant to paragraph (3):

“Calendar Year	Percent of Baseline
2012	90
2013	87.5
2014	85
2015	82.5
2016	80
2017	77.5
2018	75
2019	71
2020	67
2021	63
2022	59
2023	54
2024	50
2025	46
2026	42
2027	38
2028	34
2029	30
2030	25

“Calendar Year	Percent of Baseline
2031	21
2032	17
after 2032	15

1 “(3) BASELINE.—(A) Within 12 months after
2 the date of enactment of this section, the Adminis-
3 trator shall promulgate regulations to establish the
4 baseline for purposes of paragraph (2). The baseline
5 shall be the sum, expressed in metric tons of carbon
6 dioxide equivalents, of—

7 “(i) the annual average consumption of all
8 class II substances in calendar years 2004,
9 2005, and 2006; plus

10 “(ii) the annual average quantity of all
11 class II substances contained in imported prod-
12 ucts in calendar years 2004, 2005, and 2006.

13 “(B) Notwithstanding subparagraph (A), if the
14 Administrator determines that the baseline is higher
15 than 370 million metric tons of carbon dioxide
16 equivalents, then the Administrator shall establish
17 the baseline at 370 million metric tons of carbon di-
18 oxide equivalents.

19 “(C) Notwithstanding subparagraph (A), if the
20 Administrator determines that the baseline is lower
21 than 280 million metric tons of carbon dioxide

1 equivalents, then the Administrator shall establish
 2 the baseline at 280 million metric tons of carbon di-
 3 oxide equivalents.

4 “(4) DISTRIBUTION OF ALLOWANCES.—

5 “(A) IN GENERAL.—Pursuant to the regu-
 6 lations promulgated under paragraph (1)(A),
 7 for each calendar year beginning in 2012, the
 8 Administrator shall sell consumption allowances
 9 in accordance with this paragraph.

10 “(B) ESTABLISHMENT OF POOLS.—The
 11 Administrator shall establish two allowance
 12 pools. Eighty percent of the consumption allow-
 13 ances available for a calendar year shall be
 14 placed in the producer-importer pool, and 20
 15 percent of the consumption allowances available
 16 for a calendar year shall be placed in the sec-
 17 ondary pool.

18 “(C) PRODUCER-IMPORTER POOL.—

19 “(i) AUCTION.—(I) For each calendar
 20 year, the Administrator shall offer for sale
 21 at auction the following percentage of the
 22 consumption allowances in the producer-
 23 importer pool:

“Calendar Year	Percent Available for Auction
2012	10

“Calendar Year	Percent Available for Auction
2013	20
2014	30
2015	40
2016	50
2017	60
2018	70
2019	80
2020 and thereafter	90

1 “(II) Any person who produced or im-
2 ported any class II substance during cal-
3 endar year 2004, 2005, or 2006 may par-
4 ticipate in the auction. No other persons
5 may participate in the auction unless per-
6 mitted to do so pursuant to subclause
7 (III).

8 “(III) Not later than 3 years after the
9 date of the initial auction and from time to
10 time thereafter, the Administrator shall de-
11 termine through rulemaking whether any
12 persons who did not produce or import a
13 class II substance during calendar year
14 2004, 2005, or 2006 will be permitted to
15 participate in future auctions. The Admin-
16 istrator shall base this determination on
17 the duration, consistency, and scale of such

1 person's purchases of consumption allow-
2 ances in the secondary pool under subpara-
3 graph (D)(ii)(III), as well as economic or
4 technical hardship and other factors
5 deemed relevant by the Administrator.

6 “(IV) The Administrator shall set a
7 minimum bid per consumption allowance of
8 the following:

9 “(aa) For vintage year 2012,
10 \$1.00.

11 “(bb) For vintage year 2013,
12 \$1.20.

13 “(cc) For vintage year 2014,
14 \$1.40.

15 “(dd) For vintage year 2015,
16 \$1.60.

17 “(ee) For vintage year 2016,
18 \$1.80.

19 “(ff) For vintage year 2017,
20 \$2.00.

21 “(gg) For vintage year 2018 and
22 thereafter, \$2.00 adjusted for infla-
23 tion after vintage year 2017 based
24 upon the producer price index as pub-

1 lished by the Department of Com-
2 merce.

3 “(ii) NON-AUCTION SALE.—(I) For
4 each calendar year, as soon as practicable
5 after auction, the Administrator shall offer
6 for sale the remaining consumption allow-
7 ances in the producer-importer pool at the
8 following prices:

9 “(aa) A fee of \$1.00 per vintage
10 year 2012 allowance.

11 “(bb) A fee of \$1.20 per vintage
12 year 2013 allowance.

13 “(cc) A fee of \$1.40 per vintage
14 year 2014 allowance.

15 “(dd) For each vintage year
16 2015 allowance, a fee equal to the av-
17 erage of \$1.10 and the auction clear-
18 ing price for vintage year 2014 allow-
19 ances.

20 “(ee) For each vintage year 2016
21 allowance, a fee equal to the average
22 of \$1.30 and the auction clearing
23 price for vintage year 2015 allow-
24 ances.

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1 plus acquisitions and purchases from
2 persons who produced class II sub-
3 stances in the United States during
4 calendar year 2004, 2005, or 2006,
5 less exportation, less transfers and
6 sales to persons who produced class II
7 substances in the United States dur-
8 ing calendar year 2004, 2005, or
9 2006; and

10 “(bb) for an importer of class II
11 substances that did not produce in the
12 United States any class II substance
13 during calendar years 2004, 2005,
14 and 2006, shall be based on the im-
15 porter’s importation less exportation.

16 For purposes of item (aa), the Adminis-
17 trator shall account for 100 percent of
18 class II, group II substances and 60 per-
19 cent of class II, group I substances. For
20 purposes of item (bb), the Administrator
21 shall account for 100 percent of class II,
22 group II substances and 100 percent of
23 class II, group I substances.

24 “(IV) Any consumption allowances
25 made available for nonauction sale to a

1 specific producer or importer of class II,
2 group II substances but not purchased by
3 the specific producer or importer shall be
4 made available for sale to any producer or
5 importer of class II substances during cal-
6 endar year 2004, 2005, or 2006. If de-
7 mand for such consumption allowances ex-
8 ceeds supply of such consumption allow-
9 ances, the Administrator shall develop and
10 utilize criteria for the sale of such con-
11 sumption allowances that may include pro
12 rata shares, historic production and impor-
13 tation, economic or technical hardship, or
14 other factors deemed relevant by the Ad-
15 ministrator. If the supply of such con-
16 sumption allowances exceeds demand, the
17 Administrator may offer such consumption
18 allowances for sale in the secondary pool as
19 set forth in subparagraph (D).

20 “(D) SECONDARY POOL.—(i) For each cal-
21 endar year, as soon as practicable after the auc-
22 tion required in subparagraph (C), the Adminis-
23 trator shall offer for sale the consumption al-
24 lowances in the secondary pool at the prices
25 listed in subparagraph (C)(ii).

1 “(ii) The Administrator shall accept appli-
2 cations for purchase of secondary pool con-
3 sumption allowances from—

4 “(I) importers of products containing
5 class II, group II substances;

6 “(II) persons who purchased any class
7 II, group II substance directly from a pro-
8 ducer or importer of class II, group II sub-
9 stances for use in a product containing a
10 class II, group II substance, a manufac-
11 turing process, or a reclamation process;

12 “(III) persons who did not produce or
13 import a class II substance during cal-
14 endar year 2004, 2005, or 2006, but who
15 the Administrator determines have subse-
16 quently taken significant steps to produce
17 or import a substantial quantity of any
18 class II, group II substance; and

19 “(IV) persons who produced or im-
20 ported any class II substance during cal-
21 endar year 2004, 2005, or 2006.

22 “(iii) If the supply of consumption allow-
23 ances in the secondary pool equals or exceeds
24 the demand for consumption allowances in the
25 secondary pool as presented in the applications

1 for purchase, the Administrator shall sell the
2 consumption allowances in the secondary pool
3 to the applicants in the amounts requested in
4 the applications for purchase. Any consumption
5 allowances in the secondary pool not purchased
6 in a calendar year may be rolled over and added
7 to the quantity available in the secondary pool
8 in the following year.

9 “(iv) If the demand for consumption allow-
10 ances in the secondary pool as presented in the
11 applications for purchase exceeds the supply of
12 consumption allowances in the secondary pool,
13 the Administrator shall sell the consumption al-
14 lowances as follows:

15 “(I) The Administrator shall first sell
16 the consumption allowances in the sec-
17 ondary pool to any importers of products
18 containing class II, group II substances in
19 the amounts requested in their applications
20 for purchase. If the demand for such con-
21 sumption allowances exceeds supply of
22 such consumption allowances, the Adminis-
23 trator shall develop and utilize criteria for
24 the sale of such consumption allowances
25 among importers of products containing

1 class II, group II substances that may in-
2 clude pro rata shares, historic importation,
3 economic or technical hardship, or other
4 factors deemed relevant by the Adminis-
5 trator.

6 “(II) The Administrator shall next
7 sell any remaining consumption allowances
8 to persons identified in subclauses (II) and
9 (III) of clause (ii) in the amounts re-
10 quested in their applications for purchase.
11 If the demand for such consumption allow-
12 ances exceeds remaining supply of such
13 consumption allowances, the Administrator
14 shall develop and utilize criteria for the
15 sale of such consumption allowances
16 among subclauses (II) and (III) applicants
17 that may include pro rata shares, historic
18 use, economic or technical hardship, or
19 other factors deemed relevant by the Ad-
20 ministrator.

21 “(III) The Administrator shall then
22 sell any remaining consumption allowances
23 to persons who produced or imported any
24 class II substance during calendar year
25 2004, 2005, or 2006 in the amounts re-

1 requested in their applications for purchase.
2 If demand for such consumption allow-
3 ances exceeds remaining supply of such
4 consumption allowances, the Administrator
5 shall develop and utilize criteria for the
6 sale of such consumption allowances that
7 may include pro rata shares, historic pro-
8 duction and importation, economic or tech-
9 nical hardship, or other factors deemed rel-
10 evant by the Administrator.

11 “(IV) Each person who purchases
12 consumption allowances in a non-auction
13 sale under this subparagraph shall be re-
14 quired to disclose the person or entity
15 sponsoring or benefitting from the pur-
16 chases if such person or entity is, in whole
17 or in part, other than the purchaser or the
18 purchaser’s employer.

19 “(E) DISCRETION TO WITHHOLD ALLOW-
20 ANCES.—Nothing in this paragraph prevents
21 the Administrator from exercising discretion to
22 withhold and retire consumption allowances
23 that would otherwise be available for auction or
24 nonauction sale. Not later than 18 months after
25 the date of enactment of this section, the Ad-

1 “(ii) AUCTION FORMAT.—Auctions
2 shall follow a single-round, sealed-bid, uni-
3 form price format.

4 “(iii) FINANCIAL ASSURANCE.—The
5 Administrator may establish financial as-
6 surance requirements to ensure that auc-
7 tion participants can and will perform on
8 their bids.

9 “(iv) DISCLOSURE OF BENEFICIAL
10 OWNERSHIP.—Each bidder in the auction
11 shall be required to disclose the person or
12 entity sponsoring or benefitting from the
13 bidder’s participation in the auction if such
14 person or entity is, in whole or in part,
15 other than the bidder.

16 “(v) PUBLICATION OF INFORMA-
17 TION.—After the auction, the Adminis-
18 trator shall, in a timely fashion, publish
19 the number of bidders, number of winning
20 bidders, the quantity of allowances sold,
21 and the auction clearing price.

22 “(vi) BIDDING LIMITS IN 2012.—In
23 the vintage year 2012 auction, no auction
24 participant may, directly or in concert with
25 another participant, bid for or purchase

1 more allowances offered for sale at the
2 auction than the greater of—

3 “(I) the number of allowances
4 which, when added to the number of
5 allowances available for purchase by
6 the participant in the producer-im-
7 porter pool non-auction sale, would
8 equal the participant’s annual average
9 consumption of class II, group II sub-
10 stances in calendar years 2004, 2005,
11 and 2006; or

12 “(II) the number of allowances
13 equal to the product of—

14 “(aa) 1.20 multiplied by the
15 participant’s allocation share of
16 the producer-importer pool non-
17 auction sale as determined under
18 paragraph (4)(C)(ii); and

19 “(bb) the number of vintage
20 year 2012 allowances offered at
21 auction.

22 “(vii) BIDDING LIMITS IN 2013.—In
23 the vintage year 2013 auction, no auction
24 participant may, directly or in concert with
25 another participant, bid for or purchase

1 more allowances offered for sale at the
2 auction than the product of—

3 “(I) 1.15 multiplied by the ratio
4 of the total number of vintage year
5 2012 allowances purchased by the
6 participant from the auction and from
7 the producer-importer pool non-auc-
8 tion sale to the total number of vin-
9 tage year 2012 allowances in the pro-
10 ducer-importer pool; and

11 “(II) the number of vintage year
12 2013 allowances offered at auction.

13 “(viii) BIDDING LIMITS IN SUBSE-
14 QUENT YEARS.—In the auctions for vin-
15 tage year 2014 and subsequent vintage
16 years, no auction participant may, directly
17 or in concert with another participant, bid
18 for or purchase more allowances offered
19 for sale at the auction than the product
20 of—

21 “(I) 1.15 multiplied by the ratio
22 of the highest number of allowances
23 required to be held by the participant
24 in any of the three prior vintage years
25 to meet its compliance obligation

1 under paragraph (1) to the total num-
2 ber of allowances in the producer-im-
3 porter pool for such vintage year; and

4 “(II) the number of allowances
5 offered at auction for that vintage
6 year.

7 “(ix) OTHER REQUIREMENTS.—The
8 Administrator may include in the regula-
9 tions such other requirements or provisions
10 as the Administrator considers necessary
11 to promote effective, efficient, transparent,
12 and fair administration of auctions under
13 this section.

14 “(B) REVISION OF REGULATIONS.—The
15 Administrator may, at any time, revise the ini-
16 tial regulations promulgated under subpara-
17 graph (A) based on the Administrator’s experi-
18 ence in administering allowance auctions by
19 promulgating new regulations. Such revised reg-
20 ulations need not meet the requirements identi-
21 fied in subparagraph (A) if the Administrator
22 determines that an alternative auction design
23 would be more effective, taking into account
24 factors including costs of administration, trans-
25 parency, fairness, and risks of collusion or ma-

1 nipulation. In determining whether and how to
2 revise the initial regulations under this para-
3 graph, the Administrator shall not consider
4 maximization of revenues to the Federal Gov-
5 ernment.

6 “(C) DELEGATION OR CONTRACT.—Pursu-
7 ant to regulations under this section, the Ad-
8 ministrators may, by delegation or contract, pro-
9 vide for the conduct of auctions under the Ad-
10 ministrators’s supervision by other departments
11 or agencies of the Federal Government or by
12 nongovernmental agencies, groups, or organiza-
13 tions.

14 “(7) PAYMENTS FOR ALLOWANCES.—

15 “(A) INITIAL REGULATIONS.—Not later
16 than 18 months after the date of enactment of
17 this section, the Administrator shall promulgate
18 regulations governing the payment for allow-
19 ances purchased in auction and non-auction
20 sales under this section. Such regulations shall
21 include the requirement that, in the event that
22 full payment for purchased allowances is not
23 made on the date of purchase, equal payments
24 shall be made one time per calendar quarter

1 with all payments for allowances of a vintage
2 year made by the end of that vintage year.

3 “(B) REVISION OF REGULATIONS.—The
4 Administrator may, at any time, revise the ini-
5 tial regulations promulgated under subpara-
6 graph (A) based on the Administrator’s experi-
7 ence in administering collection of payments by
8 promulgating new regulations. Such revised reg-
9 ulations need not meet the requirements identi-
10 fied in subparagraph (A) if the Administrator
11 determines that an alternative payment struc-
12 ture or frequency would be more effective, tak-
13 ing into account factors including cost of ad-
14 ministration, transparency, and fairness. In de-
15 termining whether and how to revise the initial
16 regulations under this paragraph, the Adminis-
17 trator shall not consider maximization of reve-
18 nues to the Federal Government.

