[DISCUSSION DRAFT]

March 31, 2009

111TH CONGRESS 1ST SESSION H.R.

To [to be supplied].

IN THE HOUSE OF REPRESENTATIVES

М		introduced	the fo	llowing	bill;	which	was	referred	to	the
	Commi	nittee on						_		

A BILL

To [to be supplied].

- 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 "American Clean Energy and Security Act of 2009".
- 6 (b) Table of Contents.—The table of contents for
- 7 this Act is as follows:

Sec. 1. Short title; table of contents.

TITLE I—CLEAN ENERGY

Subtitle A—Renewable Electricity Standard

Sec. 101. Federal renewable electricity standard.

Subtitle B—Carbon Capture and Sequestration

- Sec. 111. National strategy.
- Sec. 112. Regulations for geologic sequestration sites.
 - "Sec. 813. Geologic sequestration sites.
- Sec. 113. Studies and reports.
- Sec. 114. Carbon capture and sequestration demonstration and early deployment program.
- Sec. 115. Commercial deployment of carbon capture and sequestration technologies.
- Sec. 116. Performance standards for coal-fueled power plants.
 - "Sec. 812. Performance standards for new coal-fired power plants.

Subtitle C—Clean Transportation

- Sec. 121. Low carbon fuel standard.
 - "Sec. 822. Low carbon fuel standard.
- Sec. 122. Electric vehicle infrastructure.
- Sec. 123. Large-scale vehicle electrification program.
- Sec. 124. Plug-in electric drive vehicle manufacturing.

Subtitle D—State Energy and Environment Development Funds

Sec. 131. Establishment of SEED funds.

Subtitle E—Smart Grid Advancement

- Sec. 141. Definitions.
- Sec. 142. Incorporation of Smart Grid capability in Energy Star program.
- Sec. 143. Smart Grid peak demand reduction goals.
- Sec. 144. Reauthorization of energy efficiency public information program to include Smart Grid information.
- Sec. 145. Inclusion of Smart-Grid features in appliance rebate program.

Subtitle F—Transmission Planning

- Sec. 151. Transmission planning.
- Subtitle G—Federal Purchases of Electricity Generated by Renewable Energy
- Sec. 161. Federal purchases of electricity generated by renewable energy.

Subtitle H—Technical Corrections to Energy Laws

- Sec. 171. Technical corrections to Energy Independence and Security Act of 2007.
- Sec. 172. Technical corrections to Energy Policy Act of 2005.

TITLE II—ENERGY EFFICIENCY

Subtitle A—Building Energy Efficiency Programs

- Sec. 201. Greater energy efficiency in building codes.
- Sec. 202. Building retrofit program.
- Sec. 203. Energy efficient manufactured homes.
- Sec. 204. Building energy performance labeling program.

Subtitle B—Lighting and Appliance Energy Efficiency Programs

- Sec. 211. Lighting efficiency standards.
- Sec. 212. Other appliance efficiency standards.
- Sec. 213. Appliance efficiency determinations and procedures.
- Sec. 214. Best-in-Class Appliances Deployment Program.
- Sec. 215. Purpose of Energy Star.

Subtitle C—Transportation Efficiency

Sec. 221. Emissions standards.

"PART B—MOBILE SOURCES

- "Sec. 821. Greenhouse gas emission standards for mobile sources.
- Sec. 222. Greenhouse gas emissions reductions through transportation efficiency.

"Part D—Planning Requirements

- "Sec. 841. Greenhouse gas emissions reductions through transportation efficiency.
- Sec. 223. SmartWay transportation efficiency program.
 - "Sec. 823. SmartWay transportation efficiency program.
- Sec. 224. State vehicle fleets.

Subtitle D—Utilities Energy Efficiency

Sec. 231. Energy efficiency resource standard for retail electricity and natural gas distributors.

Subtitle E—Industrial Energy Efficiency Programs

- Sec. 241. Industrial plant energy efficiency standards.
- Sec. 242. Electric and thermal energy efficiency award programs.

Subtitle F—Improvements in Energy Savings Performance Contracting

Sec. 251. Energy savings performance contracts.

Subtitle G—Public Institutions

Sec. 261. Public institutions.

TITLE III—REDUCING GLOBAL WARMING POLLUTION

Sec. 301. Short title.

Subtitle A—Reducing Global Warming Pollution

Sec. 311. Reducing global warming pollution.

"TITLE VII—GLOBAL WARMING POLLUTION REDUCTION PROGRAM

- "PART A—GLOBAL WARMING POLLUTION REDUCTION GOALS AND TARGETS
 - "Sec. 701. Findings and purpose.
 - "Sec. 702. Economy-wide reduction goals.
 - "Sec. 703. Reduction targets for specified sources.

- "Sec. 704. Supplemental pollution reductions.
- "Sec. 705. Scientific review.
- "Sec. 706. 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.

"PART C—PROGRAM RULES

- "Sec. 721. Emission allowances.
- "Sec. 722. Compliance obligation.
- "Sec. 723. Penalty for noncompliance.
- "Sec. 724. Trading.
- "Sec. 725. Banking and borrowing.
- "Sec. 726. Strategic reserve.
- "Sec. 727. Permits.
- "Sec. 728. International emission allowances.

"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. Ownership and transfer of offset credits.
- "Sec. 743. International offset credits.

"Part E—Supplemental Emissions Reductions From Reduced Deforestation

- "Sec. 751. Definitions.
- "Sec. 752. Findings.
- "Sec. 753. Supplemental emissions reductions through reduced deforestation.
- "Sec. 754. Requirements for international deforestation reduction program.
- "Sec. 755. Reports and reviews.
- "Sec. 756. Legal effect of part.

"PART F—CARBON MARKET ASSURANCE

- "Sec. 761. Oversight and assurance of carbon markets.
- Sec. 312. Definitions.
 - "Sec. 700. Definitions.

Subtitle B—Disposition of Allowances

Sec. 321. Disposition of allowances for global warming pollution reduction program.

"Part H—Disposition of Allowances

"Sec. 781. Allocation of allowances for supplemental reductions.

"Sec. 782. Disbursement of allowances and proceeds from auctions of allowances.

"Sec. 783-789. [SECTIONS RESERVED].

"Sec. 790. Exchange for State-issued allowances.

"Sec. 791. Auction procedures.

"Sec. 792. Auctioning allowances for other entities.

Subtitle C—Additional Greenhouse Gas Standards

Sec. 331. Greenhouse gas standards.

"TITLE VIII—ADDITIONAL GREENHOUSE GAS STANDARDS

"Sec. 801. Definitions.

"PART A—STATIONARY SOURCE STANDARDS

"Sec. 811. Standards of performance.

"PART C—EXEMPTIONS FROM OTHER PROGRAMS

"Sec. 831. Criteria pollutants.

"Sec. 832. Hazardous air pollutants.

"Sec. 833. New source review.

"Sec. 834. Title V permits.

Sec. 332. HFC Regulation.

Sec. 333. Black carbon.

"PART E—BLACK CARBON

"Sec. 851. Black carbon.

Sec. 334. States.

Sec. 335. State programs.

"Part F—Miscellaneous

"Sec. 861. State programs.

Sec. 336. Enforcement.

"Sec. 862. Judicial review.

Sec. 337. Conforming amendments.

TITLE IV—TRANSITIONING TO A CLEAN ENERGY ECONOMY

Subtitle A—Ensuring Domestic Competitiveness

Part 1—Preserving Domestic Competitiveness

Sec. 401. Purposes.

Sec. 402. Definitions.

Sec. 403. Distribution of rebates.

Sec. 404. Reports to Congress.

Sec. 405. Modification or elimination of distribution of rebates.

Sec. 406. Cessation of qualifying activities.

Sec. 407. Authorization of appropriations.

PART 2—INTERNATIONAL RESERVE ALLOWANCE PROGRAM

- Sec. 411. Definitions.
- Sec. 412. Purposes.
- Sec. 413. International negotiations.
- Sec. 414. Report to Congress and finding.
- Sec. 415. Prohibition.
- Sec. 416. International reserve allowance program.

Subtitle B—Green Jobs and Worker Transition

- Sec. 421. Clean energy curriculum development grants.
- Sec. 422. Workforce training and education in clean energy, energy efficiency, climate change mitigation, and sustainable environmental practices.
- Sec. 423. Wage rate requirements.
- Sec. 424. Worker transition.

Subtitle C—Consumer Assistance

Sec. 431. [to be supplied].

Subtitle D—Exporting Clean Technology

- Sec. 451. Purposes.
- Sec. 452. Definitions.
- Sec. 453. Fund establishment and governance.
- Sec. 454. Determination of eligible countries.
- Sec. 455. Funding.
- Sec. 456. Annual reports.

Subtitle E—Adapting to Climate Change

Part 1—Domestic Adaptation

SUBPART A—NATIONAL CLIMATE CHANGE ADAPTATION PROGRAM

- Sec. 461. Definitions.
- Sec. 462. National Climate Change Adaptation Council.
- Sec. 463. National Climate Change Adaptation Program.
- Sec. 464. National Climate Change Vulnerability Assessments.
- Sec. 465. Climate change adaptation services.
- Sec. 466. Federal agency climate change adaptation plans.
- Sec. 467. Federal funding for State, local, and tribal adaptation projects.

SUBPART B—PUBLIC HEALTH AND CLIMATE CHANGE

- Sec. 471. National policy on public health and climate change.
- Sec. 472. National Strategy.
- Sec. 473. Authorization of appropriations.

SUBPART C—NATURAL RESOURCE ADAPTATION

- Sec. 481. Purposes.
- Sec. 482. Natural resources climate change adaptation policy.
- Sec. 483. Definitions.
- Sec. 484. Council on Environmental Quality.

	 Sec. 485. Natural Resources Climate Change Adaptation Panel. Sec. 486. Natural Resources Climate Change Adaptation Strategy. Sec. 487. Natural Resources Climate Change Adaptation Science and Information Program.
	Sec. 488. Federal natural resource agency adaptation plans.Sec. 489. State natural resources adaptation plans.Sec. 490. Natural Resources Climate Change Adaptation Fund.
	PART 2—INTERNATIONAL CLIMATE CHANGE ADAPTATION PROGRAM
	 Sec. 491. Findings and Purposes. Sec. 492. Definitions. Sec. 493. Establishment. Sec. 494. Functions of program. Sec. 495. Funding. Sec. 496. Monitoring and evaluation of program.
1	TITLE I—CLEAN ENERGY
2	Subtitle A—Renewable Electricity
3	Standard
4	SEC. 101. FEDERAL RENEWABLE ELECTRICITY STANDARD.
5	(a) In General.—Title VI of the Public Utility Reg-
6	ulatory Policies Act of 1978 (16 U.S.C. 2601 and fol-
7	lowing) is amended by adding at the end the following:
8	"SEC. 610. FEDERAL RENEWABLE ELECTRICITY STANDARD.
9	"(a) Definitions.—For purposes of this section:
10	"(1) Affiliate.—The term 'affiliate' when
11	used in relation to a person, means another person
12	that directly or indirectly owns or controls, is owned
13	or controlled by, or is under common ownership or
14	control with, such person, as determined under regu-
15	lations promulgated by the Secretary.
16	"(2) BIOMASS.—The term 'biomass' means
17	each of the following:

1	"(A) Crops, crop byproducts, or crop resi-
2	dues harvested from actively managed or fallow
3	agricultural land that was cleared prior to the
4	date of enactment of this section and is nonfor-
5	ested.
6	"(B) Planted trees, brush, slash, and all
7	residues from an actively managed tree planta-
8	tion located on land that was cleared prior to
9	the date of enactment of this section and is not
10	Federal land.
11	"(C) Pre-commercial-sized thinnings, slash,
12	brush, and residue from milled trees, from for-
13	ested land that is not—
14	"(i) old-growth or mature forest;
15	"(ii) identified under a State Natural
16	Heritage Program as rare, imperiled, or
17	critically imperiled; or
18	"(iii) Federal land.
19	"(D) Algae.
20	"(E) Nonhazardous plant matter derived
21	from waste such as separated yard waste, land-
22	scape right-of-way trimmings, or food waste
23	(but not municipal solid waste, recyclable waste
24	paper, painted, treated or pressurized wood, or
25	wood contaminated with plastic or metals).

1	"(F) Animal waste or animal byproducts,
2	including products of animal waste digesters.
3	"(G) Vegetative matter removed from
4	within 200 yards of any manmade structure or
5	campground.
6	"(3) Distributed generation facility.—
7	The term 'distributed generation facility' means a
8	facility that—
9	"(A) generates renewable electricity other
10	than by means of combustion;
11	"(B) primarily serves 1 or more electricity
12	consumers at or near the facility site; and
13	"(C) is no larger than 2 megawatts in ca-
14	pacity.
15	"(4) Federal alternative compliance pay-
16	MENT.—The term 'Federal alternative compliance
17	payment' means a payment, to be submitted in lieu
18	of 1 Federal renewable electricity credit, pursuant to
19	subsection $(c)(3)$.
20	"(5) Federal land.—The term 'Federal land'
21	means land owned by the United States, other than
22	land held in trust for an Indian or Indian tribe.
23	"(6) Federal Renewable electricity
24	CREDIT.—The term 'Federal renewable electricity
25	credit' means a credit, representing one megawatt

1	hour of renewable electricity, issued pursuant to sub-
2	section (d).
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) Fund.—The term 'Fund' means the Re-
9	newable Electricity Deployment Fund established
10	under subsection (f).
11	"(9) QUALIFIED HYDROPOWER.—The term
12	'qualified hydropower' means—
13	"(A) electricity generated solely from in-
14	creased efficiency achieved, or additions of ca-
15	pacity made, on or after January 1, 2001 at a
16	hydroelectric facility that was placed in service
17	before that date; or
18	"(B) electricity generated from generating
19	capacity added on or after January 1, 2001 to
20	a dam that did not previously have the capacity
21	to generate electricity, provided that the Com-
22	mission certifies that—
23	"(i) the dam was placed in service be-
24	fore the date of the enactment of this sec-
25	tion and was operated for flood control,

1	navigation, or water supply purposes and
2	did not produce hydroelectric power before
3	January 1, 2001;
4	"(ii) the hydroelectric project installed
5	on the dam is licensed by the Commission
6	and meets all other applicable environ-
7	mental, licensing, and regulatory require-
8	ments, including applicable fish passage re-
9	quirements; and
10	"(iii) the hydroelectric project in-
11	stalled on the dam is operated so that the
12	water surface elevation at any given loca-
13	tion and time that would have occurred in
14	the absence of the hydroelectric project is
15	maintained, subject to any license require-
16	ments that require changes in water sur-
17	face elevation for the purpose of improving
18	the environmental quality of the affected
19	waterway.
20	"(10) Renewable electricity.—The term
21	'renewable electricity' means electricity generated
22	(including by means of a fuel cell) from a renewable
23	energy resource.

1	"(11) Renewable energy resource.—The
2	term 'renewable energy resource' means each of the
3	following:
4	"(A) Wind energy.
5	"(B) Solar energy.
6	"(C) Geothermal energy.
7	"(D) Biomass or landfill gas.
8	"(E) Qualified hydropower.
9	"(F) Marine and hydrokinetic renewable
10	energy, as that term is defined in section 632
11	of the Energy Independence and Security Act
12	of 2007 (42 U.S.C. 17211).
13	"(12) Retail electric supplier.—
14	"(A) IN GENERAL.—The term 'retail elec-
15	tric supplier' means, for any given year, an
16	electric utility that sold not less than 1,000,000
17	megawatt hours of electric energy to electric
18	consumers for purposes other than resale dur-
19	ing the preceding calendar year.
20	"(B) Inclusions and Limitations.—For
21	purposes of determining whether an electric
22	utility qualifies as a retail electric supplier
23	under subparagraph (A)—
24	"(i) the sales of any affiliate of an
25	electric utility to electric consumers for

1	purposes other than resale shall be consid-
2	ered to be sales of such electric utility; and
3	"(ii) sales by any electric utility to an
4	affiliate, lessee, or tenant of such electric
5	utility shall not be treated as sales to elec-
6	tric consumers.
7	"(13) Retail electric supplier's base
8	AMOUNT.—The term 'retail electric supplier's base
9	amount' means the total amount of electric energy
10	sold by the retail electric supplier, expressed in
11	terms of megawatt hours, to electric customers for
12	purposes other than resale during the relevant cal-
13	endar year, excluding electricity generated by—
14	"(A) a hydroelectric facility that is not
15	qualified hydropower; or
16	"(B) combustion of municipal solid waste.
17	"(14) Retire and retirement.—The terms
18	'retire' and 'retirement' with respect to a Federal re-
19	newable electricity credit, means to disqualify such
20	credit for any subsequent use under this section, re-
21	gardless of whether the use is a sale, transfer, ex-
22	change, or submission in satisfaction of a compliance
23	obligation.
24	"(b) Establishment of Program.—Not later than
25	1 year after the date of enactment of this section, the Sec-

1	retary shall, by regulation, establish a program to imple-
2	ment and enforce the requirements of this section. In es-
3	tablishing such program, the Secretary shall, to the extent
4	practicable—
5	"(1) preserve the integrity, and incorporate best
6	practices, of existing State renewable electricity pro-
7	grams;
8	"(2) rely upon existing and emerging State or
9	regional tracking systems that issue and track non-
10	Federal renewable electricity credits; and
11	"(3) cooperate with the States to facilitate co-
12	ordination between State and Federal renewable
13	electricity programs and to minimize administrative
14	burdens and costs to retail electric suppliers.
15	"(c) Annual Compliance Requirement.—
16	"(1) IN GENERAL.—Except as provided in para-
17	graph (3), for each of calendar years 2012 through
18	2039, each retail electric supplier shall, not later
19	than April 1 of the following calendar year, submit
20	to the Secretary a quantity of Federal renewable
21	electricity credits equal to the retail electric sup-
22	plier's base amount for the calendar year multiplied
23	by the required annual percentage set forth in para-
24	graph (2). The Secretary shall retire each Federal

- renewable energy credit immediately upon submission under this section.

 "(2) REQUIRED ANNUAL PERCENTAGE.—For
- 4 each of calendar years 2012 through 2039, the required annual percentage shall be as follows:

"Calendar year	Required annual percentage
2012	6.0
2013	6.0
2014	8.5
2015	8.5
2016	11.0
2017	11.0
2018	14.0
2019	14.0
2020	17.5
2021	17.5
2022	21.0
2023	21.0
2024	23.0
2025 through 2039	25.0

"(3) EFFICIENCY COMPLIANCE OPTION.—The Governor of a State (including, for purposes of this section, the Mayor of the District of Columbia), may petition the Secretary to reduce, by up to one fifth, the required annual percentage under paragraph (2) in any given year that shall be applied to the portion of any retail electric supplier's base amount that is sold to electric customers located within such State for purposes other than resale. The Secretary shall grant such petition if the Secretary determines that the entities within the State that are subject to the Federal Energy Efficiency Resource Standard estab-

1	lished under section 611 of this Act are in compli-
2	ance with such standard for such year.
3	"(4) Alternative compliance payments.—
4	A retail electric supplier may satisfy the require-
5	ments of paragraph (1) (as modified, where applica-
6	ble, under paragraph (3)) in whole or in part by
7	submitting in lieu of each Federal renewable elec-
8	tricity credit that would otherwise be due, a payment
9	equal to the lesser of—
10	"(A) 200 percent of the average market
11	value of a Federal renewable electricity credit
12	for the previous compliance year, as determined
13	by the Secretary; or
14	"(B) \$50, adjusted on January 1 of each
15	year following calendar year 2009 based on the
16	Gross Domestic Product Implicit Price
17	Deflator.
18	"(5) Use of payments.—Alternative compli-
19	ance payments submitted pursuant to paragraph (4)
20	shall be deposited in the Fund established under
21	subsection (f).
22	"(d) Federal Renewable Electricity Cred-
23	ITS.—
24	"(1) In General.—The regulations promul-
25	gated under subsection (b) shall include provisions

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

governing the issuance, tracking, and verification of Federal renewable electricity credits. Except as provided in paragraphs (2), (3), and (4) of this subsection, the Secretary shall issue to each generator of renewable electricity, 1 Federal renewable electricity credit for each megawatt hour of renewable electricity generated by such generator. The Secretary shall assign a unique serial number to each Federal renewable electricity credit.

"(2) Generation from state renewable ELECTRICITY PROGRAMS USING CENTRAL PROCURE-MENT AND FROM STATE ALTERNATIVE COMPLIANCE PAYMENTS.—Where renewable electricity is generated with the support of payments from a retail electric supplier pursuant to a State renewable electricity program (whether through State alternative compliance payments or through payments to a State renewable electricity procurement fund or entity), the Secretary shall issue Federal renewable electricity credits to such retail electric supplier for the proportion of the relevant renewable electricity generation that is attributable to the retail electric supplier's payments, as determined pursuant to regulations issued by the Secretary. For any remaining portion of the relevant renewable electricity genera-

1	tion, the Secretary shall issue Federal renewable
2	electricity credits to the generator, as provided in
3	paragraph (1), provided that in no event shall more
4	than 1 Federal renewable electricity credit be issued
5	for the same megawatt hour of electricity. In deter-
6	mining how Federal renewable electricity credits will
7	be apportioned among retail electric suppliers and
8	generators in such circumstances, the Secretary
9	shall consider information and guidance furnished by
10	the relevant State or States.
11	"(3) CERTAIN POWER SALES CONTRACTS.—
12	When a generator has sold renewable electricity to
13	a retail electric supplier under a contract for power
14	from a facility placed in service before the date of
15	enactment of this section, and the contract does not
16	provide for the determination of ownership of the
17	Federal renewable electricity credits associated with
18	such generation, the Secretary shall issue such Fed-
19	eral renewable electricity credits to the retail electric
20	supplier for the duration of the contract.
21	"(4) Credit multiplier for distributed
22	GENERATION.—
23	"(A) IN GENERAL.—Except as provided in
24	subparagraph (B), the Secretary shall issue 3
25	Federal renewable electricity credits for each

1 megawatt hour of renewable electricity gen-2 erated by a distributed generation facility. 3 "(B) Adjustment.—Except as provided 4 in subparagraph (C), not later than January 1, 5 2014, and not less frequently than every 4 6 years thereafter, the Secretary shall review the 7 effect of this paragraph and shall, as necessary, 8 reduce the number of Federal renewable elec-9 tricity credits per megawatt hour issued under 10 this paragraph, but not below 1, to ensure that 11 such number is no higher than the Secretary 12 determines is necessary to make distributed 13 generation facilities cost competitive with other 14 sources of renewable electricity generation. 15 FACILITIES PLACED IN SERVICE 16 AFTER ENACTMENT.—For any distributed gen-17 eration facility placed in service after the date 18 of enactment of this section, subparagraph (B) 19 shall not apply for the first 10 years after date 20 of enactment. For each year during such 10-21 year period, the Secretary shall issue the facil-22 ity the same number of Federal renewable elec-23 tricity credits per megawatt hour as are issued 24 to that facility in the year in which such facility

is placed in service. After such 10-year period,

25

1	the Secretary shall issue Federal renewable en-
2	ergy credits to the facility in accordance with
3	the current multiplier as determined pursuant
4	to subparagraph (B).
5	"(5) Credits based on incremental hy-
6	DROPOWER.—For purposes of this subsection, the
7	number of Federal renewable electricity credits
8	issued for qualifying hydropower described in sub-
9	section (a)(9)(A) shall be calculated—
10	"(A) based solely on the increase in aver-
11	age annual generation directly resulting from
12	the efficiency improvements or capacity addi-
13	tions described in subsection (a)(9)(A); and
14	"(B) using the same water flow informa-
15	tion used to determine a historic average an-
16	nual generation baseline for the hydroelectric
17	facility, as certified by the Secretary or by the
18	Commission.
19	"(6) Generation from mixed renewable
20	AND NON-RENEWABLE RESOURCES.—If electricity is
21	generated using both a renewable energy resource
22	and an energy source that is not a renewable energy
23	resource (as, for example, in the case of co-firing of
24	biomass and fossil fuel), the Secretary shall issue
25	Federal renewable electricity credits based on the