19 “(C) PENALTIES FOR NON-PAYMENT.—
20 Failure to pay for purchased allowances in ac-
21 cordance with the regulations promulgated pur-
22 suant to this paragraph shall be a violation of
23 the requirements of subsection (b). Section
24 113(c)(3) shall apply in the case of any person
25 who knowingly fails to pay for purchased allow-

1 ances in accordance with the regulations pro-
2 mulgated pursuant to this paragraph.

3 “(8) IMPORTED PRODUCTS.—If the United
4 States becomes a party or otherwise adheres to a
5 multilateral agreement, including any amendment to
6 the Montreal Protocol on Substances That Deplete
7 the Ozone Layer, which restricts the production or
8 consumption of class II, group II substances—

9 “(A) as of the date on which such agree-
10 ment or amendment enters into force, it shall
11 no longer be unlawful for any person to import
12 from a party to such agreement or amendment
13 any product containing any class II, group II
14 substance whose production or consumption is
15 regulated by such agreement or amendment
16 without holding one consumption allowance or
17 one destruction offset credit for each carbon di-
18 oxide equivalent ton of the class II, group II
19 substance;

20 “(B) the Administrator shall promulgate
21 regulations within 12 months of the date the
22 United States becomes a party or otherwise ad-
23 heres to such agreement or amendment, or the
24 date on which such agreement or amendment
25 enters into force, whichever is later, to establish

1 a new baseline for purposes of paragraph (2),
2 which new baseline shall be the original baseline
3 less the carbon dioxide equivalent of the annual
4 average quantity of any class II substances reg-
5 ulated by such agreement or amendment con-
6 tained in products imported from parties to
7 such agreement or amendment in calendar
8 years 2004, 2005, and 2006;

9 “(C) as of the date on which such agree-
10 ment or amendment enters into force, no per-
11 son importing any product containing any class
12 II, group II substance may, directly or in con-
13 cert with another person, purchase any con-
14 sumption allowances for sale by the Adminis-
15 trator for the importation of products from a
16 party to such agreement or amendment that
17 contain any class II, group II substance re-
18 stricted by such agreement or amendment; and

19 “(D) the Administrator may adjust the
20 two allowance pools established in paragraph
21 (4) such that up to 90 percent of the consump-
22 tion allowances available for a calendar year are
23 placed in the producer-importer pool with the
24 remaining consumption allowances placed in the
25 secondary pool.

1 “(9) OFFSETS.—

2 “(A) CHLOROFLUOROCARBON DESTRUC-
3 TION.—Within 18 months after the date of en-
4 actment of this section, the Administrator shall
5 promulgate regulations to provide for the
6 issuance of offset credits for the destruction, in
7 the calendar year 2012 or later, of
8 chlorofluorocarbons in the United States. The
9 Administrator shall establish and distribute to
10 the destroying entity a quantity of destruction
11 offset credits equal to 0.8 times the number of
12 metric tons of carbon dioxide equivalents of re-
13 duction achieved through the destruction. No
14 destruction offset credits shall be established
15 for the destruction of a class II, group II sub-
16 stance.

17 “(B) DEFINITION.—For purposes of this
18 paragraph, the term ‘destruction’ means the
19 conversion of a substance by thermal, chemical,
20 or other means to another substance with little
21 or no carbon dioxide equivalent value and no
22 ozone depletion potential.

23 “(C) REGULATIONS.—The regulations pro-
24 mulgated under this paragraph shall include
25 standards and protocols for project eligibility,

1 certification of destroyers, monitoring, tracking,
2 destruction efficiency, quantification of project
3 and baseline emissions and carbon dioxide
4 equivalent value, and verification. The Adminis-
5 trator shall ensure that destruction offset cred-
6 its represent real and verifiable destruction of
7 chlorofluorocarbons or other class I or class II,
8 group I, substances authorized under subpara-
9 graph (D).

10 “(D) OTHER SUBSTANCES.—The Adminis-
11 trator may promulgate regulations to add to the
12 list of class I and class II, group I, substances
13 that may be destroyed for destruction offset
14 credits, taking into account a candidate sub-
15 stance’s carbon dioxide equivalent value, ozone
16 depletion potential, prevalence in banks in the
17 United States, and emission rates, as well as
18 the need for additional cost containment under
19 the class II, group II limits and the integrity of
20 the class II, group II limits. The Administrator
21 shall not add a class I or class II, group I sub-
22 stance to the list if the consumption of the sub-
23 stance has not been completely phased-out
24 internationally (except for essential use exemp-

1 tions or other similar exemptions) pursuant to
2 the Montreal Protocol.

3 “(E) EXTENSION OF OFFSETS.—(i) At any
4 time after the Administrator promulgates regu-
5 lations pursuant to subparagraph (A), the Ad-
6 ministrator may, pursuant to the requirements
7 of part D of title VII and based on the carbon
8 dioxide equivalent value of the substance de-
9 stroyed, add the types of destruction projects
10 authorized to receive destruction offset credits
11 under this paragraph to the list of types of
12 projects eligible for offset credits under section
13 733. If such projects are added to the list under
14 section 733, the issuance of offset credits for
15 such projects under part D of title VII shall be
16 governed by the requirements of such part D,
17 while the issuance of offset credits for such
18 projects under this paragraph shall be governed
19 by the requirements of this paragraph. Nothing
20 in this paragraph shall affect the issuance of
21 offset credits under section 740.

22 “(ii) The Administrator shall not make the
23 addition under clause (i) unless the Adminis-
24 trator finds that insufficient destruction is oc-
25 curring or is projected to occur under this para-

1 graph and that the addition would increase de-
2 struction.

3 “(iii) In no event shall more than one de-
4 struction offset credit be issued under title VII
5 and this section for the destruction of the same
6 quantity of a substance.

7 “(10) LEGAL STATUS OF ALLOWANCES AND
8 CREDITS.—None of the following constitutes a prop-
9 erty right:

10 “(A) A production or consumption allow-
11 ance.

12 “(B) A destruction offset credit.

13 “(c) DEADLINES FOR COMPLIANCE.—Notwith-
14 standing the deadlines specified for class II substances in
15 sections 608, 609, 610, 612, and 613 that occur prior to
16 January 1, 2009, the deadline for promulgating regula-
17 tions under those sections for class II, group II substances
18 shall be January 1, 2012.

19 “(d) EXCEPTIONS FOR ESSENTIAL USES.—Notwith-
20 standing any phase down of production and consumption
21 required by this section, to the extent consistent with any
22 applicable multilateral agreement to which the United
23 States is a party or otherwise adheres, the Administrator
24 shall consider providing exceptions for essential uses under

1 paragraph (1) and may provide exceptions for essential
2 uses under paragraph (2), as follows:

3 “(1) MEDICAL DEVICES.—If the Administrator
4 makes the determination under this subsection that
5 a medical device is eligible for an exception, after no-
6 tice and opportunity for public comment, and in con-
7 sultation with the Commissioner of Food and Drugs,
8 the Administrator shall provide an exception for the
9 production and consumption of class II, group II
10 substances solely for use in medical devices, such as
11 metered dose inhalers.

12 “(2) AVIATION AND SPACE VEHICLE SAFETY.—
13 The Administrator, after notice and opportunity for
14 public comment, may authorize the production and
15 consumption of limited quantities of class II, group
16 II substances solely for the purposes of aviation or
17 space vehicle safety if either the Administrator of
18 the Federal Aviation Administration or the Adminis-
19 trator of the National Aeronautics and Space Ad-
20 ministration, in consultation with the Administrator,
21 determines that no safe and effective substitute has
22 been developed and that such authorization is nec-
23 essary for aviation or space flight safety purposes.

24 “(e) DEVELOPING COUNTRIES.—Notwithstanding
25 any phase down of production required by this section, the

1 Administrator, after notice and opportunity for public
2 comment, may authorize the production of limited quan-
3 tities of class II, group II substances in excess of the
4 amounts otherwise allowable under this section solely for
5 export to, and use in, developing countries. Any produc-
6 tion authorized under this subsection shall be solely for
7 purposes of satisfying the basic domestic needs of such
8 countries as provided in applicable international agree-
9 ments, if any, to which the United States is a party or
10 otherwise adheres.

11 “(f) NATIONAL SECURITY; FIRE SUPPRESSION,
12 ETC.—The provisions of subsection (f) and paragraphs (1)
13 and (2) of subsection (g) of section 604 shall apply to any
14 consumption and production phase down of class II, group
15 II substances in the same manner and to the same extent,
16 consistent with any applicable international agreement to
17 which the United States is a party or otherwise adheres,
18 as such provisions apply to the substances specified in
19 such subsection.

20 “(g) ACCELERATED SCHEDULE.—In lieu of section
21 606, the provisions of paragraphs (1), (2), and (3) of this
22 subsection shall apply in the case of class II, group II sub-
23 stances.

24 “(1) IN GENERAL.—The Administrator shall
25 promulgate initial regulations not later than 18

1 months after the date of enactment of this section,
2 and revised regulations any time thereafter, which
3 establish a schedule for phasing down the consump-
4 tion (and, if the condition in subsection (b)(1)(B) is
5 met, the production) of class II, group II substances
6 that is more stringent than the schedule set forth in
7 this section if, based on the availability of sub-
8 stitutes, the Administrator determines that such
9 more stringent schedule is practicable, taking into
10 account technological achievability, safety, and other
11 factors the Administrator deems relevant, or if the
12 Montreal Protocol, or any applicable international
13 agreement to which the United States is a party or
14 otherwise adheres, is modified or established to in-
15 clude a schedule or other requirements to control or
16 reduce production, consumption, or use of any class
17 II, group II substance more rapidly than the appli-
18 cable schedule under this section.

19 “(2) PETITION.—Any person may submit a pe-
20 tition to promulgate regulations under this sub-
21 section in the same manner and subject to the same
22 procedures as are provided in section 606(b).

23 “(3) INCONSISTENCY.—If the Administrator de-
24 termines that the provisions of this section regarding
25 banking, allowance rollover, or destruction offset

1 credits create a significant potential for inconsis-
2 ency with the requirements of any applicable inter-
3 national agreement to which the United States is a
4 party or otherwise adheres, the Administrator may
5 promulgate regulations restricting the availability of
6 banking, allowance rollover, or destruction offset
7 credits to the extent necessary to avoid such incon-
8 sistency.

9 “(h) EXCHANGE.—Section 607 shall not apply in the
10 case of class II, group II substances. Production and con-
11 sumption allowances for class II, group II substances may
12 be freely exchanged or sold but may not be converted into
13 allowances for class II, group I substances.

14 “(i) LABELING.—(1) In applying section 611 to prod-
15 ucts containing or manufactured with class II, group II
16 substances, in lieu of the words ‘destroying ozone in the
17 upper atmosphere’ on labels required under section 611
18 there shall be substituted the words ‘contributing to global
19 warming’.

20 “(2) The Administrator may, through rulemaking,
21 exempt from the requirements of section 611 products
22 containing or manufactured with class II, group II sub-
23 stances determined to have little or no carbon dioxide
24 equivalent value compared to other substances used in
25 similar products.

1 “(j) NONESSENTIAL PRODUCTS.—For the purposes
2 of section 610, class II, group II substances shall be regu-
3 lated under section 610(b), except that in applying section
4 610(b) the word ‘hydrofluorocarbon’ shall be substituted
5 for the word ‘chlorofluorocarbon’ and the term ‘class II,
6 group II’ shall be substituted for the term ‘class I’. Class
7 II, group II substances shall not be subject to the provi-
8 sions of section 610(d).

9 “(k) INTERNATIONAL TRANSFERS.—In the case of
10 class II, group II substances, in lieu of section 616, this
11 subsection shall apply. To the extent consistent with any
12 applicable international agreement to which the United
13 States is a party or otherwise adheres, including any
14 amendment to the Montreal Protocol, the United States
15 may engage in transfers with other parties to such agree-
16 ment or amendment under the following conditions:

17 “(1) The United States may transfer produc-
18 tion allowances to another party to such agreement
19 or amendment if, at the time of the transfer, the
20 Administrator establishes revised production limits
21 for the United States accounting for the transfer in
22 accordance with regulations promulgated pursuant
23 to this subsection.

24 “(2) The United States may acquire production
25 allowances from another party to such agreement or

1 amendment if, at the time of the transfer, the Ad-
2 ministrator finds that the other party has revised its
3 domestic production limits in the same manner as
4 provided with respect to transfers by the United
5 States in the regulations promulgated pursuant to
6 this subsection.

7 “(1) RELATIONSHIP TO OTHER LAWS.—

8 “(1) STATE LAWS.—For purposes of section
9 116, the requirements of this section for class II,
10 group II substances shall be treated as requirements
11 for the control and abatement of air pollution.

12 “(2) MULTILATERAL AGREEMENTS.—Section
13 614 shall apply to the provisions of this section con-
14 cerning class II, group II substances, except that for
15 the words ‘Montreal Protocol’ there shall be sub-
16 stituted the words ‘Montreal Protocol, or any appli-
17 cable multilateral agreement to which the United
18 States is a party or otherwise adheres that restricts
19 the production or consumption of class II, group II
20 substances,’ and for the words ‘Article 4 of the Mon-
21 treal Protocol’ there shall be substituted ‘any provi-
22 sion of such multilateral agreement regarding trade
23 with non-parties’.

24 “(3) FEDERAL FACILITIES.—For purposes of
25 section 118, the requirements of this section for

1 class II, group II substances and corresponding
2 State, interstate, and local requirements, administra-
3 tive authority, and process and sanctions shall be
4 treated as requirements for the control and abate-
5 ment of air pollution within the meaning of section
6 118.

7 “(m) CARBON DIOXIDE EQUIVALENT VALUE.—(1)
8 In lieu of section 602(e), the provisions of this subsection
9 shall apply in the case of class II, group II substances.
10 Simultaneously with establishing the list of class II, group
11 II substances, and simultaneously with any addition to
12 that list, the Administrator shall publish the carbon diox-
13 ide equivalent value of each listed class II, group II sub-
14 stance, based on a determination of the number of metric
15 tons of carbon dioxide that makes the same contribution
16 to global warming over 100 years as 1 metric ton of each
17 class II, group II substance.

18 “(2) Not later than February 1, 2017, and not less
19 than every 5 years thereafter, the Administrator shall—
20 “(A) review, and if appropriate, revise the car-
21 bon dioxide equivalent values established for class II,
22 group II substances based on a determination of the
23 number of metric tons of carbon dioxide that makes
24 the same contributions to global warming over 100

1 years as 1 metric ton of each class II, group II sub-
2 stance; and

3 “(B) publish in the Federal Register the results
4 of that review and any revisions.

5 “(3) A revised determination published in the Federal
6 Register under paragraph (2)(B) shall take effect for pro-
7 duction of class II, group II substances, consumption of
8 class II, group II substances, and importation of products
9 containing class II, group II substances starting on Janu-
10 ary 1 of the first calendar year starting at least 9 months
11 after the date on which the revised determination was pub-
12 lished.

13 “(4) The Administrator may decrease the frequency
14 of review and revision under paragraph (2) if the Adminis-
15 trator determines that such decrease is appropriate in
16 order to synchronize such review and revisions with any
17 similar review process carried out pursuant to the United
18 Nations Framework Convention on Climate Change, an
19 agreement negotiated under that convention, The Vienna
20 Convention for the Protection of the Ozone Layer, or an
21 agreement negotiated under that convention, except that
22 in no event shall the Administrator carry out such review
23 and revision any less frequently than every 10 years.

24 “(n) REPORTING REQUIREMENTS.—In lieu of sub-
25 sections (b) and (c) of section 603, paragraphs (1) and

1 (2) of this subsection shall apply in the case of class II,
2 group II substances:

3 “(1) IN GENERAL.—On a quarterly basis, or
4 such other basis (not less than annually) as deter-
5 mined by the Administrator, each person who pro-
6 duced, imported, or exported a class II, group II
7 substance, or who imported a product containing a
8 class II, group II substance, shall file a report with
9 the Administrator setting forth the carbon dioxide
10 equivalent amount of the substance that such person
11 produced, imported, or exported, as well as the
12 amount that was contained in products imported by
13 that person, during the preceding reporting period.
14 Each such report shall be signed and attested by a
15 responsible officer. If all other reporting is complete,
16 no such report shall be required from a person after
17 April 1 of the calendar year after such person per-
18 manently ceases production, importation, and expor-
19 tation of the substance, as well as importation of
20 products containing the substance, and so notifies
21 the Administrator in writing. If the United States
22 becomes a party or otherwise adheres to a multilat-
23 eral agreement, including any amendment to the
24 Montreal Protocol on Substances That Deplete the
25 Ozone Layer, that restricts the production or con-

1 sumption of class II, group II substances, then, if all
2 other reporting is complete, no such report shall be
3 required from a person with respect to importation
4 from parties to such agreement or amendment of
5 products containing any class II, group II substance
6 restricted by such agreement or amendment, after
7 April 1 of the calendar year following the year dur-
8 ing which such agreement or amendment enters into
9 force.

10 “(2) BASELINE REPORTS FOR CLASS II, GROUP
11 II SUBSTANCES.—

12 “(A) IN GENERAL.—Unless such informa-
13 tion has been previously reported to the Admin-
14 istrator, on the date on which the first report
15 under paragraph (1) of this subsection is re-
16 quired to be filed, each person who produced,
17 imported, or exported a class II, group II sub-
18 stance, or who imported a product containing a
19 class II substance, (other than a substance
20 added to the list of class II, group II substances
21 after the publication of the initial list of such
22 substances under this section), shall file a re-
23 port with the Administrator setting forth the
24 amount of such substance that such person pro-
25 duced, imported, exported, or that was con-

1 tained in products imported by that person,
2 during each of calendar years 2004, 2005, and
3 2006.

4 “(B) PRODUCERS.—In reporting under
5 subparagraph (A), each person who produced in
6 the United States a class II substance during
7 calendar year 2004, 2005, or 2006 shall—

8 “(i) report all acquisitions or pur-
9 chases of class II substances during each
10 of calendar years 2004, 2005, and 2006
11 from all other persons who produced in the
12 United States a class II substance during
13 calendar year 2004, 2005, or 2006, and
14 supply evidence of such acquisitions and
15 purchases as deemed necessary by the Ad-
16 ministrator; and

17 “(ii) report all transfers or sales of
18 class II substances during each of calendar
19 years 2004, 2005, and 2006 to all other
20 persons who produced in the United States
21 a class II substance during calendar year
22 2004, 2005, or 2006, and supply evidence
23 of such transfers and sales as deemed nec-
24 essary by the Administrator.

1 “(C) ADDED SUBSTANCES.—In the case of
2 a substance added to the list of class II, group
3 II substances after publication of the initial list
4 of such substances under this section, each per-
5 son who produced, imported, exported, or im-
6 ported products containing such substance in
7 calendar year 2004, 2005, or 2006 shall file a
8 report with the Administrator within 180 days
9 after the date on which such substance is added
10 to the list, setting forth the amount of the sub-
11 stance that such person produced, imported,
12 and exported, as well as the amount that was
13 contained in products imported by that person,
14 in calendar years 2004, 2005, and 2006.

15 “(o) STRATOSPHERIC OZONE AND CLIMATE PROTEC-
16 TION FUND.—

17 “(1) IN GENERAL.—There is established in the
18 Treasury of the United States a Stratospheric Ozone
19 and Climate Protection Fund.

20 “(2) DEPOSITS.—The Administrator shall de-
21 posit all proceeds from the auction and non-auction
22 sale of allowances under this section into the Strato-
23 spheric Ozone and Climate Protection Fund.

24 “(3) USE.—Amounts deposited into the Strato-
25 spheric Ozone and Climate Protection Fund shall be

1 available, subject to appropriations, exclusively for
2 the following purposes:

3 “(A) RECOVERY, RECYCLING, AND REC-
4 LAMATION.—The Administrator may utilize
5 funds to establish a program to incentivize the
6 recovery, recycling, and reclamation of any
7 Class II substances in order to reduce emissions
8 of such substances.

9 “(B) MULTILATERAL FUND.—If the
10 United States becomes a party or otherwise ad-
11 heres to a multilateral agreement, including any
12 amendment to the Montreal Protocol on Sub-
13 stances That Deplete the Ozone Layer, which
14 restricts the production or consumption of class
15 II, group II substances, the Administrator may
16 utilize funds to meet any related contribution
17 obligation of the United States to the Multilat-
18 eral Fund for the Implementation of the Mon-
19 treal Protocol or similar multilateral fund es-
20 tablished under such multilateral agreement.

21 “(C) LOW GLOBAL WARMING PRODUCT
22 TRANSITION ASSISTANCE PROGRAM.—

23 “(i) IN GENERAL.—The Adminis-
24 trator, in consultation with the Secretary
25 of Energy, may utilize funds in fiscal years

1 2012 through 2022 to establish a program
2 to provide financial assistance to manufac-
3 turers of products containing class II,
4 group II substances to facilitate the transi-
5 tion to products that contain or utilize al-
6 ternative substances with no or low carbon
7 dioxide equivalent value and no ozone de-
8 pletion potential.

9 “(ii) DEFINITION.—In this subpara-
10 graph, the term ‘products’ means refrig-
11 erators, freezers, dehumidifiers, air condi-
12 tioners, foam insulation, technical aerosols,
13 fire protection systems, and semiconduc-
14 tors.

15 “(iii) FINANCIAL ASSISTANCE.—The
16 Administrator may provide financial assist-
17 ance to manufacturers pursuant to clause
18 (i) for—

19 “(I) the design and configuration
20 of new products that use alternative
21 substances with no or low carbon di-
22 oxide equivalent value and no ozone
23 depletion potential; and

24 “(II) the redesign and retooling
25 of facilities for the manufacture of

1 products in the United States that use
2 alternative substances with no or low
3 carbon dioxide equivalent value and
4 no ozone depletion potential.

5 “(iv) REPORTS.—For any fiscal year
6 during which the Administrator provides
7 financial assistance pursuant to this sub-
8 paragraph, the Administrator shall submit
9 a report to the Congress within 3 months
10 of the end of such fiscal year detailing the
11 amounts, recipients, specific purposes, and
12 results of the financial assistance pro-
13 vided.”.

14 (b) TABLE OF CONTENTS.—The table of contents of
15 title VI of the Clean Air Act (42 U.S.C. 7671 et seq.)
16 is amended by adding the following new item at the end
17 thereof:

“Sec. 619. Hydrofluorocarbons (HFCs).”.

18 (c) FIRE SUPPRESSION AGENTS.—Section 605(a) of
19 the Clean Air Act (42 U.S.C. 7671(a)) is amended—

20 (1) by striking “or” at the end of paragraph

21 (2);

22 (2) by striking the period at the end of para-
23 graph (3) and inserting “; or”; and

24 (3) by adding the following new paragraph after
25 paragraph (3):

1 “(4) is listed as acceptable for use as a fire sup-
2 pression agent for nonresidential applications in ac-
3 cordance with section 612(e).”.

4 (d) MOTOR VEHICLE AIR CONDITIONERS.—

5 (1) Section 609(e) of the Clean Air Act (42
6 U.S.C. 7671h(e)) is amended by inserting “, group
7 I” after each reference to “class II” in the text and
8 heading.

9 (2) Section 609 of the Clean Air Act (42 U.S.C.
10 7671h) is amended by adding the following new sub-
11 section after subsection (e):

12 “(f) CLASS II, GROUP II SUBSTANCES.—

13 “(1) REPAIR.—The Administrator may promul-
14 gate regulations establishing requirements for repair
15 of motor vehicle air conditioners prior to adding a
16 class II, group II substance.

17 “(2) SMALL CONTAINERS.—(A) The Adminis-
18 trator may promulgate regulations establishing serv-
19 icing practices and procedures for recovery of class
20 II, group II substances from containers which con-
21 tain less than 20 pounds of such class II, group II
22 substances.

23 “(B) Not later than 18 months after enactment
24 of this subsection, the Administrator shall either
25 promulgate regulations requiring that containers

1 which contain less than 20 pounds of a class II,
2 group II substance be equipped with a device or
3 technology that limits refrigerant emissions and
4 leaks from the container and limits refrigerant emis-
5 sions and leaks during the transfer of refrigerant
6 from the container to the motor vehicle air condi-
7 tioner or issue a determination that such require-
8 ments are not necessary or appropriate.

9 “(C) Not later than 18 months after enactment
10 of this subsection, the Administrator shall promul-
11 gate regulations establishing requirements for con-
12 sumer education materials on best practices associ-
13 ated with the use of containers which contain less
14 than 20 pounds of a class II, group II substance and
15 prohibiting the sale or distribution, or offer for sale
16 or distribution, of any class II, group II substance
17 in any container which contains less than 20 pounds
18 of such class II, group II substance, unless con-
19 sumer education materials consistent with such re-
20 quirements are displayed and available at point-of-
21 sale locations, provided to the consumer, or included
22 in or on the packaging of the container which con-
23 tain less than 20 pounds of a class II, group II sub-
24 stance.

1 “(D) The Administrator may, through rule-
2 making, extend the requirements established under
3 this paragraph to containers which contain 30
4 pounds or less of a class II, group II substance if
5 the Administrator determines that such action would
6 produce significant environmental benefits.

7 “(3) RESTRICTION OF SALES.—Effective Janu-
8 ary 1, 2014, no person may sell or distribute or offer
9 to sell or distribute or otherwise introduce into inter-
10 state commerce any motor vehicle air conditioner re-
11 frigerant in any size container unless the substance
12 has been found acceptable for use in a motor vehicle
13 air conditioner under section 612.”.

14 (e) SAFE ALTERNATIVES POLICY.—Section 612(e) of
15 the Clean Air Act (42 U.S.C. 7671k(e)) is amended by
16 inserting “or class II” after each reference to “class I”.

17 **SEC. 123. BLACK CARBON.**

18 (a) STUDY OF BLACK CARBON EMISSIONS.—

19 (1) DEFINITION OF BLACK CARBON.—In this
20 subsection, the term “black carbon” means any
21 light-absorbing graphitic (or elemental) particle pro-
22 duced by incomplete combustion.

23 (2) STUDY.—The Administrator, in consulta-
24 tion with the Secretary of Energy, the Secretary of
25 State, and the heads of the National Oceanic and

1 Atmospheric Administration, the National Aero-
2 nautics and Space Administration, the United States
3 Agency for International Development, the National
4 Institutes of Health, the Centers for Disease Control
5 and Prevention, National Institute of Standards and
6 Technology, and other relevant Federal departments
7 and agencies and representatives of appropriate in-
8 dustry and environmental groups, shall conduct a 4-
9 phase study of black carbon emissions, the phases of
10 which shall be the following:

11 (A) PHASE I—UNIVERSAL DEFINITION.—

12 The Administrator shall conduct phase I of the
13 study under this subsection to carry out meas-
14 ures to establish for the scientific community
15 standard definitions of the terms—

16 (i) black carbon; and

17 (ii) organic carbon.

18 (B) PHASE II—SOURCES AND TECH-

19 NOLOGIES.—The Administrator shall conduct
20 phase II of the study under this subsection to
21 summarize the available scientific and technical
22 information concerning—

23 (i) the identification of the major
24 sources of black carbon emissions in the
25 United States and throughout the world;

1 (ii) an estimate of—

2 (I) the quantity of current and
3 projected future black carbon emis-
4 sions from those sources; and

5 (II) the net climate effects of the
6 emissions;

7 (iii) the most recent scientific data
8 relevant to the public health- and climate-
9 related impacts of black carbon emissions
10 and associated emissions of organic car-
11 bon, nitrogen oxides, and sulfur oxides
12 from the sources identified under clause
13 (i);

14 (iv) the most effective control strate-
15 gies for additional domestic and inter-
16 national reductions in black carbon emis-
17 sions, taking into consideration lifecycle
18 analysis, cost-effectiveness, and the net cli-
19 mate impact of technologies, operations,
20 and strategies, such as—

21 (I) diesel particulate filters on ex-
22 isting diesel on- and off-road engines;
23 and

24 (II) particulate emission reduc-
25 tion measures for marine vessels;

1 (v) carbon dioxide equivalency factors,
2 global/regional modeling, or other metrics
3 to compare the global warming and other
4 climate effects of black carbon emissions
5 with carbon dioxide and other greenhouse
6 gas emissions; and

7 (vi) the health benefits associated with
8 additional black carbon emission reduc-
9 tions.

10 (C) PHASE III—INTERNATIONAL FUND-
11 ING.—The Administrator shall conduct phase
12 III of the study under this subsection—

13 (i) to summarize the amount, type,
14 and direction of all actual and potential fi-
15 nancial, technical, and related assistance
16 provided by the United States to foreign
17 countries to reduce, mitigate, or otherwise
18 abate—

19 (I) black carbon emissions; and

20 (II) any health, environmental,
21 and economic impacts associated with
22 those emissions; and

23 (ii) to identify opportunities, including
24 action under existing authority, to achieve
25 significant black carbon emission reduc-

1 tions in foreign countries through the pro-
2 vision of technical assistance or other ap-
3 proaches.

4 (D) PHASE IV—RESEARCH AND DEVELOP-
5 MENT OPPORTUNITIES.—The Administrator
6 shall conduct phase IV of the study under this
7 subsection for the purpose of providing to Con-
8 gress recommendations regarding—

9 (i) areas of focus for additional re-
10 search for cost-effective technologies, oper-
11 ations, and strategies with the highest po-
12 tential to reduce black carbon emissions
13 and protect public health in the United
14 States and internationally; and

15 (ii) actions that the Federal Govern-
16 ment could take to encourage or require
17 additional black carbon emission reduc-
18 tions.

19 (3) REPORTS.—The Administrator shall submit
20 to Congress—

21 (A) by not later than 180 days after the
22 date of enactment of this Act, a report describ-
23 ing the results of phases I and II of the study
24 under subparagraphs (A) and (B) of paragraph
25 (2);

1 (B) by not later than 270 days after the
2 date of enactment of this Act, a report describ-
3 ing the results of phase III of the study under
4 paragraph (2)(C); and

5 (C) by not later than 1 year after the date
6 of enactment of this Act, a report describing
7 the recommendations developed for phase IV of
8 the study under paragraph (2)(D).

9 (4) AUTHORIZATION OF APPROPRIATIONS.—
10 There are authorized to be appropriated such sums
11 as are necessary to carry out this subsection.

12 (b) BLACK CARBON MITIGATION.—Title VIII of the
13 Clean Air Act (as amended by section 113 of division A)
14 is amended by adding at the end the following:

15 **“PART E—BLACK CARBON**

16 **“SEC. 851. BLACK CARBON.**

17 **“(a) DOMESTIC BLACK CARBON MITIGATION.—**

18 **“(1) IN GENERAL.—**Taking into consideration
19 the public health and environmental impacts of black
20 carbon emissions, including the effects on global and
21 regional warming, the Arctic, and other snow and
22 ice-covered surfaces, the Administrator shall—

23 **“(A) not later than 2 years after the date**
24 **of enactment of this part, propose—**

1 “(i) regulations applicable to emis-
2 sions of black carbon under the existing
3 authorities of this Act; or

4 “(ii) a finding that existing regula-
5 tions promulgated pursuant to this Act
6 adequately regulate black carbon emis-
7 sions, which finding may be based on a
8 finding that existing regulations, in the
9 judgment of the Administrator—

10 “(I) address those sources that
11 both contribute significantly to the
12 total emissions of black carbon and
13 provide the greatest potential for sig-
14 nificant and cost-effective reductions
15 in emissions of black carbon, under
16 the existing authorities; and

17 “(II) reflect the greatest degree
18 of emission reduction achievable
19 through application of technology that
20 will be available for such sources, giv-
21 ing appropriate consideration to cost,
22 energy, and safety factors associated
23 with the application of such tech-
24 nology; and

1 “(B) not later than 3 years after the date
2 of enactment of this part, promulgate final reg-
3 ulations under the existing authorities of this
4 Act or finalize the proposed finding.