1	proportion of the electricity that is attributable to
2	the renewable energy resource.
3	"(7) Prohibition against double-count-
4	ING.—Except as provided in paragraph (4) of this
5	subsection, the Secretary shall ensure that no more
6	than 1 Federal renewable electricity credit will be
7	issued for any megawatt hour of renewable elec-
8	tricity and that no Federal renewable electricity
9	credit will be used more than once for compliance
10	with this section.
11	"(e) Trading, Banking, and Market Over-
12	SIGHT.—
13	"(1) Trading.—The lawful holder of a Federal
14	renewable electricity credit may sell, exchange,
15	transfer, submit for compliance in accordance with
16	subsection (c), or submit such credit for retirement
17	by the Secretary.
18	"(2) Banking.—A Federal renewable elec-
19	tricity credit may be submitted in satisfaction of the
20	compliance obligation set forth in subsection (c) for
21	the compliance year in which the credit was issued
22	or for any of the 3 immediately subsequent compli-
23	ance years. The Secretary shall retire any Federal
24	renewable electricity credit that has not been sub-
25	mitted under subsection (c) by the deadline for the

1	compliance year that is 3 years after the compliance
2	year in which the credit was issued.
3	"(3) Oversight.—The Commission, in con-
4	sultation with the Secretary and relevant Federal
5	agencies, may prescribe such rules as the Commis-
6	sioner determines necessary to ensure the trans-
7	parency, fairness, and stability of the market in
8	Federal renewable electricity credits and any deriva-
9	tive instruments based on such credits.
10	"(f) Renewable Electricity Deployment
11	Fund.—
12	"(1) In general.—There is established in the
13	Treasury of the United States a Renewable Elec-
14	tricity Deployment Fund.
15	"(2) Deposits.—All Federal alternative com-
16	pliance payments submitted to the Secretary pursu-
17	ant to subsection (c)(3) and civil penalties assessed
18	under this section shall be deposited into the Fund.
19	"(3) Use.—
20	"(A) In general.—Amounts deposited in
21	the Fund shall be available exclusively for use
22	by the Secretary, subject to appropriations, to
23	make payments to retail electric suppliers in ac-
24	cordance with subparagraph (B).

1	"(B) Allocation.—Not later than May 1
2	of each year from 2013 through 2040, the Sec-
3	retary shall distribute amounts deposited in the
4	Fund during the preceding 12-month period
5	among the retail electric suppliers which have
6	submitted Federal renewable electricity credits
7	to the Secretary in total or partial compliance
8	with their obligations under subsection (c) for
9	the preceding calendar year. Each retail electric
10	supplier shall receive a payment equal to the
11	product of—
12	"(i) the total payments made to all re-
13	tail electric suppliers under this subsection;
14	and
15	"(ii) the quotient obtained by dividing
16	the quantity specified in subclause (I) by
17	the quantity specified in subclause (II):
18	"(I) The quantity of Federal re-
19	newable electricity credits submitted
20	by the retail electric supplier for the
21	preceding calendar year pursuant to
22	subsection (c).
23	"(II) The total quantity of Fed-
24	eral renewable electricity credits sub-
25	mitted by all retail electric suppliers

1	for the preceding calendar year pursu-
2	ant to subsection (c).
3	"(g) Information Collection.—In accordance
4	with section 13 of the Federal Energy Administration Act
5	of 1974 (15 U.S.C. 772), the Secretary may require any
6	retail electric supplier, renewable electricity generator, or
7	such other entities as the Secretary deems appropriate, to
8	provide any information the Secretary determines appro-
9	priate to carry out this section.
10	"(h) Enforcement and Judicial Review.—
11	"(1) CIVIL PENALTY.—If any person fails to
12	comply with the requirements of subsection (c), such
13	person shall be liable to pay to the Secretary a civil
14	penalty equal to the product of—
15	"(A) double the Federal alternative compli-
16	ance payment calculated under subsection
17	(e)(3), and
18	"(B) the aggregate quantity of Federal re-
19	newable electricity credits (or equivalent Fed-
20	eral alternative compliance payments) that the
21	person failed to submit to the Secretary in vio-
22	lation of the requirements of subsection (c).
23	"(2) Enforcement.—The Secretary shall as-
24	sess a civil penalty under paragraph (1) in accord-
25	ance with the procedures described in section 333(d)

1	of the Energy Policy and Conservation Act of 1954
2	(42 U.S.C. 6303).
3	"(3) Judicial review.—Any person who will
4	be adversely affected by a final action taken by the
5	Secretary under this section, other than the assess-
6	ment of a civil penalty under this subsection, may
7	use the procedures for review described in section
8	336(b) of the Energy Policy and Conservation Act
9	(42 U.S.C. 6306). For purposes of this paragraph,
10	references to a rule in section 336(b) of the Energy
11	Policy and Conservation Act shall be deemed to refer
12	also to all other final actions of the Secretary under
13	this section other than the assessment of a civil pen-
14	alty under this subsection.
15	"(i) Savings Provisions.—Nothing in this section
16	shall—
17	"(1) diminish or qualify any authority of a
18	State or political subdivision of a State to—
19	"(A) adopt or enforce any law or regula-
20	tion respecting renewable electricity, including
21	programs that exceed the required amount of
22	renewable electricity under this section, pro-
23	vided that no such law or regulation may relieve
24	any person of any requirement otherwise appli-
25	cable under this section; or

1	"(B) regulate the acquisition and disposi-
2	tion of Federal renewable electricity credits by
3	retail electric suppliers located within the terri-
4	tory of such State or political subdivision, in-
5	cluding the authority to require such retail elec-
6	tric supplier to acquire and retire Federal re-
7	newable electricity credits associated with elec-
8	tric energy it sells to end-use customers; or
9	"(2) affect the application of, or the responsi-
10	bility for compliance with, any other provision of law
11	or regulation, including environmental and licensing
12	requirements.
13	"(j) Sunset.—This section expires on December 31,
14	2040.".
15	(b) Table of Contents Amendment.—The table
16	of contents of the Public Utility Regulatory Policies Act
17	of 1978 (16 U.S.C. 2601 and following) is amended by
18	adding at the end of the items relating to title VI the fol-
19	lowing:
	"Sec. 610. Federal renewable electricity standard".
20	Subtitle B—Carbon Capture and

Sequestration 21

- 22 SEC. 111. NATIONAL STRATEGY.
- (a) IN GENERAL.—Not later than 120 days after the 23
- 24 date of enactment of this Act, the Administrator of the
- 25 Environmental Protection Agency (in this section referred

1 to as the "Administrator"), in consultation with the Secretary of Energy (in this section referred to as the "Secretary") and the heads of such other relevant Federal 3 4 agencies as the President may designate, shall submit to 5 Congress a report setting forth a unified and comprehensive strategy to address the key legal and regulatory barriers to the commercial-scale deployment of carbon cap-8 ture and sequestration. 9 (b) Barriers.— The report under this subsection shall— 10 11 (1) identify those regulatory and legal barriers 12 that could be addressed by a Federal agency using 13 existing statutory authority, those, if any, that re-14 quire Federal legislation, and those that would be 15 best addressed at the State or regional level; and 16 (2) recommend rulemakings, Federal legisla-17 tion, or other actions that should be taken to remove 18 such barriers. 19 SEC. 112. REGULATIONS FOR GEOLOGIC SEQUESTRATION 20 SITES. 21 (a) Coordinated Certification and Permitting 22 Process.—Title VIII of the Clean Air Act, as added by 23 section 331 of this Act, is amended by adding after section 812 (as added by section 116 of this Act) the following:

1 "SEC. 813. GEOLOGIC SEQUESTRATION SITES.

- 2 "(a) Coordinated Process.—The Administrator
- 3 shall establish a coordinated approach to certifying and
- 4 permitting geologic sequestration sites, taking into consid-
- 5 eration all relevant statutory authorities. In establishing
- 6 such approach, the Administrator shall—
- 7 "(1) take into account, and reduce redundancy
- 8 with, the requirements of section 1421 of the Safe
- 9 Drinking Water Act (42 U.S.C. 300h(d)), as amend-
- ed by section 112(b) of the American Clean Energy
- and Security Act of 2009; and
- 12 "(2) to the extent practicable, reduce the bur-
- den on certified entities and implementing authori-
- ties.
- 15 "(b) Regulations.—Not later than 2 years after
- 16 the date of enactment of this title, the Administrator shall
- 17 promulgate regulations to protect human health and the
- 18 environment by minimizing the risk of escape to the at-
- 19 mosphere of carbon dioxide injected for purposes of geo-
- 20 logic sequestration, including enhanced hydrocarbon re-
- 21 covery combined with geologic sequestration.
- 22 "(c) Requirements.—The regulations under sub-
- 23 section (b) shall include—
- 24 "(1) a process to obtain certification of a geo-
- logic sequestration site under this section; and
- 26 "(2) requirements for—

1	"(A) monitoring, record keeping, and re-
2	porting for emissions associated with injection
3	into, and escape from, geologic sequestration
4	sites, taking into account any requirements or
5	protocols developed under section 713;
6	"(B) public participation in the certifi-
7	cation process that maximizes transparency;
8	"(C) the sharing of data between States,
9	Indian tribes, and the Environmental Protec-
10	tion Agency; and
11	"(D) other elements or safeguards nec-
12	essary to achieve the purpose in subsection (b).
13	"(d) Report.—Not later than 2 years after the en-
14	actment of this title, and at 3-year intervals thereafter,
15	the Administrator shall deliver to the Committee on En-
16	ergy and Commerce of the House of Representatives and
17	the Committee on Environment and Public Works of the
18	Senate, a report on geologic sequestration in the United
19	States, and to the extent relevant, other countries in
20	North America. Such report shall include—
21	"(1) data regarding injection, emissions to the
22	atmosphere, if any, and performance of active and
23	closed geologic sequestration sites, including those
24	where enhanced hydrocarbon recovery operations
25	occur;

1	"(2) an evaluation of the performance of rel-
2	evant Federal environmental regulations and pro-
3	grams in ensuring environmentally protective geo-
4	logic sequestration practices;
5	"(3) recommendations on how such programs
6	and regulations should be improved or made more
7	effective; and
8	"(4) other relevant information.".
9	(b) SAFE DRINKING WATER ACT STANDARDS.—Sec-
10	tion 1421 of the Safe Drinking Water Act (42 U.S.C.
11	300h) is amended by inserting after subsection (d) the fol-
12	lowing:
13	"(e) Carbon Dioxide Geologic Sequestration
14	Wells.—
15	"(1) IN GENERAL.—Not later than 1 year after
16	the date of enactment of this subsection, the Admin-
17	istrator shall promulgate regulations under sub-
18	section (a) for carbon dioxide geologic sequestration
19	wells.
20	"(2) Financial responsibility.—The regula-
21	tions referred to in paragraph (1) shall include re-
22	quirements for maintaining evidence of financial re-
23	sponsibility, including financial responsibility for
24	emergency and remedial response, well plugging, site
25	closure, and post-injection site care. Financial re-

1	sponsibility may be established for carbon dioxide
2	geologic sequestration wells in accordance with regu-
3	lations promulgated by the Administrator by any
4	one, or any combination, of the following: insurance,
5	guarantee, trust, standby trust, surety bond, letter
6	of credit, qualification as a self-insurer, or any other
7	method satisfactory to the Administrator.".
8	SEC. 113. STUDIES AND REPORTS.
9	(a) Study of Legal Framework for Geologic
10	SEQUESTRATION SITES.—
11	(1) Establishment of task force.—As
12	soon as practicable, but not later than 6 months
13	after the date of enactment of this Act, the Adminis-
14	trator shall establish a task force to be composed of
15	an equal number of subject matter experts, non-
16	governmental organizations with expertise in envi-
17	ronmental policy, academic experts with expertise in
18	environmental law, State officials with environmental
19	expertise, representatives of State Attorneys Gen-
20	eral, and members of the private sector, to conduct
21	a study of—
22	(A) existing Federal environmental stat-
23	utes, State environmental statutes, and State
24	common law that apply to geologic sequestra-
25	tion sites for carbon dioxide, including the abil-