5 “(2) APPLICABILITY OF REGULATIONS.—Regu-
6 lations promulgated under paragraph (1) shall not
7 apply to specific types, classes, categories, or other
8 suitable groupings of emission sources that the Ad-
9 ministrators find are subject to adequate regulation.

10 “(b) AUTHORIZATION OF APPROPRIATIONS.—There
11 are authorized to be appropriated such sums as are nec-
12 essary to carry out this section.”.

13 **SEC. 124. STATES.**

14 Section 116 of the Clean Air Act (42 U.S.C. 7416)
15 is amended by adding the following at the end thereof:
16 “‘For the purposes of this section, the phrases ‘standard
17 or limitation respecting emissions of air pollutants’ and
18 ‘requirements respecting control or abatement of air pollu-
19 tion’ shall include any provision to: limit greenhouse gas
20 emissions, require surrender to the State or a political
21 subdivision thereof of emission allowances or offset credits
22 established or issued under this Act, and require the use
23 of such allowances or credits as a means of demonstrating
24 compliance with requirements established by a State or
25 political subdivision thereof.”.

1 **SEC. 125. STATE PROGRAMS.**

2 Title VIII of the Clean Air Act (as amended by sec-
3 tion 123(b)) is amended by adding at the end the fol-
4 lowing:

5 **“PART F—MISCELLANEOUS**

6 **“SEC. 861. STATE PROGRAMS.**

7 “(a) IN GENERAL.—Notwithstanding section 116, if
8 a Federal auction is conducted, by the deadline of March
9 31, 2011, as established in section 778, no State or polit-
10 ical subdivision thereof shall implement or enforce a com-
11 prehensive greenhouse gas emission limitation program
12 that covers any capped emissions emitted during the years
13 2012 through 2017.

14 “(b) DEADLINE.—Notwithstanding section 116, in
15 the event the March 31, 2011 auction is delayed, no State
16 or political subdivision thereof shall enforce a comprehen-
17 sive greenhouse gas emission limitation program that cov-
18 ers any capped emissions emitted during the period that
19 is at least 9 months from the first auction as set out in
20 section 778, through 2017.

21 “(c) DEFINITION OF COMPREHENSIVE GREENHOUSE
22 GAS EMISSION LIMITATION PROGRAM.—For purposes of
23 this section, the term ‘comprehensive greenhouse gas
24 emission limitation program’ means a system of green-
25 house gas regulation under which a State or political sub-
26 division issues a limited number of tradable instruments

1 in the nature of emission allowances and requires that
2 sources within its jurisdiction surrender such tradeable in-
3 struments for each unit of greenhouse gases emitted dur-
4 ing a compliance period. For purposes of this section, a
5 ‘comprehensive greenhouse gas emission limitation pro-
6 gram’ does not include a target or limit on greenhouse
7 gas emissions adopted by a State or political subdivision
8 that is implemented other than through the issuance and
9 surrender of a limited number of tradable instruments in
10 the nature of emission allowances, nor does it include any
11 other standard, limit, regulation, or program to reduce
12 greenhouse gas emissions that is not implemented through
13 the issuance and surrender of a limited number of
14 tradeable instruments in the nature of emission allow-
15 ances. For purposes of this section, the term ‘comprehen-
16 sive greenhouse gas emission limitation program’ does not
17 include, among other things, fleet-wide motor vehicle emis-
18 sion requirements that allow greater emissions with in-
19 creased vehicle production, or requirements that fuels, or
20 other products, meet an average pollution emission rate
21 or lifecycle greenhouse gas standard.

22 **“SEC. 862. GRANTS FOR SUPPORT OF AIR POLLUTION CON-**
23 **TROL PROGRAMS.**

24 “The Administrator is authorized to make grants to
25 air pollution control agencies pursuant to section 105 for

1 purposes of assisting in the implementation of programs
2 to address global warming established under the Clean
3 Energy Jobs and American Power Act.”.

4 **SEC. 126. ENFORCEMENT.**

5 (a) REMAND.—Section 307(b) of the Clean Air Act
6 (42 U.S.C. 7607(b)) is amended by adding the following
7 new paragraph at the end thereof:

8 “(3) If the court determines that any action of
9 the Administrator is arbitrary, capricious, or other-
10 wise unlawful, the court may remand such action,
11 without vacatur, if vacatur would impair or delay
12 protection of the environment or public health or
13 otherwise undermine the timely achievement of the
14 purposes of this Act.

15 “(4) If the court determines that any action of
16 the Administrator is arbitrary, capricious, or other-
17 wise unlawful, and remands the matter to the Ad-
18 ministrator, the Administrator shall complete final
19 action on remand within an expeditious time period
20 not longer than the time originally allowed for the
21 action or 1 year, whichever is less, unless the court
22 on motion determines that a shorter or longer period
23 is necessary, appropriate, and consistent with the
24 purposes of this Act. The court of appeals shall have

1 jurisdiction to enforce a deadline for action on re-
2 mand under this paragraph.”.

3 (b) PETITION FOR RECONSIDERATION.—Section
4 307(d)(7)(B) of the Clean Air Act (42 U.S.C.
5 7607(d)(7)(B)) is amended as follows:

6 (1) By inserting after the second sentence “If
7 a petition for reconsideration is filed, the Adminis-
8 trator shall take final action on such petition, in-
9 cluding promulgation of final action either revising
10 or determining not to revise the action for which re-
11 consideration is sought, within 150 days after the
12 petition is received by the Administrator or the peti-
13 tion shall be deemed denied for the purpose of judi-
14 cial review.”.

15 (2) By amending the third sentence to read as
16 follows: “Such person may seek judicial review of
17 such denial, or of any other final action, by the Ad-
18 ministrator, in response to a petition for reconsider-
19 ation, in the United States court of appeals for the
20 appropriate circuit (as provided in subsection (b)).”.

21 (c) PETITION FOR REVIEW.—Section 307(b)(1) of
22 the Clean Air Act (42 U.S.C. 7607(b)(1)) is amended by
23 inserting after the second sentence the following: “Any
24 person may file a petition for review of action by the Ad-
25 ministrator as provided in this subsection.”.

1 **SEC. 127. CONFORMING AMENDMENTS.**

2 (a) FEDERAL ENFORCEMENT.—Section 113 of the
3 Clean Air Act (42 U.S.C. 7413) is amended as follows:

4 (1) In subsection (a)(3), by striking “or title
5 VI,” and inserting “title VI, title VII, or title VIII”.

6 (2) In subsection (b), by striking “or a major
7 stationary source” and inserting “a major stationary
8 source, or a covered EGU under title VIII” in the
9 material preceding paragraph (1).

10 (3) In paragraph (2) of subsection (b), by strik-
11 ing “or title VI” and inserting “title VI, title VII,
12 or title VIII”.

13 (4) In subsection (c)—

14 (A) in the first sentence of paragraph (1),
15 by striking “or title VI (relating to strato-
16 spheric ozone control),” and inserting “title VI,
17 title VII, or title VIII,”; and

18 (B) in the first sentence of paragraph (3),
19 by striking “or VI” and inserting “VI, VII, or
20 VIII”.

21 (5) In subsection (d)(1)(B), by striking “or VI”
22 and inserting “VI, VII, or VIII”.

23 (6) In subsection (f), in the first sentence, by
24 striking “or VI” and inserting “VI, VII, or VIII”.

750

1 (b) RETENTION OF STATE AUTHORITY.—Section
2 116 of the Clean Air Act (42 U.S.C. 7416) is amended
3 as follows:

4 (1) By striking “and 233” and inserting “233”.

5 (2) By striking “of moving sources)” and in-
6 sserting “of moving sources), and 861 (preempting
7 certain State greenhouse gas programs for a limited
8 time)”.

9 (c) INSPECTIONS, MONITORING, AND ENTRY.—Sec-
10 tion 114(a) of the Clean Air Act (42 U.S.C. 7414(a)) is
11 amended by striking “section 112,” and all that follows
12 through “(ii)” and inserting the following: “section 112,
13 or any regulation of greenhouse gas emissions under title
14 VII or VIII, (ii)”.

15 (d) ENFORCEMENT.—Subsection (f) of section 304 of
16 the Clean Air Act (42 U.S.C. 7604(f)) is amended as fol-
17 lows:

18 (1) By striking “; or” at the end of paragraph
19 (3) thereof and inserting a comma.

20 (2) By striking the period at the end of para-
21 graph (4) thereof and inserting “, or”.

22 (3) By adding the following after paragraph (4)
23 thereof:

24 “(5) any requirement of title VII or VIII.”.

1 (e) ADMINISTRATIVE PROCEEDINGS AND JUDICIAL
2 REVIEW.—Section 307 of the Clean Air Act (42 U.S.C.
3 7607) is amended as follows:

4 (1) In subsection (a), by striking “, or section
5 306” and inserting “section 306, or title VII or
6 VIII”.

7 (2) In subsection (b)(1)—

8 (A) by striking “,” and inserting “,” in
9 each place such punctuation appears; and

10 (B) by striking “section 120,” in the first
11 sentence and inserting “section 120, any final
12 action under title VII or VIII,”.

13 (3) In subsection (d)(1) by amending subpara-
14 graph (S) to read as follows:

15 “(S) the promulgation or revision of any
16 regulation under title VII or VIII,”.

17 (f) TECHNICAL AMENDMENT.—Title IV of the Clean
18 Air Act (relating to noise pollution) (42 U.S.C. 7641 et
19 seq.)—

20 (1) is amended by redesignating sections 401
21 through 403 as sections 901 through 903, respec-
22 tively; and

23 (2) is redesignated as title IX and moved to ap-
24 pear at the end of that Act.

1 **SEC. 128. DAVIS-BACON COMPLIANCE.**

2 (a) IN GENERAL.—Notwithstanding any other provi-
3 sion of law and in a manner consistent with other provi-
4 sions in this Act, to receive emission allowances or funding
5 under this Act, or the amendments made by this Act, the
6 recipient shall provide reasonable assurances that all la-
7 borers and mechanics employed by contractors and sub-
8 contractors on projects funded directly by or assisted in
9 whole or in part by and through the Federal Government
10 pursuant to this Act, or the amendments made by this
11 Act, or by any entity established in accordance with this
12 Act, or the amendments made by this Act, including the
13 Carbon Storage Research Corporation, will be paid wages
14 at rates not less than those prevailing on projects of a
15 character similar in the locality as determined by the Sec-
16 retary of Labor in accordance with subchapter IV of chap-
17 ter 31 of title 40, United States Code (commonly known
18 as the “Davis-Bacon Act”). With respect to the labor
19 standards specified in this section, the Secretary of Labor
20 shall have the authority and functions set forth in Reorga-
21 nization Plan Numbered 14 of 1950 (64 Stat. 1267; 5
22 U.S.C. App.) and section 3145 of title 40, United States
23 Code.

24 (b) EXEMPTION.—Neither subsection (a) nor the re-
25 quirements of subchapter IV of chapter 31 of title 40,

1 United States Code, shall apply to retrofitting of the fol-
2 lowing:

3 (1) Single family homes (both attached and de-
4 tached) under section 164 of division A.

5 (2) Owner-occupied residential units in larger
6 buildings that have their own dedicated space-condi-
7 tioning systems under section 164 of division A.

8 (3) Residential buildings (as defined in section
9 164(a) of division A) if designed for residential use
10 by less than 4 families.

11 (4) Nonresidential buildings (as defined in sec-
12 tion 164(a) of division A) if the net interior space
13 of such nonresidential building is less than 6,500
14 square feet.

15 **Subtitle D—Carbon Market** 16 **Assurance**

17 **SEC. 131. CARBON MARKET ASSURANCE.**

18 It is the sense of the Senate that there shall be a
19 single, integrated carbon market oversight program—

20 (1) to provide for effective and comprehensive
21 market oversight and enforcement;

22 (2) to lower systemic risk and protect con-
23 sumers;

24 (3) to ensure market liquidity and allowance
25 availability;

1 (4) to enhance the price discovery function of
2 such markets, ensuring that the price for emission
3 allowances and offset credits reflects the marginal
4 cost of abatement;

5 (5) to prevent excessive speculation that con-
6 tributes to price volatility, including the establish-
7 ment of robust aggregate position limits and margin
8 requirements;

9 (6) to ensure that market mechanisms and as-
10 sociated oversight support the environmental integ-
11 rity of the program established under title VII of the
12 Clean Air Act (as added by section 101 of this divi-
13 sion);

14 (7) to establish provisions for market trans-
15 parency that provide authority, resources, and infor-
16 mation needed to prevent fraud and manipulation in
17 such markets;

18 (8) to establish standards for trading as, and
19 operation of, trading facilities;

20 (9) to ensure a well-functioning, well-regulated
21 market, including a futures market, designed to
22 manage risk and facilitate investment in emission re-
23 ductions;

24 (10) to establish clear, professional standards
25 for dealers, traders, and other market participants;

1 (11) to provide for appropriate criminal and
2 civil penalties; and

3 (12) to prevent any excessive leverage by mar-
4 ket participants that creates risk to the economy.

5 **Subtitle E—Ensuring Real**
6 **Reductions in Industrial Emissions**

7 **SEC. 141. ENSURING REAL REDUCTIONS IN INDUSTRIAL**
8 **EMISSIONS.**

9 Title VII of the Clean Air Act (as amended by section
10 322 of division A) is amended by adding at the end the
11 following:

12 **“PART F—ENSURING REAL REDUCTIONS IN**
13 **INDUSTRIAL EMISSIONS**

14 **“SEC. 761. PURPOSES.**

15 “The purposes of this part are—

16 “(1) to promote a strong global effort to signifi-
17 cantly reduce greenhouse gas emissions, and,
18 through this global effort, stabilize greenhouse gas
19 concentrations in the atmosphere at a level that will
20 prevent dangerous anthropogenic interference with
21 the climate system;

22 “(2) to prevent an increase in greenhouse gas
23 emissions in countries other than the United States
24 as a result of direct and indirect compliance costs in-
25 curred under this title;

1 “(3) to provide a rebate to the owners and op-
2 erators of entities in domestic eligible industrial sec-
3 tors for their greenhouse gas emission costs incurred
4 under this title, but not for costs associated with
5 other related or unrelated market dynamics;

6 “(4) to design such rebates in a way that will
7 prevent carbon leakage while also rewarding innova-
8 tion and facility-level investments in energy effi-
9 ciency performance improvements; and

10 “(5) to eliminate or reduce distribution of emis-
11 sion allowances under this part when such distribu-
12 tion is no longer necessary to prevent carbon leakage
13 from eligible industrial sectors.

14 **“SEC. 762. DEFINITIONS.**

15 “In this part:

16 “(1) CARBON LEAKAGE.—The term ‘carbon
17 leakage’ means any substantial increase (as deter-
18 mined by the Administrator) in greenhouse gas
19 emissions by industrial entities located in other
20 countries if such increase is caused by an incre-
21 mental cost of production increase in the United
22 States resulting from the implementation of this
23 title.

24 “(2) ELIGIBLE INDUSTRIAL SECTOR.—The
25 term ‘eligible industrial sector’ means an industrial

1 sector determined by the Administrator under sec-
2 tion 763(b) to be eligible to receive emission allow-
3 ance rebates under this part.

4 “(3) INDUSTRIAL SECTOR.—The term ‘indus-
5 trial sector’ means any sector that is in the manu-
6 facturing sector (as defined in NAICS codes 31, 32,
7 and 33) or that beneficiates or otherwise processes
8 (including agglomeration) metal ores, including iron
9 and copper ores, soda ash, or phosphate. The extrac-
10 tion of metal ores, soda ash, or phosphate shall not
11 be considered to be an industrial sector.

12 “(4) NAICS.—The term ‘NAICS’ means the
13 North American Industrial Classification System of
14 2002.