1	ity of such laws to serve as risk management
2	tools;
3	(B) the existing statutory framework, in-
4	cluding Federal and State laws, that apply to
5	environmental harm and damage at closed sites
6	where carbon dioxide injection has been used
7	for enhanced hydrocarbon recovery;
8	(C) the statutory framework, environ-
9	mental and safety considerations, implementa-
10	tion issues, and financial implications of poten-
11	tial models for Federal, State, or private sector
12	assumption of liabilities and financial respon-
13	sibilities with respect to closed geologic seques-
14	tration sites;
15	(D) private sector mechanisms, including
16	insurance and bonding, that may be available to
17	manage environmental risk from closed geologic
18	sequestration sites; and
19	(E) the subsurface mineral rights, water
20	rights, or property rights issues associated with
21	geological sequestration of carbon dioxide.
22	(2) Report.—Not later than 18 months after
23	the date of enactment of this Act, the task force es-
24	tablished under paragraph (1) shall submit to Con-
25	gress a report describing the results of the study

1 conducted under that paragraph including any con-2 sensus recommendations of the task force. (b) Carbon Dioxide Transportation.— 3 4 (1) STUDY OF PIPELINES.—The Secretary of 5 Energy (referred to in this section as the "Sec-6 retary"), in coordination with the Federal Energy 7 Regulatory Commission, the Administrator of the 8 Environmental Protection Agency, and such other 9 relevant Federal agencies as the President may des-10 ignate, shall conduct a study to assess the need for 11 and barriers to the construction and operation of 12 pipelines to be used for the transportation of carbon 13 dioxide for the purpose of sequestration or enhanced 14 hydrocarbon recovery. 15 (2) Scope of study.—In conducting the study 16 under this subsection, the Secretary shall consider 17 each of the following: 18 (A) Any barrier or potential barrier in ex-19 istence as of the date of enactment of this Act, 20 including any technical, siting, financing, or 21 regulatory barrier, relating to the construction 22 and operation of pipelines to be used for the 23 transportation of carbon dioxide for the purpose 24 of sequestration or enhanced hydrocarbon re-

25

covery.

1	(B) Any market risk (including throughput
2	risk) relating to the construction and operation
3	of pipelines to be used for the transportation of
4	carbon dioxide for the purpose of sequestration
5	or enhanced hydrocarbon recovery.
6	(C) Any regulatory, financing, or siting op-
7	tion that, as determined by the Secretary,
8	would mitigate any market risk described in
9	subparagraph (B) or help ensure the construc-
10	tion of pipelines dedicated to the transportation
11	of carbon dioxide for the purpose of sequestra-
12	tion or enhanced hydrocarbon recovery.
13	(D) The means by which to ensure the safe
14	transportation of carbon dioxide.
15	(E) Any preventive measure to ensure the
16	integrity of pipelines to be used for the trans-
17	portation of carbon dioxide for the purpose of
18	sequestration or enhanced hydrocarbon recov-
19	ery.
20	(F) Any other appropriate issue, as deter-
21	mined by the Secretary.
22	(3) Report.—Not later than 180 days after
23	the date of enactment of this Act, the Secretary
24	shall submit to the Committee on Energy and Com-
25	merce of the House of Representatives and the Com-

1	mittee on Energy and Natural Resources of the Sen-
2	ate a report describing the results of the study.
3	SEC. 114. CARBON CAPTURE AND SEQUESTRATION DEM-
4	ONSTRATION AND EARLY DEPLOYMENT PRO-
5	GRAM.
6	(a) Definitions.—For purposes of this section:
7	(1) Secretary.—The term "Secretary" means
8	the Secretary of Energy.
9	(2) Distribution utility.—The term "dis-
10	tribution utility" means an entity that distributes
11	electricity directly to retail consumers under a legal,
12	regulatory, or contractual obligation to do so.
13	(3) Electric utility.—The term "electric
14	utility" has the meaning provided by section 3(22)
15	of the Federal Power Act (16 U.S.C. 796(22)).
16	(4) Fossil fuel-based electricity.—The
17	term "fossil fuel-based electricity" means electricity
18	that is produced from the combustion of fossil fuels.
19	(5) Fossil fuel.—The term "fossil fuel"
20	means coal, petroleum, natural gas or any derivative
21	of coal, petroleum, or natural gas.
22	(6) Corporation.—The term "Corporation"
23	means the Carbon Storage Research Corporation es-
24	tablished in accordance with this section.

1	(7) Qualified industry organization.—The
2	term "qualified industry organization" means the
3	Edison Electric Institute, the American Public
4	Power Association, the National Rural Electric Co-
5	operative Association, a successor organization of
6	such organizations or a group of owners or operators
7	of distribution utilities delivering fossil fuel-based
8	electricity who collectively represent at least 20 per-
9	cent of the volume of fossil fuel-based electricity de-
10	livered by distribution utilities to consumers in the
11	United States.
12	(8) Retail consumer.—The term "retail con-
13	sumer' means an end-user of electricity.
14	(b) Carbon Storage Research Corporation.—
15	(1) Establishment.—
16	(A) Referendum.—Qualified industry or-
17	ganizations may conduct, at their own expense,
18	a referendum among the owners or operators of
19	distribution utilities delivering fossil fuel-based
20	electricity for the creation of a Carbon Storage
21	Research Corporation. Such referendum shall
22	be conducted by an independent auditing firm
23	agreed to by the qualified industry organiza-
24	tions. Voting rights in such referendum shall be
25	based on the quantity of fossil fuel-based elec-

tricity delivered to consumers in the previous calendar year or other representative period as determined by the Secretary pursuant to subsection (f). Upon approval of those persons representing two-thirds of the total quantity of fossil fuel-based electricity delivered to retail consumers, the Corporation shall be established unless opposed by the State regulatory authorities pursuant to subparagraph (B). All distribution utilities voting in the referendum shall certify to the independent auditing firm the quantity of fossil fuel-based electricity represented by their vote.

(B) STATE REGULATORY AUTHORITIES.—
Upon its own motion or the petition of a qualified industry organization, each State regulatory authority shall consider its support or opposition to the creation of the Corporation under subparagraph (A). State regulatory authorities may notify the independent auditing firm referred to in subparagraph (A) of their views on the creation of the Corporation within 180 days after the enactment of this Act. If 40 percent or more of the State regulatory authorities submit to the independent auditing firm

1	written notices of opposition, the Corporation
2	shall not be established notwithstanding the ap-
3	proval of the qualified industry organizations as
4	provided in subparagraph (A).
5	(2) TERMINATION.—The Corporation shall be
6	authorized to collect assessments and conduct oper-
7	ations pursuant to this section for a 10-year period
8	from the date 6 months after the date of enactment
9	of this Act. After such 10-year period, the Corpora-
10	tion is no longer authorized to collect assessments
11	and shall be dissolved on the date 15 years after
12	such date of enactment, unless the period is ex-
13	tended by an Act of Congress.
14	(3) Governance.—The Corporation shall oper-
15	ate as a division or affiliate of the Electric Power
16	Research Institute (referred to in this section as
17	"EPRI") and be managed by a Board of not more
18	than 15 voting members responsible for its oper-
19	ations, including compliance with this section. EPRI,
20	in consultation with the Edison Electric Institute,
21	the American Public Power Association and the Na-
22	tional Rural Electric Cooperative Association shall
23	appoint the Board members under clauses (i), (ii),

and (iii) of subparagraph (A) from among can-

didates recommended by those organizations. At

24

1	least a majority of the Board members appointed by
2	EPRI shall be representatives of distribution utilities
3	subject to assessments under subsection (d).
4	(A) Members.—The Board shall include
5	at least one representative of each of the fol-
6	lowing:
7	(i) Investor-owned utilities.
8	(ii) Utilities owned by a State agency
9	or a municipality.
10	(iii) Rural electric cooperatives.
11	(iv) Fossil fuel producers.
12	(v) Non-profit environmental organi-
13	zations.
14	(vi) Independent generators or whole-
15	sale power providers.
16	(vii) Consumer groups.
17	(B) Nonvoting members.—The Board
18	shall also include as additional non-voting Mem-
19	bers the Secretary of Energy or his designee
20	and 2 representatives of State regulatory au-
21	thorities as defined in section 3(17) of the Pub-
22	lic Utility Regulatory Policies Act of 1978 (16
23	U.S.C. 2602, 3(17)), each designated by the
24	National Association of State Regulatory Utility

1	Commissioners from States that are not within
2	the same transmission interconnection.
3	(4) Compensation.—Corporation Board mem-
4	bers shall receive no compensation for their services,
5	nor shall Corporation Board members be reimbursed
6	for expenses relating to their service.
7	(5) Terms.—Corporation Board members shall
8	serve terms of 4 years and may serve not more than
9	2 full consecutive terms. Members filling unexpired
10	terms may serve not more than a total of 8 consecu-
11	tive years. Former members of the Corporation
12	Board may be reappointed to the Corporation Board
13	if they have not been members for a period of 2
14	years. Initial appointments to the Corporation Board
15	shall be for terms of 1, 2, 3, and 4 years, staggered
16	to provide for the selection of 3 members each year.
17	(6) Status of Corporation.—The Corpora-
18	tion shall not be considered to be an agency, depart-
19	ment, or instrumentality of the United States, and
20	no officer or director or employee of the Corporation
21	shall be considered to be an officer or employee of
22	the United States Government, for purposes of title
23	5 or title 31 of the United States Code, or for any
24	other purpose, and no funds of the Corporation shall
25	be treated as public money for purposes of chapter

1 33 of title 31, United States Code, or for any other 2 purpose. 3 (c) Functions and Administration of the Cor-4 PORATION.— 5 (1) In General.—The Corporation shall estab-6 lish and administer a program to accelerate the com-7 mercial availability of carbon dioxide capture and 8 storage technologies and methods, including tech-9 nologies which capture and store, or capture and 10 convert, carbon dioxide. Under such program com-11 petitively awarded grants, contracts, and financial 12 assistance shall be provided and entered into with el-13 igible entities. Except as provided in paragraph (7), 14 the Corporation shall use all funds derived from as-15 sessments under subsection (d) to issue grants and 16 contracts to eligible entities. 17 (2) Purpose.—The purposes of the grants, 18 contracts, and assistance under this subsection shall 19 be to support commercial-scale demonstrations of 20 carbon capture or storage technology projects capa-21 ble of advancing the technologies to commercial 22 readiness. Such projects should encompass a range 23 of different coal and other fossil fuel varieties, be 24 geographically diverse, involve diverse storage media, 25 and employ capture or storage, or capture and con-

- version, technologies potentially suitable either for new or for retrofit applications.
 - (3) ELIGIBLE ENTITIES.—Entities eligible for grants, contracts or assistance under this subsection may include distribution utilities, electric utilities and other private entities, academic institutions, national laboratories, Federal research agencies, State research agencies, non-profit organizations, or consortiums of 2 or more entities. Pilot-scale and similar small-scale projects are not eligible for support by the Corporation.
 - (4) ADMINISTRATION.—The members of the Board of Directors of the Corporation shall elect a Chairman and other officers as necessary, may establish committees and subcommittees of the Corporation, and shall adopt rules and bylaws for the conduct of business and the implementation of this section. The Board shall appoint an Executive Director and professional support staff who may be employees of the Electric Power Research Institute (EPRI). After consultation with the Technical Advisory Committee established under subsection (i), the Secretary, and the Director of the National Energy Technology Laboratory to obtain advice and recommendations on plans, programs, and project selec-

tion criteria, the Board shall establish priorities for grants, contracts, and assistance; publish requests for proposals for grants, contracts and assistance; award grants, contracts and assistance competitively, on the basis of merit, after the establishment of procedures that provide for scientific peer review by the Technical Advisory Committee. The Board shall give preference to applications that reflect the best overall value and prospect for achieving the purposes of the Act, such as those which demonstrate an integrated approach for capture and storage or capture and conversion technologies. The Board members shall not participate in making grants or awards to entities with whom they are affiliated.

(5) Uses of grants, contracts, and assistance provided under this subsection may be used to purchase carbon dioxide when needed to conduct tests of carbon dioxide storage sites, in the case of established projects that are storing carbon dioxide emissions, or for other purposes consistent with the purposes of this section. The Corporation shall make publicly available at no cost information learned as a result of projects which it supports financially.