15 “(5) OUTPUT.—The term ‘output’ means the
16 total tonnage or other standard unit of production
17 (as determined by the Administrator) produced by
18 an entity in an industrial sector. The output of the
19 cement sector is hydraulic cement, and not clinker.

20 **“SEC. 763. ELIGIBLE INDUSTRIAL SECTORS.**

21 “(a) LIST.—

22 “(1) INITIAL LIST.—Not later than June 30,
23 2011, the Administrator shall publish in the Federal
24 Register a list of eligible industrial sectors pursuant
25 to subsection (b). Such list shall include the amount

1 of the emission allowance rebate per unit of produc-
2 tion that shall be provided to entities in each eligible
3 industrial sector in the following two calendar years
4 pursuant to section 764.

5 “(2) SUBSEQUENT LISTS.—Not later than Feb-
6 ruary 1, 2013, and every 4 years thereafter, the Ad-
7 ministrator shall publish in the Federal Register an
8 updated version of the list published under para-
9 graph (1).

10 “(b) ELIGIBLE INDUSTRIAL SECTORS.—

11 “(1) IN GENERAL.—Not later than June 30,
12 2011, the Administrator shall promulgate a rule des-
13 ignating, based on the criteria under paragraph (2),
14 the industrial sectors eligible for emission allowance
15 rebates under this part.

16 “(2) PRESUMPTIVELY ELIGIBLE INDUSTRIAL
17 SECTORS.—

18 “(A) ELIGIBILITY CRITERIA.—

19 “(i) IN GENERAL.—An owner or oper-
20 ator of an entity shall be eligible to receive
21 emission allowance rebates under this part
22 if such entity is in an industrial sector that
23 is included in a six-digit classification of
24 the NAICS that meets the criteria in both

1 clauses (ii) and (iii), or the criteria in
2 clause (iv).

3 “(ii) ENERGY OR GREENHOUSE GAS
4 INTENSITY.—As determined by the Admin-
5 istrator, the industrial sector had—

6 “(I) an energy intensity of at
7 least 5 percent, calculated by dividing
8 the cost of purchased electricity and
9 fuel costs of the sector by the value of
10 the shipments of the sector, based on
11 data described in subparagraph (D);
12 or

13 “(II) a greenhouse gas intensity
14 of at least 5 percent, calculated by di-
15 viding—

16 “(aa) the number 20 multi-
17 plied by the number of tons of
18 carbon dioxide equivalent green-
19 house gas emissions (including
20 direct emissions from fuel com-
21 bustion, process emissions, and
22 indirect emissions from the gen-
23 eration of electricity used to
24 produce the output of the sector)

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1 of the sector based on data de-
2 scribed in subparagraph (D); by

3 “(bb) the value of the ship-
4 ments of the sector, based on
5 data described in subparagraph
6 (D).

7 “(iii) TRADE INTENSITY.—As deter-
8 mined by the Administrator, the industrial
9 sector had a trade intensity of at least 15
10 percent, calculated by dividing the value of
11 the total imports and exports of such sec-
12 tor by the value of the shipments plus the
13 value of imports of such sector, based on
14 data described in subparagraph (D).

15 “(iv) VERY HIGH ENERGY OR GREEN-
16 HOUSE GAS INTENSITY.—As determined by
17 the Administrator, the industrial sector
18 had an energy or greenhouse gas intensity,
19 as calculated under clause (ii)(I) or (II), of
20 at least 20 percent.

21 “(B) METAL AND PHOSPHATE PRODUC-
22 TION CLASSIFIED UNDER MORE THAN ONE
23 NAICS CODE.—For purposes of this section, the
24 Administrator shall—

1 available, the Administrator shall make a
2 determination based upon 2002 or 2006
3 data from the most detailed industrial clas-
4 sification level of Energy Information
5 Agency's Manufacturing Energy Consump-
6 tion Survey (using 2006 data if it is avail-
7 able) and the 2002 or 2007 Economic Cen-
8 sus of the United States (using 2007 data
9 if it is available). If data from the Manu-
10 facturing Energy Consumption Survey or
11 Economic Census are unavailable for any
12 sector at the six-digit classification level in
13 the NAICS, then the Administrator may
14 extrapolate the information necessary to
15 determine the eligibility of a sector under
16 this paragraph from available Manufac-
17 turing Energy Consumption Survey or
18 Economic Census data pertaining to a
19 broader industrial category classified in the
20 NAICS. If data relating to the
21 beneficiation or other processing (including
22 agglomeration) of metal ores, including
23 iron and copper ores, soda ash, or phos-
24 phate are not available from the specified
25 data sources, the Administrator shall use

1 the best available Federal or State govern-
2 ment data and may use, to the extent nec-
3 essary, representative data submitted by
4 entities that perform such beneficiation or
5 other processing (including agglomeration),
6 in making a determination. Fuel cost data
7 shall not include the cost of fuel used as
8 feedstock by an industrial sector.

9 “(ii) IMPORTS AND EXPORTS.—The
10 Administrator shall base the value of im-
11 ports and exports under this subsection on
12 United States International Trade Com-
13 mission data. The Administrator shall take
14 the average of data from as many of the
15 years of 2004, 2005, and 2006 for which
16 such data are available. If data from the
17 United States International Trade Com-
18 mission are unavailable for any sector at
19 the six-digit classification level in the
20 NAICS, then the Administrator may ex-
21 trapolate the information necessary to de-
22 termine the eligibility of a sector under
23 this paragraph from available United
24 States International Trade Commission

1 data pertaining to a broader industrial cat-
2 egory classified in the NAICS.

3 “(iii) PERCENTAGES.—The Adminis-
4 trator shall round the energy intensity,
5 greenhouse gas intensity, and trade inten-
6 sity percentages under subparagraph (A)
7 to the nearest whole number.

8 “(iv) GREENHOUSE GAS EMISSION
9 CALCULATIONS.—When calculating the
10 tons of carbon dioxide equivalent green-
11 house gas emissions for each sector under
12 subparagraph (A)(ii)(II)(aa), the Adminis-
13 trator—

14 “(I) shall use the best available
15 data from as many of the years 2004,
16 2005, and 2006 for which such data
17 is available; and

18 “(II) may, to the extent nec-
19 essary with respect to a sector, use
20 economic and engineering models and
21 the best available information on tech-
22 nology performance levels for such
23 sector.

24 “(3) ADMINISTRATIVE DETERMINATION OF AD-
25 DITIONAL ELIGIBLE INDUSTRIAL SECTORS.—

1 graph (2)(A), or the eligibility criteria
2 in clause (iv) of paragraph (2)(A).

3 “(ii) DATA.—In making a determina-
4 tion under this subparagraph, the Admin-
5 istrator shall consider data submitted by
6 the petitioner that is specific to the entity,
7 data solicited by the Administrator from
8 other entities in the subsector, if such
9 other entities exist, and data specified in
10 paragraph (2)(D).

11 “(iii) BASIS OF SUBSECTOR DETER-
12 MINATION.—The Administrator shall de-
13 termine an entity or group of entities to be
14 a subsector of a six-digit section of the
15 NAICS code based only upon the products
16 manufactured and not the industrial proc-
17 ess by which the products are manufac-
18 tured, except that the Administrator may
19 determine an entity or group of entities
20 that manufacture a product from primarily
21 virgin material to be a separate subsector
22 from another entity or group of entities
23 that manufacture the same product pri-
24 marily from recycled material.

1 “(iv) USE OF MOST RECENT DATA.—

2 In determining whether to designate a sec-
3 tor or subsector as an eligible industrial
4 sector under this subparagraph, the Ad-
5 ministrator shall use the most recent data
6 available from the sources described in
7 paragraph (2)(D), rather than the data
8 from the years specified in paragraph
9 (2)(D), to determine the trade intensity of
10 such sector or subsector, but only for de-
11 termining such trade intensity.

12 “(v) FINAL ACTION.—The Adminis-
13 trator shall take final action on such peti-
14 tion no later than 6 months after the peti-
15 tion is received by the Administrator.

16 **“SEC. 764. DISTRIBUTION OF EMISSION ALLOWANCE RE-**
17 **BATES.**

18 “(a) DISTRIBUTION SCHEDULE.—

19 “(1) IN GENERAL.—For each vintage year, the
20 Administrator shall distribute pursuant to this sec-
21 tion emission allowances made available under sec-
22 tion 771(a)(5), no later than October 31 of the pre-
23 ceding calendar year. The Administrator shall make
24 such annual distributions to the owners and opera-
25 tors of each entity in an eligible industrial sector in

1 the amount of emission allowances calculated under
2 subsection (b), except that—

3 “(A) for vintage years 2012 and 2013, the
4 distribution for a covered entity shall be pursu-
5 ant to the entity’s indirect carbon factor as cal-
6 culated under subsection (b)(3);

7 “(B) for vintage year 2026 and thereafter,
8 the distribution shall be pursuant to the
9 amount calculated under subsection (b) multi-
10 plied by, for a sector—

11 “(i) 90 percent for vintage year 2026;

12 “(ii) 80 percent for vintage year
13 2027;

14 “(iii) 70 percent for vintage year
15 2028;

16 “(iv) 60 percent for vintage year
17 2029;

18 “(v) 50 percent for vintage year 2030;

19 “(vi) 40 percent for vintage year
20 2031;

21 “(vii) 30 percent for vintage year
22 2032;

23 “(viii) 20 percent for vintage year
24 2033;

1 “(ix) 10 percent for vintage year
2 2034; and

3 “(x) 0 percent for vintage year 2035
4 and thereafter.

5 “(2) NEWLY ELIGIBLE SECTORS.—In addition
6 to receiving a distribution of emission allowances
7 under this section in the first distribution occurring
8 after an industrial sector is designated as eligible
9 under section 763(b)(3), the owner or operator of an
10 entity in that eligible industrial sector may receive a
11 prorated share of any emission allowances made
12 available for distribution under this section that
13 were not distributed for the year in which the peti-
14 tion for eligibility was granted under section
15 763(b)(3)(A).

16 “(3) CESSATION OF QUALIFYING ACTIVITIES.—
17 If, as determined by the Administrator, a facility is
18 no longer in an eligible industrial sector designated
19 under section 763—

20 “(A) the Administrator shall not distribute
21 emission allowances to the owner or operator of
22 such facility under this section; and

23 “(B) the owner or operator of such facility
24 shall return to the Administrator all allowances
25 that have been distributed to it for future vin-

1 tage years and a pro-rated amount of allow-
2 ances distributed to the facility under this sec-
3 tion for the vintage year in which the facility
4 ceases to be in an eligible industrial sector des-
5 ignated under section 763.

6 “(b) CALCULATION OF DIRECT AND INDIRECT CAR-
7 BON FACTORS.—

8 “(1) IN GENERAL.—

9 “(A) COVERED ENTITIES.—Except as pro-
10 vided in subsection (a), for covered entities that
11 are in eligible industrial sectors, the amount of
12 emission allowance rebates shall be based on
13 the sum of the covered entity’s direct and indi-
14 rect carbon factors.

15 “(B) OTHER ELIGIBLE ENTITIES.—For
16 entities that are in eligible industrial sectors
17 but are not covered entities, the amount of
18 emission allowance rebates shall be based on
19 the entity’s indirect carbon factor.

20 “(C) NEW ENTITIES.—Not later than 2
21 years after the date of enactment of this title,
22 the Administrator shall issue regulations gov-
23 erning the distribution of emission allowance re-
24 bates for the first and second years of operation

1 of a new entity in an eligible industrial sector.

2 These regulations shall provide for—

3 “(i) the distribution of emission allow-
4 ance rebates to such entities based on com-
5 parable entities in the same sector; and

6 “(ii) an adjustment in the third and
7 fourth years of operation to reconcile the
8 total amount of emission allowance rebates
9 received during the first and second years
10 of operation to the amount the entity
11 would have received during the first and
12 second years of operation had the appro-
13 priate data been available.

14 “(2) DIRECT CARBON FACTOR.—The direct car-
15 bon factor for a covered entity for a vintage year is
16 the product of—

17 “(A) the average annual output of the cov-
18 ered entity for the 2 years preceding the year
19 of the distribution; and

20 “(B) the most recent calculation of the av-
21 erage direct greenhouse gas emissions (ex-
22 pressed in tons of carbon dioxide equivalent)
23 per unit of output for all covered entities in the
24 sector, as determined by the Administrator
25 under paragraph (4).

1 “(3) INDIRECT CARBON FACTOR.—

2 “(A) IN GENERAL.—The indirect carbon
3 factor for an entity for a vintage year is the
4 product obtained by multiplying the average an-
5 nual output of the entity for the 2 years pre-
6 ceding the year of the distribution by both the
7 electricity emissions intensity factor determined
8 pursuant to subparagraph (B) and the elec-
9 tricity efficiency factor determined pursuant to
10 subparagraph (C) for the year concerned.

11 “(B) ELECTRICITY EMISSIONS INTENSITY
12 FACTOR.—

13 “(i) IN GENERAL.—Each person sell-
14 ing electricity to the owner or operator of
15 an entity in any sector designated as an el-
16 igible industrial sector under section
17 763(b) shall provide the owner or operator
18 of the entity and the Administrator, on an
19 annual basis, the electricity emissions in-
20 tensity factor for the entity. The electricity
21 emissions intensity factor for the entity,
22 expressed in tons of carbon dioxide equiva-
23 lents per kilowatt hour, is determined by
24 dividing—

1 “(I) the annual sum of the hour-
2 ly product of—

3 “(aa) the electricity pur-
4 chased by the entity from that
5 person in each hour (expressed in
6 kilowatt hours); multiplied by

7 “(bb) the marginal or
8 weighted average tons of carbon
9 dioxide equivalent per kilowatt
10 hour that are reflected in the
11 electricity charges to the entity,
12 as determined by the entity’s re-
13 tail rate arrangements; by

14 “(II) the total kilowatt hours of
15 electricity purchased by the entity
16 from that person during that year.

17 “(ii) USE OF OTHER DATA TO DETER-
18 MINE FACTOR.—Where it is not possible to
19 determine the precise electricity emissions
20 intensity factor for an entity using the
21 methodology in clause (i), the person sell-
22 ing electricity shall use the monthly aver-
23 age data reported by the Energy Informa-
24 tion Administration or collected and re-
25 ported by the Administrator for the utility

1 serving the entity to determine the elec-
2 tricity emissions intensity factor.

3 “(C) ELECTRICITY EFFICIENCY FACTOR.—

4 The electricity efficiency factor is the average
5 amount of electricity (in kilowatt hours) used
6 per unit of output for all entities in the relevant
7 sector, as determined by the Administrator
8 based on the best available data, including data
9 provided under paragraph (6).

10 “(D) INDIRECT CARBON FACTOR REDUC-

11 TION.—If an electricity provider received a free
12 allocation of emission allowances pursuant to
13 section 771(a)(1), the Administrator shall ad-
14 just the indirect carbon factor to avoid rebates
15 to the eligible entity for costs that the Adminis-
16 trator determines were not incurred by the eli-
17 gible entity because the allowances were freely
18 allocated to the eligible entity’s electricity pro-
19 vider and used for the benefit of industrial con-
20 sumers.

21 “(4) GREENHOUSE GAS INTENSITY CALCULA-

22 TIONS.—The Administrator shall calculate the aver-
23 age direct greenhouse gas emissions (expressed in
24 tons of carbon dioxide equivalent) per unit of output
25 and the electricity efficiency factor for all covered

1 entities in each eligible industrial sector every 4
2 years, using an average of the four most recent
3 years of the best available data. For purposes of the
4 lists required to be published no later than February
5 1, 2013, the Administrator shall use the best avail-
6 able data for the maximum number of years, up to
7 4 years, for which data are available.