1	(6) Intellectual property.—The Board
2	shall establish policies regarding the ownership of in-
3	tellectual property developed as a result of Corpora-
4	tion grants and other forms of technology support.
5	Such policies shall encourage individual ingenuity
6	and invention.
7	(7) Administrative expenses.—Up to 5 per-
8	cent of the funds collected in any fiscal year under
9	subsection (d) may be used for the administrative
10	expenses of operating the Corporation (not including
11	costs incurred in the determination and collection of
12	the assessments pursuant to subsection (d)).
13	(8) Programs and Budget.—Before August 1
14	each year, the Corporation, after consulting with the
15	Technical Advisory Committee and the Secretary
16	and the Director of the Department's National En-
17	ergy Technology Laboratory and other interested
18	parties to obtain advice and recommendations, shall
19	publish for public review and comment its proposed
20	plans, programs, project selection criteria, and

projects to be funded by the Corporation for the

next calendar year. The Corporation shall also pub-

lish for public review and comment a budget plan for

21

22

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

ommended rate of assessment sufficient to cover such costs. The Secretary may recommend program and activities the Secretary considers appropriate.

> (9) Records; Audits.—The Corporation shall keep minutes, books, and records that clearly reflect all of the acts and transactions of the Corporation and make public such information. The books of the Corporation shall be audited by a certified public accountant at least once each fiscal year and at such other times as the Corporation may designate. Copies of each audit shall be provided to the Congress, all Corporation board members, all qualified industry organizations, each State regulatory authority and, upon request, to other members of the industry. If the audit determines that the Corporation's practices fail to meet generally accepted accounting principles the assessment collection authority of the Corporation under subsection (d) shall be suspended until a certified public accountant renders a subsequent opinion that the failure has been corrected.

> (10) Public access.—The Corporation Board's meetings shall be open to the public and shall occur after at least 30 days advance public notice. Meetings of the Board of Directors may be closed to the public where the agenda of such meet-

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

ings includes only confidential matters pertaining to project selection, the award of grants or contracts, personnel matter, or the receipt of legal advice. The minutes of all meetings of the Corporation shall be made available to and readily accessible by the public.

(11) Annual Report.—Each year the Corporation shall prepare and make publicly available a report which includes an identification and description of all programs and projects undertaken by the Corporation during the previous year. The report shall also detail the allocation or planned allocation of Corporation resources for each such program and project. The Corporation shall provide its annual report to the Congress, the Secretary, each State regulatory authority, and upon request to the public.

(d) Assessments.—

(1) AMOUNT.—(A) In all calendar years following its establishment, the Corporation shall collect an assessment on distribution utilities for all fossil fuel-based electricity delivered directly to retail consumers (as determined under subsection (f)). The assessments shall reflect the relative carbon dioxide 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.

- (B) The Corporation is authorized to adjust the assessments on fossil fuel-based electricity to reflect changes in the expected quantities of such electricity from different fuel types, such that the assessments generate not less than \$1.0 billion and not more than \$1.1 billion annually. The Corporation is authorized to supplement assessments through additional financial commitments.
- (2) Investment of funds.—Pending disbursement pursuant to a program, plan, or project, the Corporation may invest funds collected through assessments under this subsection, and any other funds received by the Corporation, only in obligations of the United States or any agency thereof, in general obligations of any State or any political subdivision thereof, in any interest-bearing account or certificate of deposit of a bank that is a member of the Federal Reserve System, or in obligations fully guaranteed as to principal and interest by the 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 sched-
18	uling entities, or their successor entities;
19	(ii) charged consistent with other
20	charges imposed on qualified scheduling
21	entities as a fee on energy used by the
22	load-serving entities; and
23	(iii) collected and remitted by ERCOT
24	to the Corporation in the amounts and in

1	the same manner as set forth in subsection
2	(d).
3	(B) The assessment amounts referred to in sub-
4	paragraph (A) shall be—
5	(i) determined by the amount and types of
6	fossil fuel-based electricity delivered directly to
7	all retail customers in the prior calendar year
8	beginning with the year ending immediately
9	prior to the period described in subsection
10	(b)(1); and
11	(ii) take into account the number of renew-
12	able energy credits retired by the load-serving
13	entities represented by a qualified scheduling
14	entity within the prior calendar year.
15	(2) Administration expenses.—Up to 1 per-
16	cent of the funds collected in any fiscal year by
17	ERCOT under the provisions of this subsection may
18	be used for the administrative expenses incurred in
19	the determination, collection and remittance of the
20	assessments to the Corporation.
21	(3) Audit.—ERCOT shall provide a copy of its
22	annual audit pertaining to the administration of the
23	provisions of this subsection to the Corporation.
24	(4) Definitions.—For the purposes of this
25	subsection:

1	(A) The term "ERCOT" means the Elec-
2	tric Reliability Council of Texas.
3	(B) The term "load-serving entities" has
4	the meaning adopted by ERCOT Protocols and
5	in effect on the date of enactment of this Act
6	(C) The term "qualified scheduling enti-
7	ties" has the meaning adopted by ERCOT Pro-
8	tocols and in effect on the date of enactment of
9	this Act.
10	(D) The term "renewable energy credit"
11	has the meaning as promulgated and adopted
12	by the Public Utility Commission of Texas pur-
13	suant to section 39.904(b) of the Public Utility
14	Regulatory Act of 1999, and in effect on the
15	date of enactment of this Act.
16	(f) Determination of Fossil Fuel-Based Elec-
17	TRICITY DELIVERIES.—
18	(1) FINDINGS.—The Congress finds that:
19	(A) The assessments under subsection (d)
20	are to be collected based on the amount of fossi
21	fuel-based electricity delivered by each distribu-
22	tion utility.
23	(B) Since many distribution utilities pur-
24	chase all or part of their retail consumer's elec-
25	tricity needs from other entities, it may not be

1	practical to determine the precise fuel mix for
2	the power sold by each individual distribution
3	utility.
4	(C) It may be necessary to use average
5	data, often on a regional basis with reference to
6	Regional Transmission Organization ("RTO")
7	or NERC regions, to make the determinations
8	necessary for making assessments.
9	(2) DOE PROPOSED RULE.—The Secretary,
10	acting in close consultation with the Energy Infor-
11	mation Administration, shall issue for notice and
12	comment a proposed rule to determine the level of
13	fossil fuel electricity delivered to retail customers by
14	each distribution utility in the United States during
15	the most recent calendar year or other period deter-
16	mined to be most appropriate. Such proposed rule
17	shall balance the need to be efficient, reasonably pre-
18	cise and timely, taking into account the nature and
19	cost of data currently available and the nature of
20	markets and regulation in effect in various regions
21	of the country. Different methodologies may be ap-
22	plied in different regions if appropriate to obtain the
23	best balance of such factors.
24	(3) Final Rule.—Within 6 months after the
25	enactment of this Act, and after opportunity for

1 comment, the Secretary shall issue a final rule under 2 this subsection for determining the level and type of 3 fossil fuel-based electricity delivered to retail customers by each distribution utility in the United 5 States during the appropriate period. In issuing 6 such rule, the Secretary may consider opportunities 7 and costs to develop new data sources in the future 8 and issue recommendations for the Energy Informa-9 tion Administration or other entities to collect such 10 data. After notice and opportunity for comment the 11 Secretary may, by rule, subsequently update and 12 modify the methodology for making such determinations. 13 14 (4) Annual Determinations.—Pursuant to 15 the final rule issued under paragraph (3), the Sec-16 retary shall make annual determinations of the 17 amounts and types for each such utility and publish 18 such determinations in the Federal Register. Such 19 determinations shall be used to conduct the ref-20 erendum under subsection (b) and by the Corpora-21 tion in applying any assessment under this sub-22 section. 23 (5) Rehearing and Judicial Review.—The 24 owner or operator of any distribution utility that be-25 lieves that the Secretary has misapplied the method-

1 ology in the final rule in determining the amount 2 and types of fossil fuel electricity delivered by such 3 distribution utility may seek rehearing of such deter-4 mination within 30 days of publication of the deter-5 mination in the Federal Register. The Secretary 6 shall decide such rehearing petitions within 30 days. 7 The Secretary's determinations following rehearing 8 shall be final and subject to judicial review in the 9 United States Court of Appeals for the District of 10 Columbia. 11 WITHCORPORATION COMPLIANCE Assess-12 MENTS.—The Corporation may bring an action in the appropriate court of the United States to compel compliance 13 14 with an assessment levied by the Corporation under this 15 section. A successful action for compliance under this sub-16 section may also require payment by the defendant of the 17 costs incurred by the Corporation in bringing such action. 18 (h) MIDCOURSE REVIEW.—Not later than 5 years 19 following establishment of the Corporation, the Comptroller General of the United States shall prepare an anal-20 21 ysis, and report to Congress, assessing the Corporation's 22 activities, including project selection and methods of dis-23 bursement of assessed fees, impacts on the prospects for commercialization of carbon capture and storage technologies, and adequacy of funding. The report shall also

make such recommendations as may be appropriate in each of these areas. The Corporation shall reimburse the Government Accountability Office for the costs associated 3 4 with performing this midcourse 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 (i) TECHNICAL ADVISORY COMMITTEE.— 20 (1) ESTABLISHMENT.—There is established an 21 advisory committee, to be known as the "Technical 22 Advisory Committee". 23 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-

lowing:

1	(A) Reviewing and evaluating the Corpora-
2	tion's plans and budgets described in subsection
3	(c)(8), 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	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 to 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 the Davis-Bacon Act (40 U.S.C. 276a–276a–
6	5).
7	SEC. 115. COMMERCIAL DEPLOYMENT OF CARBON CAP-
8	TURE AND SEQUESTRATION TECHNOLOGIES.
9	(a) REGULATIONS.—Not later than 2 years after the
10	date of enactment of this Act, the Administrator of the
11	Environmental Protection Agency (in this section referred
12	to as the "Administrator") shall promulgate regulations
13	establishing a program to distribute authorized funds, in
14	accordance with the requirements of this section, to sup-
15	port the commercial deployment of carbon capture and se-
16	questration technologies in both electric power generation
17	and appropriate industrial operations.
18	(b) ELIGIBILITY CRITERIA.—To be eligible for fund-
19	ing under this section, a project must implement carbon
20	capture and sequestration technology—
21	(1) at an electric generating unit that—
22	(A) has a nameplate capacity of 250
23	megawatts or more; and

1	(B) derives at least 50 percent of its an-
2	nual fuel input from coal, petroleum coke, or
3	any combination of these fuels; or
4	(2) at an industrial source that, absent carbon
5	capture and sequestration technology, would emit
6	over 250,000 tons per year of carbon dioxide equiva-
7	lent.
8	(c) Distribution of Funds.—
9	(1) Multiple tranches.—The Administrator
10	shall divide funds for distribution to eligible projects
11	into a series of tranches, each supporting the deploy-
12	ment of a specified quantity of electric generating
13	capacity (or such alternative metric as the Adminis-
14	trator may designate for industrial projects) utilizing
15	carbon capture and sequestration technology.
16	(2) FORM OF FUNDING.—The Administrator
17	shall distribute funds within each tranche, on a first-
18	come, first-served basis, in the form of a payment
19	per ton of carbon dioxide captured and sequestered
20	by the project.
21	(3) SLIDING SCALE.—For each tranche estab-
22	lished pursuant to paragraph (1), the Administrator
23	shall establish a payment schedule based on a sliding
24	scale that provides higher payments per ton for

1	projects achieving higher rates of capture and se-
2	questration.
3	(4) Declining payments by tranche.—For
4	each successive tranche established pursuant to
5	paragraph (1), the schedule established pursuant to
6	paragraph (3) shall establish a lower payment per
7	ton than was provided in the prior tranche.
8	(5) Criteria for establishing payment
9	SCHEDULES.—Payment levels under the program
10	under this section shall be established so as to cover
11	the reasonable incremental capital and operating
12	costs of a project that are attributable to implemen-
13	tation of carbon capture and sequestration tech-
14	nologies, taking into account—
15	(A) the reduced cost of compliance with
16	section 722 of the Clean Air Act (as added by
17	section 311 of this Act);
18	(B) the capture technology and fuel type
19	(including coal type) used by the project; and
20	(C) such other factors as the Adminis-
21	trator determines are appropriate.
22	(d) Limitations.—
23	(1) Payment period.—An eligible project may
24	receive funding under this subsection only for the
25	first [x] years of operation.

1	(2) Industrial Projects.—(A) Industrial
2	sources shall receive no more than 15 percent of
3	available funds available under this section.
4	(B) An industrial source shall not be eligible to
5	receive funding under this section if it produces a
6	transportation fuel that contains more than 10 kilo-
7	grams of fossil-based carbon per million British
8	thermal units, higher heat value.
9	(3) Total deployment.—Funding under this
10	section may be used to support the deployment of no
11	greater than [x] gigawatts of electric generating ca-
12	pacity with carbon capture and sequestration tech-
13	nology (reduced, based on such equivalent metric as
14	the Administrator may designate, by the quantity of
15	industrial source projects deployed under this sec-
16	tion).
17	(e) AUTHORIZATION.—There are authorized to be ap-
18	propriated to carry out the program under this section
19	such sums as may be necessary.
20	SEC. 116. PERFORMANCE STANDARDS FOR COAL-FUELED
21	POWER PLANTS.
22	(a) IN GENERAL.—Title VIII of the Clean Air Act
23	(as added by section 331 of this Act) is amended by add-
24	ing the following new section after section 811:

1	"SEC. 812. PERFORMANCE STANDARDS FOR NEW COAL-
2	FIRED POWER PLANTS.
3	"(a) Definitions.—For purposes of this section:
4	"(1) COVERED EGU.—The term 'covered EGU'
5	means a utility unit that—
6	"(A) has a permit issued under title V of
7	this Act that permits it to derive at least 30
8	percent of its annual heat input from coal, pe-
9	troleum coke, or any combination of these fuels;
10	and
11	"(B) is finally permitted after January 1,
12	2009.
13	"(2) Finally permitted.— For purposes of
14	paragraph (1), the term 'finally permitted' by a
15	specified date means that the owner or operator of
16	the covered EGU has received all necessary
17	preconstruction approvals or permits under this Act,
18	for a new (not modified) utility unit, and any admin-
19	istrative review of such approvals or permits has
20	been exhausted by that date. A subsequent modifica-
21	tion of any such approval or permits shall not affect
22	the date on which a covered EGU is considered to
23	be finally permitted under this paragraph.
24	"(b) STANDARDS.—(1) A covered EGU that is finally
25	permitted after January 1, 2015, shall emit no more than
26	1,100 pounds of carbon dioxide per megawatt-hour.

1	"(2) A covered EGU that is finally permitted after
2	January 1, 2020, shall emit no more than 800 pounds
3	of carbon dioxide per megawatt-hour, or meet such more
4	stringent standard as the Administrator may establish
5	pursuant to subsection (c).
6	"(3) A covered EGU that is finally permitted after
7	January 1, 2009, and before January 1, 2015, shall, by
8	the applicable compliance date established under this
9	paragraph, emit no more than 1,100 pounds of carbon di-
10	oxide per megawatt-hour. Compliance with the require-
11	ment set forth in this paragraph shall be required by the
12	earliest of the following:
13	"(A) Four years after the date the Adminis-
14	trator issues a determination that there are in com-
15	mercial operation in the United States electric gen-
16	erating units equipped with carbon capture and se-
17	questration technology that, in the aggregate—
18	"(i) have a total of at least 2.5 gigawatts
19	of nameplate generating capacity; and
20	"(ii) are capturing and sequestering in the
21	aggregate at least 5 million tons of carbon diox-
22	ide per year, calculated on an aggregate
23	annualized basis.
24	"(B) Four years after the date the Adminis-
25	trator issues a determination that there are in com-

1	mercial operation worldwide electric generating units
2	equipped with carbon capture and sequestration
3	technology that, in the aggregate—
4	"(i) have a total of at least 5 gigawatts of
5	nameplate generating capacity; and
6	"(ii) are capturing and sequestering in the
7	aggregate at least 10 million tons of carbon di-
8	oxide per year, calculated on an aggregate
9	annualized basis, of which at least 2 million
10	tons of carbon dioxide per year, calculated on
11	an aggregate annualized basis, is being cap-
12	tured and sequestered in the United States; or
13	"(C) January 1, 2025.
14	"(c) Review and Revision of Standards.—Not
15	later than 2025 and at 5-year intervals thereafter, the Ad-
16	ministrator shall review the standards for new covered
17	EGUs under this section and shall, by rule, reduce the
18	maximum carbon dioxide emission rate for new covered
19	EGUs to a rate which reflects the degree of emission limi-
20	tation achievable through the application of the best sys-
21	tem of emission reduction which (taking into account the
22	cost of achieving such reduction and any nonair quality
23	health and environmental impact and energy require-
24	ments) the Administrator determines has been adequately
25	demonstrated.".

1 Subtitle C—Clean Transportation

SEC. 121. LOW CARBON FUEL STANDARD. 3 Part B of title VIII of the Clean Air Act, as added by section 221 of this Act, is amended by adding after 4 5 section 821 the following section: 6 "SEC. 822. LOW CARBON FUEL STANDARD. 7 "(a) Definitions.—For purposes of this section: 8 "(1) In general.—Except as otherwise pro-9 vided in this section, all terms used in this section 10 shall have the same meaning as when used in title 11 II, including section 211(o). 12 "(2) Fuel emission baseline.—The term 13 'fuel emission baseline' means the average lifecycle 14 greenhouse gas emissions per unit of energy, as de-15 termined by the Administrator, of all transportation 16 fuels sold or introduced into commerce in any of the 17 50 States or the District of Columbia in calendar 18 year 2005. 19 "(3) Renewable biomass.—Notwithstanding 20 paragraph (1), the term 'renewable biomass' shall 21 have the meaning given to such term in title VII. 22 "(4) TRANSPORTATION FUEL.—The 'transportation fuel' means fuel for use in motor ve-23 24 hicles, motor vehicle engines, nonroad vehicles,

nonroad engines, and aircraft. The Administrator

1	may, at his discretion, include fuel for use in ocean-
2	going vessels and adjust the fuel emission baseline
3	as appropriate to reflect the inclusion of such fuel.
4	"(5) Transportation fuel provider.—The
5	term 'transportation fuel provider' includes any indi-
6	vidual or entity that produces, refines, blends, or im-
7	ports any transportation fuel.
8	"(b) Regulations.—
9	"(1) STANDARD.—Not later than 3 years after
10	enactment of this section, the Administrator shall
11	promulgate regulations under section 211(c) and
12	this section that—
13	"(A) determine the lifecycle greenhouse
14	gas emissions of all transportation fuels;
15	"(B) determine the fuel emission baseline;
16	"(C) apply to refineries, blenders, and im-
17	porters, as appropriate, and to such other
18	transportation fuel providers as determined by
19	the Administrator;
20	"(D) ensure that, for each year from 2014
21	through 2022, the annual average lifecycle
22	greenhouse gas emissions, per unit of energy as
23	determined by the Administrator, of transpor-
24	tation fuel, excluding renewable fuel used to
25	meet the obligations of section 211(o), sold or

1	introduced into commerce by such transpor-
2	tation fuel providers in any of the 50 States or
3	the District of Columbia, does not exceed the
4	fuel emission baseline; and
5	"(E) ensure that, for 2023 and each year
6	thereafter, such transportation fuel providers
7	reduce the annual average lifecycle greenhouse
8	gas emissions, per unit of energy as determined
9	by the Administrator, for transportation fuel
10	that is sold or introduced into commerce in any
11	of the 50 States or the District of Columbia, to
12	the maximum extent practicable, taking into
13	consideration cost, energy, and other environ-
14	mental factors, and that—
15	"(i) for calendar year 2023 and later,
16	the annual average lifecycle greenhouse gas
17	emission is at least 5 percent below the
18	fuel emission baseline; and
19	"(ii) for calendar year 2030 and later,
20	the annual average lifecycle greenhouse gas
21	emission is at least 10 percent below the
22	fuel emission baseline.
23	"(2) Review.—The Administrator shall from
24	time to time, but no less than every 5 years begin-
25	ning in 2020, review and revise as appropriate the

1	annual average lifecycle greenhouse gas emission re-
2	quirements of the regulations issued under this sub-
3	section.
4	"(3) Provisions.—The regulations issued
5	under this subsection—
6	"(A) shall contain compliance provisions
7	applicable to transportation fuel providers and
8	other persons, as appropriate, to ensure that
9	the requirements of this subsection are met;
10	"(B) shall not impose any per-gallon obli-
11	gation regarding the amount of lifecycle green-
12	house gas emissions per unit of energy as deter-
13	mined by the Administrator; and
14	"(C) shall set the lifecycle greenhouse gas
15	emissions of biofuels derived from biomass
16	other than renewable biomass at a level no
17	higher than the fuel emission baseline.
18	"(4) Election to participate.—
19	"(A) Participation.—For any transpor-
20	tation fuel provider which the Administrator
21	has not yet determined to be subject to the reg-
22	ulations under this subsection, and for any pro-
23	vider of a non-transportation fuel, the Adminis-
24	trator, at his discretion, may allow the fuel pro-
25	vider to elect to participate in the program

1	under this subsection, subject to requirements
2	established by the regulation.
3	"(B) REGULATORY PROVISIONS.—Regula-
4	tions implementing this paragraph shall in-
5	clude—
6	"(i) provisions for tracking of the fuel
7	used for transportation purposes separately
8	from fuel used for other purposes; and
9	"(ii) any other provisions determined
10	appropriate by the Administrator to carry
11	out this paragraph.
12	"(c) Credits.—
13	"(1) In general.—The regulations under sub-
14	section (b) shall permit transportation fuel providers
15	to generate credits for achieving, during a calendar
16	year, greater reductions for the fuel produced or im-
17	ported by the fuel provider than are required by
18	such regulations. The Administrator shall determine
19	the appropriate amount of credits and appropriate
20	conditions, if any, on the duration, trading, and use
21	of credits. The Administrator shall, with appropriate
22	conditions, allow the use of credits or renewable
23	identification numbers generated under section
24	211(o).

1	"(2) ELECTRICITY.—The Administrator may,
2	at his discretion, issue regulations providing for—
3	"(A) the generation of credits for elec-
4	tricity used as a transportation fuel and gen-
5	erated by a source other than the vehicle; and
6	"(B) the assignment of those credits to the
7	manufacturers or importers of such vehicles or
8	to other persons as deemed appropriate by the
9	Administrator.
10	"(3) Compliance.—Each transportation fuel
11	provider subject to the regulations promulgated
12	under this section shall demonstrate compliance, in-
13	cluding, as necessary, through the use of credits
14	generated, banked or purchased.
15	"(4) Inability to generate or purchase
16	SUFFICIENT CREDITS.—A transportation fuel pro-
17	vider that is unable to generate or purchase suffi-
18	cient credits to meet the requirements of the regula-
19	tions under subsection (b) may carry the compliance
20	deficit forward, subject to the condition that the fuel
21	provider, for the calendar year following the year for
22	which the deficit is created—
23	"(A) achieves compliance; and

1	"(B) generates or purchases additional
2	credits to offset the deficit from the preceding
3	calendar year.
4	"(d) Waivers.—The Administrator, in consultation
5	with the Secretary of Agriculture and the Secretary of En-
6	ergy, may waive the requirements of the regulations under
7	subsection (b) in whole or in part on petition by one or
8	more States, by any person subject to the requirements
9	of this section, or by the Administrator on his own motion
10	by revising the average lifecycle greenhouse gas emissions
11	reduction required through regulations under subsection
12	(b) based on a determination by the Administrator, after
13	public notice and opportunity for comment, that—
14	"(1) implementation of the requirement would
15	severely harm the economy or environment of a
16	State, a region, or the United States; or
17	"(2) there is an inadequate domestic supply of
18	fuels to meet the requirements of this section.
19	"(e) Environmental and Resource Conserva-
20	TION IMPACTS.—Not later than 2 years after the promul-
21	gation of regulations under subsection (b), the Adminis-
22	trator shall complete a study to determine the environ-
23	mental and resource conservation impacts of the require-
24	ments of such regulations, including impacts on air and
25	water quality.