8 “(5) ENSURING EFFICIENCY IMPROVEMENTS.—
9 When making greenhouse gas calculations, the Ad-
10 ministrator shall—

11 “(A) limit the average direct greenhouse
12 gas emissions per unit of output, calculated
13 under paragraph (4), for any eligible industrial
14 sector to an amount that is not greater than it
15 was in any previous calculation under this sub-
16 section;

17 “(B) limit the electricity emissions inten-
18 sity factor, calculated under paragraph (3)(B)
19 and resulting from a change in electricity sup-
20 ply, for any entity to an amount that is not
21 greater than it was during any previous year;
22 and

23 “(C) limit the electricity efficiency factor,
24 calculated under paragraph (3)(C), for any eli-
25 gible industrial sector to an amount that is not

1 greater than it was in any previous calculation
2 under this subsection.

3 “(6) DATA SOURCES.—For the purposes of this
4 subsection—

5 “(A) the Administrator shall use data from
6 the greenhouse gas registry established under
7 section 713, where it is available; and

8 “(B) each owner or operator of an entity
9 in an eligible industrial sector and each depart-
10 ment, agency, and instrumentality of the
11 United States shall provide the Administrator
12 with such information as the Administrator
13 finds necessary to determine the direct carbon
14 factor and the indirect carbon factor for each
15 entity subject to this section.

16 “(c) TOTAL MAXIMUM DISTRIBUTION.—Notwith-
17 standing subsections (a) and (b), the Administrator shall
18 not distribute more allowances for any vintage year pursu-
19 ant to this section than are allocated for use under this
20 part pursuant to section 765 for that vintage year. For
21 any vintage year for which the total emission allowance
22 rebates calculated pursuant to this section exceed the
23 number of allowances allocated pursuant to section 765,
24 the Administrator shall reduce each entity’s distribution
25 on a pro rata basis so that the total distribution under

1 this section equals the number of allowances allocated
2 under section 765.

3 “(d) IRON AND STEEL SECTOR.—For purposes of
4 this section, the Administrator shall consider as in dif-
5 ferent industrial sectors—

6 “(1) entities using integrated iron and
7 steelmaking technologies (including coke ovens, blast
8 furnaces, and other iron-making technologies); and

9 “(2) entities using electric arc furnace tech-
10 nologies.

11 “(e) METAL, SODA ASH, OR PHOSPHATE PRODUC-
12 TION CLASSIFIED UNDER MORE THAN ONE NAICS
13 CODE.—For purposes of this section, the Administrator
14 shall not aggregate data for the beneficiation or other
15 processing (including agglomeration) of metal ores, soda
16 ash, or phosphate with subsequent steps in the process
17 of metal, soda ash, or phosphate manufacturing. The Ad-
18 ministrator shall consider the beneficiation or other proc-
19 essing (including agglomeration) of metal ores, soda ash,
20 or phosphate to be in separate industrial sectors from the
21 metal, soda ash, or phosphate manufacturing sectors. In-
22 dustrial sectors that beneficiate or otherwise process (in-
23 cluding agglomeration) metal ores, soda ash, or phosphate
24 shall not receive emission allowance rebates under this sec-

1 tion related to the activity of extracting metal ores, soda
2 ash, or phosphate.

3 “(f) COMBINED HEAT AND POWER.—For purposes
4 of this section, and to achieve the purpose set forth in
5 section 761(4), (the Administrator may consider entities to
6 be in different industrial sectors or otherwise take into ac-
7 count the differences among entities in the same industrial
8 sector, based upon the extent to which such entities use
9 combined heat and power technologies.

10 **“SEC. 765. INTERNATIONAL TRADE.**

11 “It is the sense of the Senate that this Act will con-
12 tain a trade title that will include a border measure that
13 is consistent with our international obligations and de-
14 signed to work in conjunction with provisions that allocate
15 allowances to energy-intensive and trade-exposed indus-
16 tries.”.

17 **TITLE II—PROGRAM**
18 **ALLOCATIONS**

19 **SEC. 201. INVESTMENT IN CLEAN VEHICLE TECHNOLOGY.**

20 (a) ESTABLISHMENT OF FUND.—There is estab-
21 lished in the Treasury a separate account, which shall be
22 known as the “Clean Vehicle Technology Fund”.

23 (b) AUCTION PROCEEDS.—The Administrator shall
24 deposit the proceeds of the auction conducted pursuant

1 to section 771(b)(3) of the Clean Air Act in the Clean
2 Vehicle Technology Fund.

3 (c) AVAILABILITY OF AMOUNTS.—Of the amounts
4 deposited in the Clean Vehicle Technology Fund—

5 (1) 80 percent shall be available to the Sec-
6 retary of Energy to support—

7 (A) the development and demonstration of
8 a national transportation low-emissions energy
9 plan; and

10 (B) the use of plug-in electric drive vehi-
11 cles, including medium- and heavy-duty motor
12 vehicles (including transit vehicles) and other
13 advanced technology vehicles (as defined in sec-
14 tions 131 and 136 of the Energy Independence
15 and Security Act of 2007 (42 U.S.C. 17011,
16 17013)) that are developed and produced in the
17 United States; and

18 (2) 20 percent of the amounts shall be available
19 to the Administrator for use in providing grants au-
20 thorized under subtitle G of title VII of the Energy
21 Policy Act of 2005 (42 U.S.C. 16131 et seq.).

22 (d) PILOT PROGRAM.—

23 (1) IN GENERAL.—Of the amounts deposited in
24 accordance with (c)(1), the Secretary of Energy
25 shall use not more than 5 percent to develop a na-

1 tional transportation low-emissions energy plan that
2 shall—

3 (A) project the near- and long-term need
4 for and location of electric drive vehicle refuel-
5 ing infrastructure at strategic locations across
6 all major national highways, roads, and cor-
7 ridors;

8 (B) identify infrastructure and standard-
9 ization needs for electricity providers, infra-
10 structure providers, vehicle manufacturers, and
11 electricity purchasers;

12 (C) establish an aspirational goal of
13 achieving strategic deployment of electric vehi-
14 cle infrastructure by 2020;

15 (D) be developed by the Secretary with the
16 involvement of all relevant stakeholders; and

17 (E) prioritize the development of—

18 (i) standardized public charge access
19 ports with wireless or smart card billing
20 capability; and

21 (ii) level I and level II charge port
22 systems (that charge an electric vehicle
23 over a period of 8 to 14 hours and 4 to 8
24 hours, respectively) that will meet the en-

1 ergy requirements of the majority of plug-
2 in hybrid and battery electric vehicles;

3 (F) examine the feasibility of level III
4 charge port systems that can charge an electric
5 vehicle over a period of 10 to 20 minutes; and

6 (G) focus on infrastructure that provides
7 consumers with the lowest cost while providing
8 convenient charge system access.

9 (2) ELECTRIC DRIVE DEMONSTRATION
10 PROJECTS.—

11 (A) IN GENERAL.—The Secretary shall es-
12 tablish pilot projects to demonstrate electric
13 drive vehicles and infrastructure.

14 (B) REQUIREMENTS.—The Secretary
15 shall—

16 (i) establish the pilot projects de-
17 scribed in subparagraph (A) after publica-
18 tion of the plan developed under paragraph
19 (1);

20 (ii) use the plan to determine which
21 regions of the United States are most
22 ready to demonstrate electric vehicle infra-
23 structure;

1 (iii) carry out the pilot projects under
2 this paragraph in different regions of the
3 United States; and

4 (iv) ensure that—

5 (I) at least 1 pilot project is car-
6 ried out in a rural region of the
7 United States; and

8 (II) at least 1 pilot project is fo-
9 cused on freight issues.

10 (3) FINANCIAL RESOURCES.—In carrying out
11 the pilot projects under paragraph (2), the Secretary
12 shall coordinate the use of appropriate financial in-
13 centives, grant programs, and other Federal finan-
14 cial resources to ensure that electric infrastructure
15 delivery entities are able to participate in the pilot
16 projects.

17 (4) LEEP COORDINATOR.—The Secretary may
18 designate 1 full-time position within the Department
19 of Transportation, to be known as the “LEEP coor-
20 dinator”, with responsibility to oversee—

21 (A) the development of the plan under
22 paragraph (1); and

23 (B) the implementation of the pilot
24 projects under paragraph (2).

1 **SEC. 202. STATE AND LOCAL INVESTMENT IN ENERGY EFFI-**
2 **CIENCY AND RENEWABLE ENERGY.**

3 (a) DEFINITIONS.—For purposes of this section:

4 (1) ALLOWANCE.—The term “allowance”
5 means an emission allowance established under sec-
6 tion 721 of the Clean Air Act.

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

11 (3) VINTAGE YEAR.—The term “vintage year”
12 has the meaning given the term in section 700 of the
13 Clean Air Act.

14 (b) DISTRIBUTION AMONG INDIAN TRIBES, STATES,
15 LOCAL GOVERNMENTS, METROPOLITAN PLANNING ORGA-
16 NIZATIONS AND RENEWABLE ELECTRICITY GENERA-
17 TIONS.—The Administrator shall, in accordance with this
18 section, distribute allowances allocated pursuant to section
19 771(a)(8) of the Clean Air Act for the following vintage
20 year. The Administrator, after consultation with the Sec-
21 retary of the Interior, shall distribute not less than 1 per-
22 cent of such allowances to Indian tribes. The Adminis-
23 trator, after consultation with the Secretary of Energy
24 and the with the assistance of the Secretary of Transpor-
25 tation, shall distribute the remaining allowances among
26 the States, local governments, metropolitan planning orga-

1 nizations, and renewable electricity generations under this
2 section each year in accordance with the following for-
3 mula:

4 (1) 62.5 percent of the allowances shall be pro-
5 vided to the States, of which—

6 (A) 30 percent shall be divided equally
7 among the States;

8 (B) 30 percent shall be distributed on a
9 pro rata basis among the States based on the
10 population of each State, as contained in the
11 most recent reliable census data available from
12 the Bureau of the Census for all States at the
13 time at which the Administrator calculates the
14 formula for distribution;

15 (C) 30 percent shall be distributed on a
16 pro rata basis among the States on the basis of
17 the energy consumption of each State, as con-
18 tained in the most recent State Energy Data
19 Report available from the Energy Information
20 Administration (or such alternative reliable
21 source as the Administrator may designate);
22 and

23 (D) 10 percentage shall be provided to the
24 States based on an energy-efficiency formula

1 developed by the Administrator, which formula
2 shall be—

3 (i) based on—

4 (I) weather-adjusted criteria; and

5 (II) performance-based metrics

6 that measure each State's success at

7 decreasing energy consumption or in-

8 creasing energy efficiency—

9 (aa) on a per capita basis in

10 the residential sector; and

11 (bb) on an energy consump-

12 tion per square-foot basis in the

13 commercial sector; and

14 (ii) updated every 3 years.

15 (2) 25 percent of the allowances shall be pro-

16 vided to local governments for energy conservation

17 and efficiency grants.

18 (3) 10 percent of the allowances shall be re-

19 served by the Secretary of Transportation for grants

20 to States and metropolitan planning organizations

21 for greenhouse gas reduction programs in the trans-

22 portation sector.

23 (4) 2.5 percent of the allowances shall be pro-

24 vided to renewable energy generating companies with

25 a capacity of 20 megawatts or greater exclusively for

1 the generation of renewable energy. The Adminis-
2 trator, in consultation with the Secretary of Energy,
3 shall award allocations to renewable energy genera-
4 tion companies based on the number of megawatt-
5 hours the company generates and the technology
6 used. The Administrator shall promulgate such regu-
7 lations as are appropriate to carry out this para-
8 graph.

9 (c) USES.—The allowances distributed to each State,
10 local government, and metropolitan planning organization
11 pursuant to this section shall be used exclusively in accord-
12 ance with the following requirements:

13 (1) ALLOCATION TO STATES.—Allowances allo-
14 cated to the States under subsection (b)(1) shall be
15 for the following purposes and be used in accordance
16 with the following conditions:

17 (A) PURPOSES.—

18 (i) ENERGY EFFICIENCY PRO-
19 GRAMS.—Not less than 35 percent shall be
20 used exclusively for—

21 (I) implementation and enforce-
22 ment of building codes;

23 (II) implementation of the en-
24 ergy-efficient manufactured homes
25 program;

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1 (III) implementation of building
2 energy performance labeling; and

3 (IV) low-income community en-
4 ergy efficiency programs.

5 (ii) RENEWABLE ENERGY PRO-
6 GRAMS.—Renewable energy programs for
7 capital grants, production incentives, loans,
8 loan guarantees, forgivable loans, direct
9 provision of allowances, and interest rate
10 buy-downs for—

11 (I) re-equipping, expanding, or
12 establishing a manufacturing facility
13 that receives certification from the
14 Secretary of Energy pursuant to sec-
15 tion 48C of the Internal Revenue
16 Code of 1986 for the production of—

17 (aa) property designed to be
18 used to produce energy from re-
19 newable energy sources; and

20 (bb) electricity storage sys-
21 tems;

22 (II) deployment of technologies to
23 generate electricity from renewable
24 energy sources; and

1 (III) deployment of facilities or
2 equipment, such as solar panels, to
3 generate electricity or thermal energy
4 from renewable energy resources in
5 and on buildings in an urban environ-
6 ment.

7 (iii) IMPROVEMENT IN ELECTRICITY
8 TRANSMISSION.—Improvement in elec-
9 tricity transmission for 1 or more of the
10 following purposes:

11 (I) State implementation of elec-
12 tricity transmission planning and
13 siting activities that facilitate renew-
14 able energy development, including fa-
15 cilitation of landowner negotiations
16 for transmission of right-of-way leas-
17 ing or other contractual arrange-
18 ments.

19 (II) Grants to nonprofit organi-
20 zations that facilitate negotiations for
21 transmission right-of-way leasing or
22 other contractual agreements between
23 landowners and developers.

24 (III) State or regional studies of
25 renewable energy zones and resources

1 with insufficient transmission capac-
2 ity, including geographical identifica-
3 tion of potential renewable energy
4 sites, environmental reviews, and land
5 use or coastal zone constraints.

6 (IV) Grants to support land-
7 owner associations' and other non-
8 profit organizations' participation in
9 State and Federal siting processes, in-
10 cluding such associations' studies of
11 renewable energy feasibility and bene-
12 fits and associated data collection.

13 (V) Grants to landowners or
14 landowner associations or nonprofit
15 organizations for mitigation of im-
16 pacts on property or ecosystems due
17 to transmission projects that are part
18 of an interconnection-wide plan fo-
19 cused on facilitating renewable energy
20 development.

21 (VI) Training for State regu-
22 latory authority staff and local
23 workforces relating to renewable en-
24 ergy generation resources and storage,

1 smart grid, or new transmission tech-
2 nologies.

3 (VII) Grants to transmission pro-
4 viders for transmission improvements
5 (including smart grid investments)
6 that benefit consumers.

7 (VIII) Grants to transmission
8 providers for security upgrades to the
9 transmission system and authorized
10 uses under title XIII of the Energy
11 Independence and Security Act of
12 2007 (42 U.S.C. 17381 et seq.).

13 (IX) Grants to develop energy
14 storage, reliability, or distributed re-
15 newable generation projects.

16 (iv) END-USE CONSUMERS.—Cost-ef-
17 fective energy efficiency programs for end-
18 use consumers of electricity, natural gas,
19 home heating oil, or propane, including,
20 where appropriate, programs or mecha-
21 nisms administered by local governments
22 and entities other than the State.

23 (v) RETROFITS AND HOUSING INVEST-
24 MENTS.—Energy retrofits and green in-
25 vestments in subsidized housing based on

1 standards to ensure that investments are
2 cost-effective, taking into account reduc-
3 tions in future use of energy and other
4 utilities, and the extent to which such ret-
5 rofits and investments address repair and
6 replacement needs that may otherwise need
7 to be addressed with other forms of assist-
8 ance. As a condition of such funding, the
9 recipient shall commit to an additional pe-
10 riod of affordability of not fewer than 15
11 years, covering all units for which such
12 grants and loans are used.