1	"(f) Energy Security and Leakage.—Not later
2	than 18 months after the promulgation of regulations
3	under subsection (b), the Administrator shall complete a
4	study to determine the effect of the requirements of such
5	regulations on energy security. The study shall also assess
6	the potential shifting of fuel feedstocks and fuel products
7	internationally as a result of such requirements and shall
8	determine the environmental and energy security implica-
9	tions of such leakage.
10	"(g) Transition.—Section 211(o) shall not apply to
11	fuel sold or introduced into commerce after December 31,
12	2022. Notwithstanding the preceding sentence, the defini-
13	tions in section 211(o) shall continue to apply except as
14	otherwise noted.".
15	SEC. 122. ELECTRIC VEHICLE INFRASTRUCTURE.
16	(a) Amendment of PURPA .—Section 111(d) of
17	the Public Utility Regulatory Policies Act of 1978 (16
18	U.S.C. 2621(d)) is amended by adding at the end the fol-
19	lowing:
20	"(20) Plug-in hybrid electric vehicle
21	AND ELECTRIC VEHICLE INFRASTRUCTURE.—
22	"(A) UTILITY PLAN FOR INFRASTRUC-
23	TURE.—Each electric utility shall develop a
24	plan to support the use of plug-in hybrid elec-
25	tric vehicles and electric vehicles, including

1	heavy-duty hybrid electric vehicles. The plan
2	may provide for deployment of electrical charg-
3	ing stations in public or private locations, in-
4	cluding street parking, parking garages, park-
5	ing lots, homes, gas stations, and highway rest
6	stops. Any such plan may also include—
7	"(i) battery exchange, fast charging
8	infrastructure and other services;
9	"(ii) triggers for infrastructure de-
10	ployment based upon market penetration
11	of plug-in hybrid electric vehicles and elec-
12	tric vehicles; and
13	"(iii) such other elements as the State
14	determines necessary to support electric
15	vehicles and plug-in hybrid electric vehi-
16	cles.
17	Each plan under this paragraph shall provide
18	for the deployment of the charging infrastruc-
19	ture or other infrastructure necessary to ade-
20	quately support the use of plug-in hybrid elec-
21	tric vehicles and electric vehicles.
22	"(B) Support requirements.—Each
23	State regulatory authority (in the case of each
24	electric utility for which it has ratemaking au-

1	thority) and each utility (in the case of a non-
2	regulated utility) shall—
3	"(i) require that charging infrastruc-
4	ture deployed is interoperable with prod-
5	ucts of all auto manufacturers to the ex-
6	tent possible; and
7	"(ii) consider adopting minimum re-
8	quirements for deployment of electrical
9	charging infrastructure and other appro-
10	priate requirements necessary to support
11	the use of plug-in hybrid electric vehicles
12	and electric vehicles.
13	"(C) Cost recovery.—Each State regu-
14	latory authority (in the case of each electric
15	utility for which it has ratemaking authority)
16	and each utility (in the case of a nonregulated
17	utility) shall consider whether, and to what ex-
18	tent, to allow cost recovery for plans and imple-
19	mentation of plans.
20	"(D) SMART GRID INTEGRATION.—The
21	State regulatory authority (in the case of each
22	electric utility for which it has ratemaking au-
23	thority) and each utility (in the case of a non-
24	regulated utility) shall—

1	"(i) establish any appropriate proto-
2	cols and standards for integrating plug-in
3	hybrid electric vehicles and electric vehicles
4	into an electrical distribution system, in-
5	cluding Smart Grid systems and devices;
6	"(ii) include the ability for each plug-
7	in hybrid electric vehicle and electric vehi-
8	cle to be identified individually and to be
9	associated with its owner's electric utility
10	account, regardless of the location that the
11	vehicle is plugged in, for purposes of ap-
12	propriate billing for any electricity required
13	to charge the vehicle's batteries as well as
14	any crediting for electricity provided to the
15	electric utility from the vehicle's batteries;
16	and
17	"(iii) review the determination made
18	in response to section 1252 of the Energy
19	Policy Act of 2005 in light of this section,
20	including whether time-of-use pricing
21	should be employed to enable the use of
22	plug-in hybrid electric vehicles and electric
23	vehicles to contribute to meeting peak-load
24	power needs".
25	(b) Compliance.—

1	(1) Time limitations.—Section 112(b) of the
2	Public Utility Regulatory Policies Act of 1978 (16
3	U.S.C. 2622(b)) is amended by adding the following
4	at the end thereof:
5	"(7)(A) Not later than 1 year after the enact-
6	ment of this paragraph, each State regulatory au-
7	thority (with respect to each electric utility for which
8	it has ratemaking authority) and each nonregulated
9	utility shall commence the consideration referred to
10	in section 111, or set a hearing date for consider-
11	ation, with respect to the standard established by
12	paragraph (20) of section 111(d).
13	"(B) Not later than 2 years after the date of
14	the enactment of the this paragraph, each State reg-
15	ulatory authority (with respect to each electric utility
16	for which it has ratemaking authority), and each
17	nonregulated electric utility, shall complete the con-
18	sideration, and shall make the determination, re-
19	ferred to in section 111 with respect to the standard
20	established by paragraph (20) of section 111(d).".
21	(2) Failure to comply.—Section 112(c) of
22	the Public Utility Regulatory Policies Act of 1978
23	(16 U.S.C. 2622(c)) is amended by adding the fol-
24	lowing at the end:

1	"In the case of the standards established by para-
2	graph (20) of section 111(d), the reference contained in
3	this subsection to the date of enactment of this Act shall
4	be deemed to be a reference to the date of enactment of
5	such paragraph.".
6	(3) Prior state actions.—Section 112(d) of
7	the Public Utility Regulatory Policies Act of 1978
8	(16 U.S.C. 2622(d)) is amended by striking (19)
9	and inserting "(20)" before "of section 111(d)".
10	SEC. 123. LARGE-SCALE VEHICLE ELECTRIFICATION PRO-
11	GRAM.
12	(a) Deployment Program.—The Secretary of En-
13	ergy shall establish a program to deploy and integrate
14	plug-in electric drive vehicles in multiple regions. In car-
15	rying out the program, the Secretary may provide finan-
	Tyring out the program, the secretary may provide minum
16	cial assistance described under subsection (d), consistent
17	cial assistance described under subsection (d), consistent
17	cial assistance described under subsection (d), consistent with the goals under subsection (b). The Secretary shall
17 18	cial assistance described under subsection (d), consistent with the goals under subsection (b). The Secretary shall select regions based upon applications for assistance re-
17 18 19	cial assistance described under subsection (d), consistent with the goals under subsection (b). The Secretary shall select regions based upon applications for assistance received pursuant to subsection (c).
17 18 19 20	cial assistance described under subsection (d), consistent with the goals under subsection (b). The Secretary shall select regions based upon applications for assistance received pursuant to subsection (c). (b) Goals.—The goals of the program established
17 18 19 20 21	cial assistance described under subsection (d), consistent with the goals under subsection (b). The Secretary shall select regions based upon applications for assistance received pursuant to subsection (c). (b) Goals.—The goals of the program established pursuant to subsection (a) shall be—

1	lower carbon emissions than a system based on con-
2	ventional vehicles;
3	(2) to facilitate the integration of advanced ve-
4	hicle technologies into electricity distribution areas
5	to improve system performance and reliability;
6	(3) to demonstrate the potential benefits of co-
7	ordinated investments in vehicle electrification on
8	personal mobility and a regional grid;
9	(4) to demonstrate protocols and standards that
10	facilitate vehicle integration into the grid; and
11	(5) to investigate differences in each region and
12	regulatory environment regarding best practices in
13	implementing vehicle electrification.
14	(c) APPLICATIONS.—Any State or local government
15	(or group of State or local governments) may apply to the
16	Secretary of Energy for financial assistance in furthering
17	the regional deployment of plug-in electric drive vehicles.
18	Such applications may be jointly sponsored by electric util-
19	ities, automobile manufacturers, technology providers, car
20	sharing companies or organizations, or other persons or
21	entities.
22	(d) Use of Funds.—Pursuant to applications re-
23	ceived under subsection (c), the Secretary may make fi-
24	nancial assistance available to any applicant or joint spon-
25	sor of the application to be used for any of the following:

1	(1) Assisting persons located in the regional de-
2	ployment area, including fleet owners, in the pur-
3	chase of new plug-in electric drive vehicles by offset-
4	ting in whole or in part the incremental cost of such
5	vehicles above the cost of comparable conventionally
6	fueled vehicles.
7	(2) Supporting the use of plug-in electric drive
8	vehicles by funding projects for the deployment of
9	any of the following:
10	(A) Electrical charging stations for plug-in
11	electric drive vehicles, including battery ex-
12	change, fast charging infrastructure, and other
13	services, in public or private locations, including
14	street parking, parking garages, parking lots,
15	homes, gas stations, and highway rest stops.
16	(B) Smart Grid equipment and infrastruc-
17	ture to facilitate the charging and integration of
18	plug-in electric drive vehicles.
19	(3) Such other projects as the Secretary deter-
20	mines appropriate to support the large-scale deploy-
21	ment of plug-in electric drive vehicles in regional de-
22	ployment areas.
23	(e) Program Requirements.—The Secretary shall
24	determine design elements and requirements of the pro-
25	gram established pursuant to subsection (a), including—

1	(1) the type of financial mechanism with which
2	to provide financial assistance;
3	(2) criteria for evaluating applications sub-
4	mitted under subsection (e), including the antici-
5	pated ability to promote deployment and market
6	penetration of vehicles that are less dependent on
7	petroleum as fuel source; and
8	(3) reporting requirements for entities that re-
9	ceive financial assistance under this section, includ-
10	ing a comprehensive set of performance data charac-
11	terizing the results of the deployment program.
12	(f) Information Clearinghouse.—The Secretary
13	shall, as part of the program established pursuant to sub-
14	section (a), collect and make available to the public infor-
15	mation regarding the cost, performance, and other tech-
16	nical data regarding the deployment and integration of
17	plug-in electric drive vehicles.
18	(g) AUTHORIZATION.—There are authorized to be ap-
19	propriated to carry out this section such sums as may be
20	necessary.
21	SEC. 124. PLUG-IN ELECTRIC DRIVE VEHICLE MANUFAC-
22	TURING.
23	(a) Vehicle Manufacturing Assistance Pro-
24	GRAM.—The Secretary of Energy shall establish a pro-
25	gram to provide financial assistance to automobile manu-

1	facturers to facilitate the manufacture of plug-in electric
2	drive vehicles, as defined in section 131(a)(5) of the En-
3	ergy Independence and Security Act of 2007, that are de-
4	veloped and produced in the United States.
5	(b) Financial Assistance.—The Secretary of En-
6	ergy may provide financial assistance to an automobile
7	manufacturer under the program established pursuant to
8	subsection (a) for—
9	(1) the reconstruction or retooling of facilities
10	for the manufacture of plug-in electric drive vehicles
11	that are developed and produced in the United
12	States; and
13	(2) if appropriate, the purchase of domestically
14	produced vehicle batteries to be used in the manu-
15	facture of vehicles manufactured pursuant to para-
16	graph (1).
17	(c) REQUIREMENTS.—The Secretary may provide fi-
18	nancial assistance under subsection (b) to an automobile
19	manufacturer if—
20	(1) in the case of a reconstruction or retooling
21	described under subsection (b)(1), without financial
22	assistance the automobile manufacturer is not able
23	to reasonably finance the reconstruction or retooling
24	of a facility; or

1	(2) in the case of battery purchases described
2	under subsection (b)(2), without financial assistance
3	the automobile manufacturer is not able reasonably
4	finance the purchase of such batteries.
5	(d) Coordination With Regional Deploy-
6	MENT.—The Secretary may provide financial assistance
7	under subsection (b) in conjunction with the award of fi-
8	nancial assistance under the large scale vehicle electrifica-
9	tion program established pursuant to section 123 of this
10	Act.
11	(e) Program Requirements.—The Secretary shall
12	determine design elements and requirements of the pro-
13	gram established pursuant to subsection (a), including—
14	(1) the type of financial mechanism with which
15	to provide financial assistance;
16	(2) criteria, in addition to the criteria described
17	under subsection (f), for evaluating applications for
18	financial assistance; and
19	(3) reporting requirements for automobile man-
20	ufacturers that receive financial assistance under
21	this section.
22	(f) Criteria.—In selecting recipients of financial as-
23	sistance from among applicant automobile manufacturers.
24	the Secretary shall give preference to proposals that—
25	(1) are most likely to be successful: and