13 (vi) THERMAL ENERGY EFFI-
14 CIENCY.—Not less than 2 percent shall be
15 used for thermal energy efficiency projects
16 that provide district thermal energy
17 through a network of pipes from 1 or more
18 central plants to at least 2 or more build-
19 ings, combined heat and power that pro-
20 duces electricity and thermal energy with a
21 minimum 60 percent overall efficiency on a
22 lower-heating value basis, or recoverable
23 waste energy (including mechanical, ther-
24 mal, or electrical energy) that, if not for
25 recovery, would be wasted and may be re-

1 covered or generated through modification
2 of an existing facility or addition of a new
3 facility. Allocations may be used for plan-
4 ning, engineering, and feasibility studies as
5 well as project construction and develop-
6 ment. Such projects shall—

7 (I) reduce or avoid greenhouse
8 gas emissions; and

9 (II)(aa) produce thermal energy
10 from renewable energy resources or
11 natural cooling sources;

12 (bb) capture and productively use
13 thermal energy from an electric gen-
14 eration facility;

15 (cc) integrate new electricity gen-
16 eration into an existing district energy
17 system;

18 (dd) capture and productively
19 uses surplus thermal energy from an
20 industrial or municipal process (such
21 as wastewater treatment); or

22 (ee) distribute and transfer to
23 buildings the thermal energy from the
24 energy sources described in items (aa)
25 through (dd).

1 (vii) SMART GRID DEVELOPMENT.—
2 Enabling the development of a Smart Grid
3 (as described in section 1301 of the En-
4 ergy Independence and Security Act of
5 2007 (42 U.S.C. 17381)) for State, local
6 government, and other public buildings and
7 facilities, including integration of renew-
8 able energy resources and distributed gen-
9 eration, demand response, demand-side
10 management, and systems analysis.

11 (B) CONDITIONS.—

12 (i) IN GENERAL.—The States shall
13 prioritize expansion of existing energy effi-
14 ciency programs approved and overseen by
15 the State or the appropriate State regu-
16 latory authority.

17 (ii) SUPPLEMENTATION.—The States
18 shall demonstrate that such allowances
19 have been used to supplement, and not to
20 supplant, existing and otherwise available
21 State, local, and ratepayer funding for
22 such purpose.

23 (2) ENERGY CONSERVATION AND EFFI-
24 CIENCY.—Allowances allocated to local governments
25 under subsection (b)(2) shall be used exclusively for

1 energy conservation and efficiency purposes specified
2 under section 543 of the Energy Independence and
3 Security Act of 2007 (42 U.S.C. 17153).

4 (3) STATE AND MPO GRANTS.—Allocation to
5 the Secretary of Transportation for grants to States
6 and metropolitan planning organizations under sub-
7 section (b)(3) shall be used exclusively for the
8 Transportation Greenhouse Gas Reduction program
9 in accordance with sections 831 and 832 of the
10 Clean Air Act.

11 (d) REPORTING.—Each Indian tribe, State, local gov-
12 ernment, metropolitan planning organization, and renew-
13 able electricity generating company directly receiving al-
14 lowances or allowance value under this section shall sub-
15 mit to the Administrator a report that contains a list of
16 entities receiving allowances or allowance value under this
17 section.

18 (e) ENFORCEMENT.—If the Administrator deter-
19 mines that an Indian tribe, State, local government, met-
20 ropolitan planning organization, or renewable electricity
21 generation company is not in compliance with this section,
22 the Administrator may withhold up to twice the number
23 of allowances or allowance value that the Indian tribe,
24 State, local government, metropolitan planning organiza-
25 tion, or renewable electricity generation company failed to

1 use in accordance with the requirements of this section,
2 that such Indian tribe, State, local government, metropoli-
3 tan planning organization, or renewable electricity genera-
4 tion companies would otherwise be eligible to receive under
5 this section in later years. Allowances withheld pursuant
6 to this subsection shall be distributed among the remain-
7 ing Indian tribes, States, local governments, metropolitan
8 planning organizations, and renewable electricity genera-
9 tion companies in accordance with subsection (b).

10 **SEC. 203. ENERGY EFFICIENCY IN BUILDING CODES.**

11 The Administrator shall distribute emission allow-
12 ances allocated for the following vintage year pursuant to
13 section 771(a)(9) of the Clean Air Act among the States
14 in accordance with the formula described in section 202
15 of this division exclusively for the purpose of section 163
16 of division A.

17 **SEC. 204. BUILDING RETROFIT PROGRAM.**

18 The Administrator shall distribute emission allow-
19 ances allocated for the following vintage year pursuant to
20 section 771(a)(10) of the Clean Air Act among the States
21 in accordance with the formula described in section 202
22 of this division exclusively for the purpose of section 164
23 of division A.

1 **SEC. 205. ENERGY INNOVATION HUBS.**

2 (a) PURPOSE.—The Secretary shall carry out a pro-
3 gram in accordance with this section to establish Energy
4 Innovation Hubs to enhance the economic, environmental,
5 and energy security of the United States by promoting
6 commercial application of clean, indigenous energy alter-
7 natives to oil and other fossil fuels, reducing greenhouse
8 gas emissions, and ensuring that the United States main-
9 tains a technological lead in the development and commer-
10 cial application of state-of-the-art energy technologies.

11 (b) DISTRIBUTION OF ALLOWANCES TO ENERGY IN-
12 NOVATION HUBS.—The Secretary shall, in accordance
13 with the requirements of this section, distribute to eligible
14 consortia allowances allocated for the following vintage
15 year under section 772(a)(11) of the Clean Air Act.

16 **SEC. 206. ARPA-E RESEARCH.**

17 (a) DEFINITIONS.—For purposes of this section:

18 (1) ALLOWANCE.—The term “allowance”
19 means an emission allowance established under sec-
20 tion 721 of the Clean Air Act.

21 (2) DIRECTOR.—The term “Director” means
22 Director of the Advanced Research Projects Agency–
23 Energy.

24 (b) DISTRIBUTION OF ALLOWANCES.—The Director,
25 in accordance with this section, shall distribute allowances
26 allocated for the following vintage year under section

1 771(a)(12) of the Clean Air Act. Such allowances shall
2 be distributed on a competitive basis to institutions of
3 higher education, companies, research foundations, trade
4 and industry research collaborations, or consortia of such
5 entities, or other appropriate research and development
6 entities to achieve the goals of the Advanced Research
7 Projects Agency-Energy (as described in section 5012(c)
8 of the America COMPETES Act (42 U.S.C. 16538(c)))
9 through targeted acceleration of—

10 (1) novel early-stage energy research with pos-
11 sible technology applications;

12 (2) development of techniques, processes, and
13 technologies, and related testing and evaluation;

14 (3) development of manufacturing processes for
15 technologies; and

16 (4) demonstration and coordination with non-
17 governmental entities for commercial applications of
18 technologies and research applications.

19 (c) SUPPLEMENT NOT SUPPLANT.—Assistance pro-
20 vided under this section shall be used to supplement, and
21 not to supplant, any other Federal resources available to
22 carry out activities described in this section.

1 **SEC. 207. INTERNATIONAL CLEAN ENERGY DEPLOYMENT**
2 **PROGRAM.**

3 The Secretary of State shall distribute emission al-
4 lowances allocated for the following vintage year pursuant
5 to section 771(a)(13) of the Clean Air Act exclusively for
6 the purpose of section 323 of division A.

7 **SEC. 208. INTERNATIONAL CLIMATE CHANGE ADAPTATION**
8 **AND GLOBAL SECURITY.**

9 The Secretary of State shall distribute emission al-
10 lowances allocated for the following vintage year pursuant
11 to section 771(a)(14) of the Clean Air Act exclusively for
12 the purpose of section 324 of division A.

13 **SEC. 209. ENERGY EFFICIENCY AND RENEWABLE ENERGY**
14 **WORKER TRAINING.**

15 (a) ESTABLISHMENT OF FUND.—There is estab-
16 lished in the Treasury a separate account, to be known
17 as the “Energy Efficiency and Renewable Energy Worker
18 Training Fund”.

19 (b) AUCTION PROCEEDS.—The Administrator shall
20 deposit the proceeds of the auction conducted pursuant
21 to section 771(b)(5) of the Clean Air Act in the Energy
22 Efficiency and Renewable Energy Worker Training Fund.

23 (c) AVAILABILITY OF AMOUNTS.—The Secretary of
24 Energy shall use the amounts deposited in the Energy Ef-
25 ficiency and Renewable Energy Worker Training Fund
26 under subsection (b) to carry out section 171(e)(8) of the

1 Workforce Investment Act of 1998 (29 U.S.C. 2916(e)(8))
2 without further appropriation or fiscal year limitation.

3 **SEC. 210. WORKER TRANSITION.**

4 (a) ESTABLISHMENT OF FUND.—There is estab-
5 lished in the Treasury a separate account, to be known
6 as the “Worker Transition Fund”.

7 (b) AUCTION PROCEEDS.—The Administrator shall
8 deposit the proceeds of the auction conducted pursuant
9 to section 771(b)(6) of the Clean Air Act in the Worker
10 Transition Fund.

11 (c) AVAILABILITY OF AMOUNTS.—The amounts de-
12 posited in the Worker Transition Fund shall be used to
13 carry out part 2 of subtitle A of title III of division A.

14 **SEC. 211. STATE PROGRAMS FOR GREENHOUSE GAS RE-**
15 **DUCTION AND CLIMATE ADAPTATION.**

16 (a) DEFINITIONS.—In this section:

17 (1) ALASKA NATIVE VILLAGE.—The term
18 “Alaska Native village” means a federally recognized
19 Indian tribe located in the State of Alaska and listed
20 in the Bureau of Indian Affairs publication entitled
21 “Indian Entities Recognized and Eligible to Receive
22 Services from the United States Bureau of Indian
23 Affairs” (74 Fed. Reg. 40218 (Aug. 11, 2009)).

1 (2) ALLOWANCE.—The term “allowance”
2 means an emission allowance established under sec-
3 tion 721 of the Clean Air Act.

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

8 (4) SCCR ACCOUNT.—The term “SCCR Ac-
9 count” means a State Climate Change Response Ac-
10 count established under subsection (d)(5).

11 (5) VINTAGE YEAR.—The term “vintage year”
12 has the meaning given that term in section 700 of
13 the Clean Air Act.

14 (b) REGULATIONS; COORDINATION.—

15 (1) REGULATIONS.—Not later than 2 years
16 after the date of enactment of this Act, the Adminis-
17 trator, or the heads of such Federal agencies as the
18 President may designate, shall promulgate regula-
19 tions to implement this section.

20 (2) COORDINATION.—If the President des-
21 ignates more than 1 Federal agency to implement
22 this section, the President shall require such agen-
23 cies to establish a memorandum of understanding
24 providing for coordination of rulemaking and other

1 implementing activities, in accordance with this sec-
2 tion.

3 (c) STATE CLIMATE CHANGE RESPONSE AND TRANS-
4 PORTATION FUND.—

5 (1) ESTABLISHMENT OF FUND.—There is es-
6 tablished in the Treasury a separate account, to be
7 known as the “State Climate Change Response and
8 Transportation Fund”.

9 (2) AUCTION PROCEEDS DEPOSITED TO
10 FUND.—The Administrator shall deposit the pro-
11 ceeds of the auction conducted pursuant to section
12 771(b)(7) of the Clean Air Act in the State Climate
13 Change Response and Transportation Fund.

14 (3) AVAILABILITY OF AMOUNTS.—All amounts
15 deposited in the State Climate Change Response and
16 Transportation Fund shall be available, without fur-
17 ther appropriation or fiscal year limitation, to carry
18 out this section.

19 (d) DISTRIBUTION OF ALLOWANCE PROCEEDS.—

20 (1) IN GENERAL.—The Administrator shall dis-
21 tribute, in accordance with this section, proceeds of
22 the auction of allowances allocated for the following
23 vintage year that have been deposited in the State
24 Climate Change Response and Transportation Fund
25 pursuant to subsection (c)(2).

1 (2) RESERVATION AND ALLOCATION.—The Ad-
2 ministrator shall—

3 (A) reserve 10 percent of the proceeds of
4 such allowances described in paragraph (1) for
5 distribution among coastal and Great Lakes
6 States in accordance with subsection (f);

7 (B) after consultation with the Secretary
8 of the Interior, reserve at least 1 percent of the
9 proceeds of those allowances for distribution to
10 Indian tribes in accordance with subsection (e);
11 and

12 (C) distribute the remaining proceeds of
13 those allowances to fund State and local govern-
14 ment programs for greenhouse gas reduction
15 and climate adaptation, with such remaining
16 proceeds divided equally between—

17 (i) funding of transportation grant
18 programs under subsection (g); and

19 (ii) funding of other programs admin-
20 istered by the States, with the proceeds to
21 be deposited in and administered through
22 the State Climate Change Response Ac-
23 counts established pursuant to paragraph
24 (5).

1 (3) FORMULA FOR DISTRIBUTION.—The Ad-
2 ministrators shall distribute the proceeds to be allo-
3 cated pursuant to paragraph (2)(C)(ii) ratably
4 among the States based on the product obtained by
5 multiplying—

6 (A) the population of a State; and

7 (B) the allocation factor for the State de-
8 termined under paragraph (4).

9 (4) STATE ALLOCATION FACTORS.—

10 (A) IN GENERAL.—Except as provided in
11 subparagraph (B), the allocation factor for a
12 State shall be the quotient obtained by divid-
13 ing—

14 (i) the per capita income of all indi-
15 viduals in the United States; by

16 (ii) the per capita income of all indi-
17 viduals in the State.

18 (B) LIMITATION.—

19 (i) MAXIMUM.—If the allocation fac-
20 tor for a State as calculated under sub-
21 paragraph (A) would exceed 1.2, the allo-
22 cation factor for such State shall be 1.2.

23 (ii) MINIMUM.—If the allocation fac-
24 tor for a State as calculated under sub-
25 paragraph (A) would be less than 0.8, the

1 allocation factor for such State shall be
2 0.8.

3 (C) PER CAPITA INCOME.—For purposes
4 of this paragraph, per capita income shall be—
5 (i) determined at 2-year intervals; and
6 (ii) subject to subparagraph (D),
7 equal to the average of the annual per cap-
8 ita incomes for the most recent period of
9 3 consecutive years for which satisfactory
10 data are available from the Department of
11 Commerce at the time such determination
12 is made.

13 (D) REVENUE DIRECTLY RESULTING FROM
14 A PRESIDENTIALLY DECLARED MAJOR DIS-
15 ASTER.—

16 (i) IN GENERAL.—For purposes of
17 this paragraph, per capita income from 1
18 or more of the sources described in clause
19 (ii) shall be reduced or excluded if the Sec-
20 retary of Commerce—

21 (I) (in consultation with the Ad-
22 ministrator and the heads of the de-
23 partments or agencies involved) deter-
24 mines that the income accrues to per-
25 sons as the result of a major disaster

1 designated by the President under the
2 Robert T. Stafford Disaster Relief
3 and Emergency Assistance Act (42
4 U.S.C. 5121 et seq.); and

5 (II) finds that the inclusion of 1
6 or more of the income sources, in
7 whole or in part, results in a transi-
8 tory, rather than a sustainable, in-
9 crease in a State's per capita income
10 level relative to the national average.

11 (ii) SOURCES OF INCOME.—The
12 sources of income referred to in clause (i)
13 are the following:

14 (I) Property and casualty insur-
15 ance (including homeowners and rent-
16 ers insurance).

17 (II) The National Flood Insur-
18 ance Program of the Federal Emer-
19 gency Management Agency.

20 (III) The Individual and Family
21 Grants Program of the Federal Emer-
22 gency Management Agency.

23 (IV) The Disaster Housing Pro-
24 gram of the Federal Emergency Man-
25 agement Agency.

1 (V) The Community Develop-
2 ment Block Grant Program of the De-
3 partment of Housing and Urban De-
4 velopment.

5 (VI) The Disaster Unemployment
6 Assistance Program of the Depart-
7 ment of Labor.

8 (VII) Any other source deter-
9 mined appropriate by the Adminis-
10 trator.

11 (5) STATE CLIMATE CHANGE RESPONSE AC-
12 COUNTS.—Each State shall establish a State Cli-
13 mate Change Response Account, to be administered
14 pursuant to State law, to receive and distribute the
15 amounts provided under paragraph (2)(C)(ii). State
16 regulations and implementing procedures relating to
17 such accounts shall require compliance with the pro-
18 visions of this section and all other applicable provi-
19 sions of Federal law.

20 (e) DISTRIBUTION TO INDIAN TRIBES.—

21 (1) IN GENERAL.—The Administrator, or the
22 heads of such Federal agencies as the President may
23 designate, shall promulgate regulations establishing
24 a program to distribute allowance proceeds to Indian
25 tribes, in accordance with the requirements of this

1 section, of which not less than 18 percent shall be
2 allocated to Alaska Native Villages for each year.

3 (2) USE OF PROCEEDS.—Allowance proceeds
4 distributed to Indian tribes shall be used exclu-
5 sively—

6 (A) in accordance with subsection (h); and

7 (B) in compliance with any approved tribal
8 climate change response plan.

9 (f) DISTRIBUTION TO COASTAL AND GREAT LAKES
10 STATES.—The Administrator, or the heads of such other
11 Federal agencies as the President may designate, shall dis-
12 tribute proceeds of emission allowances for coastal State
13 economic protection each fiscal year, in accordance with
14 section 384 of division A.

15 (g) DISTRIBUTION OF TRANSPORTATION GRANTS.—

16 (1) DISTRIBUTION OF TRANSPORTATION
17 GRANTS.—

18 (A) IN GENERAL.—The Secretary of
19 Transportation, in consultation with the Admin-
20 istrator, shall distribute the amounts allocated
21 for transportation grants each fiscal year in ac-
22 cordance with subsection (d)(2)(C)(i) as grants
23 to public transportation agencies (including des-
24 ignated recipients (as defined in section
25 5307(a) and section 5340 of title 49, United

1 States Code)) and recipients and sub-recipients
2 (as defined in section 5311(a) of title 49,
3 United States Code).

4 (B) FORMULA.—In providing grants under
5 this subsection, the Secretary shall distribute—

6 (i) 80 percent of the funds in accord-
7 ance with the formula and conditions gov-
8 erning grants under section 5307 of title
9 49, United States Code;

10 (ii) 10 percent of the funds in accord-
11 ance with the formula and conditions gov-
12 erning grants under section 5311 of title
13 49, United States Code; and

14 (iii) 10 percent of the funds in accord-
15 ance with the formula and conditions gov-
16 erning grants under section 5340 of title
17 49, United States Code.

18 (h) USES OF ALLOWANCE PROCEEDS DEPOSITED TO
19 SCCR ACCOUNTS.—

20 (1) IN GENERAL.—States shall use allowance
21 proceeds deposited to SCCR Accounts under sub-
22 section (d)(2)(C)(ii) exclusively for the development
23 and implementation of projects, programs, or meas-
24 ures as described in this section to address climate
25 change by reducing emissions of greenhouse gases or

1 by building resilience to the impacts of climate
2 change, including impacts such as—

3 (A) extreme weather events, such as flood-
4 ing and tropical cyclones;

5 (B) more frequent heavy precipitation
6 events;

7 (C) water scarcity and adverse impacts on
8 water quality;

9 (D) stronger and longer heat waves;

10 (E) more frequent and severe droughts;

11 (F) rises in sea level;

12 (G) ecosystem disruption;

13 (H) increased wildfire risk;

14 (I) increased air pollution;

15 (J) effects on public health;

16 (K) impaired transportation systems and
17 infrastructure; and

18 (L) reduced productivity of agricultural or
19 ranching operations.

20 (2) REQUIREMENTS.—The allowance proceeds
21 received by each SCCR Account for each fiscal year
22 shall be used by the State exclusively to fund the fol-
23 lowing categories of activities, in compliance with the
24 provisions of approved State climate change re-
25 sponse plans:

1 (A) Grants to fund water system mitiga-
2 tion and adaptation partnerships in accordance
3 with section 381 of division A.

4 (B) Flood control, protection, prevention
5 and response programs and projects in accord-
6 ance with section 382 of division A.

7 (C) Programs or projects implemented by
8 State agencies as owners or operators of water
9 systems to address any ongoing or forecasted
10 climate-related impact on water quality, water
11 supply or reliability, for 1 or more of the pur-
12 poses listed in section 381(d) of division A.

13 (D) Programs or projects to reduce green-
14 house gas emissions through recycling or for in-
15 creasing recycling rates in accordance with sec-
16 tion 154 of division A.

17 (E) Programs and projects addressing ad-
18 verse impacts of climate change affecting agri-
19 culture or ranching activities.

20 (F) Programs or projects addressing air
21 pollution or air quality impacts caused or exac-
22 erbated by climate change.

23 (G) Programs or projects to reduce green-
24 house gas emissions that result in a decrease in
25 emissions of other air pollutants.

1 (3) DISTRIBUTION FOR LOCAL GOVERN-
2 MENTS.—Not less than 12.5 percent of the proceeds
3 deposited to SCCR Accounts shall be distributed by
4 each State to units of local government within such
5 State, to be used exclusively to support the cat-
6 egories of climate change response efforts listed in
7 paragraph (2).

8 (4) VULNERABLE POPULATIONS.—In deploying
9 allowance proceeds under this section, States and
10 units of local government shall ensure that programs
11 and projects are funded responding to impacts af-
12 fecting socially and economically vulnerable popu-
13 lations, including—

14 (A) persons of low-income (as defined in
15 title I of the Housing and Community Develop-
16 ment Act of 1974, (42 U.S.C. 5301 et seq.));

17 (B) members of socially disadvantaged
18 groups (as defined in section 2501(e)(2) of the
19 Food, Agriculture, Conservation, and Trade Act
20 of 1990 (7 U.S.C. 2279(e)(2)));

21 (C) individuals over 65 years of age and
22 under 5 years of age; and

23 (D) individuals with disabilities.

24 (5) INTENT OF CONGRESS.—It is the intent of
25 the Congress that allowances distributed to carry

1 out this section should be used to supplement, and
2 not replace, existing sources of funding used to ad-
3 dress and build resilience to the impacts of climate
4 change.

5 (i) STATE AND TRIBAL CLIMATE CHANGE RESPONSE
6 PLANS.—

7 (1) IN GENERAL.—The regulations promulgated
8 pursuant to subsection (b) shall include require-
9 ments for submission and approval of State and
10 tribal climate change response plans under this sec-
11 tion. Beginning with vintage year 2012, distribution
12 of allowance proceeds to a State pursuant to this
13 section shall be contingent on approval of a State
14 climate change response plan for such State that
15 meets the requirements of such regulations.

16 (2) REQUIREMENTS.—Regulations promulgated
17 under this section shall require, at minimum, that
18 State climate change response plans—

19 (A) assess and prioritize the vulnerability
20 of a State to a broad range of impacts of cli-
21 mate change, based on the best available
22 science;

23 (B) identify and prioritize specific cost-ef-
24 fective projects, programs, and measures to
25 mitigate and build resilience to current and pre-

1 dicted impacts of climate change, including
2 projects, programs, and measures within each
3 of the categories of activities listed in sub-
4 section (h)(2);

5 (C) include an assessment of potential for
6 carbon reduction through changes to land man-
7 agement policies (including enhancement or
8 protection of forest carbon sinks);

9 (D) ensure that the State fully considers
10 and undertakes, to the maximum extent prac-
11 ticable, initiatives that—

12 (i) protect or enhance natural eco-
13 system functions, including protection,
14 maintenance, or restoration of natural in-
15 frastructure such as wetlands, reefs, and
16 barrier islands to buffer communities from
17 floodwaters or storms, watershed protec-
18 tion to maintain water quality and ground-
19 water recharge, or floodplain restoration to
20 improve natural flood control capacity;

21 (ii) where appropriate, use non-
22 structural approaches, including practices
23 that use, enhance, or mimic the natural
24 hydrologic cycle processes of infiltration,
25 evapotranspiration, and use; or

1 (iii) where appropriate, protect for-
2 ested land via scientifically based ecological
3 restoration practices, including by reducing
4 fuel loads, restoring forest diversity, and
5 conducting research on pest mitigation;

6 (E) give consideration to impacts affecting
7 socially and economically vulnerable popu-
8 lations, including—

9 (i) persons of low-income (as defined
10 in title I of the Housing and Community
11 Development Act of 1974 (42 U.S.C. sec.
12 5301 et seq.));

13 (ii) members of socially disadvantaged
14 groups (as defined in section 2501(e)(2) of
15 the Food, Agriculture, Conservation, and
16 Trade Act of 1990 (7 U.S.C. 2279(e)(2)));

17 (iii) persons over 65 years of age and
18 under 5 years of age; and

19 (iv) persons with disabilities;

20 (F) use pre-disaster mitigation, emergency
21 response, and public insurance programs to
22 mitigate the impacts of climate change;

23 (G) be consistent with Federal conserva-
24 tion and environmental laws and, to the max-

1 imum extent practicable, avoid environmental
2 degradation; and

3 (H) be revised and resubmitted for ap-
4 proval not less frequently than every 5 years.

5 (3) TRIBAL CLIMATE CHANGE RESPONSE
6 PLANS.—Requirements for tribal climate change re-
7 sponse plans should include the requirements listed
8 in subparagraphs (A) through (H) of paragraph (2),
9 as appropriate, but may vary from those of State cli-
10 mate change response plans to the extent necessary
11 to account for the special circumstances of Indian
12 tribes.

13 (4) COORDINATION WITH PRIOR PLANNING EF-
14 FORTS.—In implementing this subsection, the Ad-
15 ministrators, or the heads of such Federal agencies
16 as the President may designate, shall—

17 (A) draw upon lessons learned and best
18 practices from preexisting State and tribal cli-
19 mate change response planning efforts;

20 (B) seek to avoid duplication of such ef-
21 forts; and

22 (C) ensure that the plans developed under
23 this section are developed in coordination with
24 State natural resources adaptation plans devel-
25 oped under section 369 of division A.

1 (j) REPORTING.—Not later than 1 year after each
2 date of receipt of allowance proceeds under this section,
3 and biennially thereafter until the value of any allowance
4 proceeds received under this section has been fully ex-
5 pended, each State or Indian tribe receiving allowance pro-
6 ceeds under this section shall submit to the Administrator,
7 or the heads of such Federal agencies as the President
8 may designate, a report that—

9 (1) provides a full accounting for the use by the
10 State or Indian tribe of allowance proceeds distrib-
11 uted under this section, including a description of
12 the projects, programs, or measures supported using
13 such proceeds;

14 (2) includes a report prepared by an inde-
15 pendent third party, in accordance with such regula-
16 tions as are promulgated by the Administrator or
17 the heads of such other Federal agencies as the
18 President may designate, evaluating the performance
19 of the projects, programs, or measures supported
20 under this section; and

21 (3) identifies any use by the State or Indian
22 tribe of allowance proceeds distributed under this
23 section for the reduction of flood and storm damage
24 and the effects of climate change on water and flood
25 protection infrastructure.

1 (k) AUDITING.—The Administrator, or the heads of
2 such Federal agencies as the President may designate,
3 shall have authority to conduct such audits or other review
4 of States implementation of and compliance with this sec-
5 tion as such Federal officials may in their discretion deter-
6 mine to be necessary or appropriate.

7 (l) ENFORCEMENT.—If the Administrator, or the
8 heads of such Federal agencies as the President may des-
9 ignate, determine that a State or Indian tribe is not in
10 compliance with this section, the Administrator or such
11 other agency head may withhold a quantity of the allow-
12 ance proceeds equal to up to twice the quantity of allow-
13 ance proceeds that the State or Indian tribe failed to use
14 in accordance with the requirements of this section, that
15 such State or Indian tribe would otherwise be eligible to
16 receive under this section in 1 or more later years. Allow-
17 ance proceeds withheld pursuant to this subsection shall
18 be distributed among the remaining States or Indian
19 tribes ratably in accordance with—

20 (1) the formula under subsection (d), in the
21 case of allowances withheld from a State; or

22 (2) in accordance with subsection (e), in the
23 case of allowance proceeds withheld from an Indian
24 tribe.

1 **SEC. 212. CLIMATE CHANGE HEALTH PROTECTION AND**
2 **PROMOTION FUND.**

3 (a) ESTABLISHMENT OF FUND.—There is estab-
4 lished in the Treasury a separate account, to be known
5 as the “Climate Change Health Protection and Promotion
6 Fund”.

7 (b) AUCTION PROCEEDS.—The Administrator shall
8 deposit the proceeds of the auction pursuant to section
9 771(b)(8) of the Clean Air Act in the Climate Change
10 Health Protection and Promotion Fund.

11 (c) AVAILABILITY OF AMOUNTS.—All amounts depos-
12 ited in the Climate Change Health Protection and Pro-
13 motion Fund shall be available to the Secretary of Health
14 and Human Services to carry out subpart B of subtitle
15 C of title III of division A, without further appropriation
16 or fiscal year limitation.

17 (d) DISTRIBUTION OF FUNDS BY HHS.—In carrying
18 out subpart B of subtitle C of title III of division A, the
19 Secretary of Health and Human Services may make funds
20 deposited in the Climate Change Health Protection and
21 Promotion Fund available to—

22 (1) other departments, agencies, and offices of
23 the Federal Government;

24 (2) foreign, State, tribal, and local govern-
25 ments; and

1 (3) such other entities as the Secretary deter-
2 mines to be appropriate.

3 (e) SUPPLEMENT, NOT REPLACE.—It is the intent
4 of Congress that funds made available to carry out sub-
5 part B of subtitle C of title III of division A should be
6 used to supplement, and not replace, existing sources of
7 funding for public health.

8 **SEC. 213. CLIMATE CHANGE SAFEGUARDS FOR NATURAL**
9 **RESOURCES CONSERVATION.**

10 (a) ESTABLISHMENT OF FUND.—There is estab-
11 lished in the Treasury a separate account, to be known
12 as the “Natural Resources Climate Change Adaptation
13 Account”.

14 (b) AUCTION PROCEEDS.—The Administrator shall
15 deposit the proceeds of the auction conducted pursuant
16 to section 771(b)(9) of the Clean Air Act in the Natural
17 Resources Climate Change Adaptation Account.

18 (c) AVAILABILITY OF AMOUNTS.—All amounts depos-
19 ited in the Natural Resources Climate Change Adaptation
20 Account shall be available without further appropriation
21 or fiscal year limitation solely for the purposes of section
22 370 of division A.

1 **SEC. 214. NUCLEAR WORKER TRAINING.**

2 (a) ESTABLISHMENT OF FUND.—There is estab-
3 lished in the Treasury a separate account, to be known
4 as the “Nuclear Worker Training Fund”.

5 (b) AUCTION PROCEEDS.—The Administrator shall
6 deposit the proceeds of the auction conducted pursuant
7 to section 771(b)(10) of the Clean Air Act in the Nuclear
8 Worker Training Fund.

9 (c) AVAILABILITY OF AMOUNTS.—All amounts depos-
10 ited in the Nuclear Worker Training Fund shall be avail-
11 able without further appropriation or fiscal year limitation
12 solely for the purpose of carrying out section 132 of divi-
13 sion A.

14 **SEC. 215. SUPPLEMENTAL AGRICULTURE, RENEWABLE EN-
15 ERGY, AND FORESTRY.**

16 (a) ESTABLISHMENT OF FUND.—There is estab-
17 lished in the Treasury a separate account, to be known
18 as the “Supplemental Agriculture, Renewable Energy, and
19 Forestry Fund”.

20 (b) AUCTION PROCEEDS.—The Administrator shall
21 deposit the proceeds of the auction conducted pursuant
22 to section 771(b)(11) of the Clean Air Act in the Supple-
23 mental Agriculture, Renewable Energy, and Forestry
24 Fund.

25 (c) AVAILABILITY OF AMOUNTS.—All amounts depos-
26 ited in the Supplemental Agriculture, Renewable Energy,

1 and Forestry Fund shall be available without further ap-
2 propriation or fiscal year limitation solely for the purpose
3 of carrying out section 155 of division A.