1	(2) are located in local markets that have the
2	greatest need for the facility.
3	(g) Reports.—The Secretary shall annually submit
4	to Congress a report on the program established pursuant
5	to this section.
6	(h) AUTHORIZATION OF APPROPRIATIONS.—There
7	are authorized to be appropriated such sums as are nec-
8	essary to carry out this section.
9	Subtitle D—State Energy and
10	Environment Development Funds
11	SEC. 131. ESTABLISHMENT OF SEED FUNDS.
12	(a) Definitions.—In this section:
13	(1) SEED FUND.—The term "SEED Fund"
14	means a State Energy and Environment Develop-
15	ment Fund established pursuant to this section.
16	(2) State energy office.—The term "State
17	Energy Office" means the State entities eligible for
18	grants under part D of title III of the Energy Policy
19	and Conservation Act (42 U.S.C. 6321 et seq.)
20	(b) Establishment of Program.—The Secretary
21	of Energy shall establish a program under which a State,
22	through its State Energy Office, may create a State En-
23	ergy and Environment Development Fund.
24	(c) Purpose.—The purpose of each SEED Fund is
25	to serve as a common State-level fund, including a revolv-

1	ing fund, for managing and accounting for Federal finan-
2	cial assistance to States designated primarily for clean en-
3	ergy, energy efficiency, and climate change purposes.
4	(d) Guidance.—The Secretary of Energy shall de-
5	velop model regulations for the operation of a SEED Fund
6	by a State under this section. The Secretary of Energy
7	and the Administrator shall provide consultation and as-
8	sistance to States for the establishment and operation of
9	SEED Funds under this section.
10	(e) Operation.—
11	(1) Deposits.—
12	(A) IN GENERAL.—A State may deposit
13	into its SEED Fund amounts received from
14	Federal appropriations primarily for clean en-
15	ergy, energy efficiency, or climate change pur-
16	poses, including appropriations for—
17	(i) the Weatherization Assistance Pro-
18	gram under part A of title IV of the En-
19	ergy Conservation and Production Act (42
20	U.S.C. 6861 et seq.);
21	(ii) the Low-Income Home Energy As-
22	sistance Program under the Low-Income
23	Home Energy Assistance Act of 1981 (42
24	U.S.C. 8621 et seq.);

1	(iii) grants under part D of title III of
2	the Energy Policy and Conservation Act
3	(42 U.S.C. 6321 et seq.);
4	(iv) State portions of Energy Effi-
5	ciency and Conservation Block Grants
6	under subtitle E of title V of the Energy
7	Independence and Security Act of 2007
8	(42 U.S.C. 17151 et seq.); and
9	(v) the American Recovery and Rein-
10	vestment Act of 2009.
11	(B) Pending expenditure.—Any
12	amounts provided to a State from Federal ap-
13	propriations for a clean energy, energy effi-
14	ciency, or climate change purpose shall be
15	deemed to be serving that purpose for any pe-
16	riod those amounts are held in a SEED Fund
17	pending expenditure.
18	(C) Funding authorized under this
19	SECTION.—A State shall deposit into its SEED
20	Fund any amounts transmitted to the State
21	that were appropriated pursuant to this section.
22	(D) Loan repayments.—Repayments of
23	the principal or interest from a SEED Fund
24	loan provided pursuant to paragraph (2)(C)(i)

1	shall be returned to that SEED Fund to allow
2	for further SEED Fund activities by the State.
3	(2) Expenditures.—
4	(A) In general.—All expenditures from
5	SEED Funds shall support clean energy, en-
6	ergy efficiency, or climate change programs au-
7	thorized or approved by the Federal Govern-
8	ment, or serve specific purposes as provided
9	under the Federal law authorizing or appro-
10	priating the funds expended.
11	(B) Dedicated funding.—Amounts de-
12	posited in a SEED Fund for which the author-
13	izing or appropriating legislation required spe-
14	cific uses for a specified period shall be ex-
15	pended according to those requirements during
16	that period.
17	(C) Undedicated funding.—To the ex-
18	tent that amounts deposited in a SEED Fund
19	are not required for specific uses for a specified
20	period as described in subparagraph (B), such
21	amounts may be expended for any of the fol-
22	lowing purposes:
23	(i) Loans.—Loans may be provided,
24	interest on commercial loans may be sub-
25	sidized at or to an interest rate as low as

1	zero, and other credit support may be pro-
2	vided, at the discretion of the State, to
3	support programs authorized to use SEED
4	Fund amounts or any other clean energy,
5	energy efficiency, or climate change pur-
6	pose authorized or approved by the Federal
7	Government.
8	(ii) Grants.—Grants may be pro-
9	vided to support programs authorized to
10	use SEED Fund amounts or any other
11	clean energy, energy efficiency, or climate
12	change purpose authorized or approved by
13	the Federal Government.
14	(iii) Other forms of support.—
15	Amounts may be provided for other forms
16	of support for programs authorized to use
17	SEED Fund amounts or any other clean
18	energy, energy efficiency, or climate
19	change purpose authorized or approved by
20	the Federal Government.
21	(iv) Administrative costs.—Except
22	to the extent provided in Federal law au-
23	thorizing or appropriating funds deposited
24	in a SEED Fund, not more than 5 percent
25	of the amounts in a SEED Fund in any

1	year may be used to cover administrative
2	expenses of the SEED Fund.
3	(D) Sub-funds.—A State may create and
4	maintain sub-funds for local governments that
5	request such sub-funds to hold amounts trans-
6	mitted to local governments for clean energy,
7	energy efficiency, or climate change programs
8	authorized or approved by the Federal Govern-
9	ment.
10	(3) Accountability and transparency.—
11	(A) RECORDKEEPING.—Any State that has
12	established a SEED Fund shall maintain
13	records of all activities relating to the deposits
14	and expenditures of the SEED Fund, and shall
15	retain such records for a period of at least 5
16	years.
17	(B) Controls.—Any State that has es-
18	tablished a SEED Fund shall establish fiscal
19	controls and accounting procedures for the
20	SEED Fund sufficient to ensure proper ac-
21	counting during appropriate accounting periods
22	for deposits into the SEED Fund, expenditures
23	from the SEED Fund, and SEED Fund bal-
24	ances. Such controls and procedures shall con-

1	form to generally accepted government account-
2	ing principles.
3	(C) Audits.—Any State that has estab-
4	lished a SEED Fund shall have an annual
5	audit conducted of the SEED Fund by an inde-
6	pendent public accountant in accordance with
7	generally accepted auditing standards.
8	(D) Public information.—Any—
9	(i) controls and procedures established
10	under subparagraph (B); and
11	(ii) information obtained through au-
12	dits conducted under subparagraph (C),
13	except to the extent that it would be pro-
14	tected from disclosure, if it were informa-
15	tion held by the Federal Government,
16	under section 552(b) of title 5, United
17	States Code,
18	shall be made publicly available.
19	(E) OTHER PROTECTIONS.—The Secretary
20	shall require such additional procedures and
21	protections as are necessary to ensure that any
22	State that has established a SEED Fund will
23	operate the SEED Fund in an accountable and
24	transparent manner.

1	(f) Funding to States.—Federal financial assist-
2	ance provided to States pursuant to this Act that is des-
3	ignated primarily for clean energy, energy efficiency, and
4	climate change purposes shall be deposited by the States
5	in their SEED Fund. A State's eligibility to receive fund-
6	ing in its SEED Fund shall depend on that State's com-
7	pliance with the requirements of this Act.
8	(g) Authorization of Appropriations.—There
9	are authorized to be appropriated to the Secretary such
10	additional sums as may be necessary to carry out this sec-
11	tion. Amounts appropriated pursuant to this section shall
12	be allocated among the States in accordance with the
13	State Energy Program formula under section 363 of the
14	Energy Policy and Conservation Act (42 U.S.C. 6323)
15	Subtitle E—Smart Grid
16	Advancement
17	SEC. 141. DEFINITIONS.
18	For purposes of this subtitle, the terms:
19	(1) "Secretary" means the Secretary of Energy.
20	(2) "Administrator" means the Administrator
21	of the Environmental Protection Agency.
22	(3) "Commission" means Federal Energy Reg-
23	ulatory Commission.

1	(4) "Smart Grid" has the meaning provided by
2	section 1301 of the Energy Independence and Secu-
3	rity Act of 2007 (15 U.S.C. 17381).
4	(5) "Peak demand reduction" means the reduc-
5	tion in annual peak demand as compared to a pre-
6	vious baseline year or period, expressed in
7	Megawatts (MW).
8	(6) "Peak demand" shall mean the highest
9	point of electricity demand during any hour on the
10	system of a load-serving entity during an annual cal-
11	endar year, expressed in megawatts, or more than
12	one such high point of electricity demand as a func-
13	tion of seasonal demand changes.
14	(7) "Peak period" shall mean the time period
15	on the system of a load-serving entity relative to
16	peak demand that may warrant special measures or
17	electricity resources to maintain system reliability
18	while meeting peak demand.
19	(8) "load-serving entity" means an entity that
20	provides electricity directly to retail consumers with
21	the responsibility to assure power quality and reli-
22	ability, including such entities that are investor-
23	owned, publicly owned, owned by rural electric co-
24	operatives, or other entities.

1	(9) "Applicable baseline" shall mean the aver-
2	age of the highest three annual peak demands a
3	load-serving entity has experienced during the 5
4	years immediately prior to the date of enactment of
5	this Act.
6	(10) "Peak load reduction plan" means a plan
7	developed by or for a load-serving entity that it will
8	implement to meet its peak demand management
9	goals.
10	SEC. 142. INCORPORATION OF SMART GRID CAPABILITY IN
11	ENERGY STAR PROGRAM.
12	(a) Assessment.—Within one year after the date of
13	enactment of this Act, the Secretary and the Adminis-
14	trator shall each assess the potential for cost-effective in-
15	tegration of Smart Grid technologies and capabilities in
16	all products that are reviewed by the Department of En-
17	ergy and the Environmental Protection Agency, respec-
18	tively, for potential designation as Energy Star products.
19	(b) Analysis.—(1) Within 2 years after the date of
20	enactment of this Act, the Secretary and the Adminis-
21	trator shall each prepare an analysis of the potential en-
22	ergy savings, and electricity cost savings that could accrue
23	for each of the products referred to in subsection (a) in
24	the following optimal circumstances:

1	(A) The products possessed full Smart Grid ca-
2	pability.
3	(B) The products were utilized in an electricity
4	utility service area which had Smart Grid capability
5	and time-of-use electric rates.
6	(C) The time-of-use rates reflected national av-
7	erage utility rates including average peak and valley
8	daily electricity costs to the utility.
9	(D) Consumers using such products took full
10	advantage of such capability.
11	(2) The analysis under paragraph (1) shall be consid-
12	ered the "best case" Smart Grid analysis. On the basis
13	of such an analysis for each product, the Secretary and
14	the Administrator shall determine whether the installation
15	of Smart Grid capability for such a product would be cost
16	effective. For purposes of this paragraph, the term "cost
17	effective" means that the cumulative savings from using
18	the product under the best case Smart Grid circumstances
19	for a period of 5 years will be greater than the incremental
20	cost of the Smart Grid features included in the product.
21	(3) To the extent that including Smart Grid capa-
22	bility in any products analyzed under paragraph (2) yield-
23	ed a finding that doing so was cost effective in the best
24	case, the Secretary and the Administrator shall, not later

1	than 3 years after the date of enactment of this Act take
2	each of the following actions:
3	(A) Inform the manufacturer of such product of
4	such finding.
5	(B) Make special note in a prominent manner
6	on any Energy Star label for any product actually
7	including Smart Grid capability that—
8	(i) Smart Grid capability is a feature of
9	that product;
10	(ii) the use and value of those features de-
11	pended on the Smart Grid capability of the util-
12	ity system in which the product was installed
13	and the use of those features by the customer;
14	and
15	(iii) on a utility system with Smart Grid
16	capability, the use of the product's Smart Grid
17	capability could potentially reduce the cost of
18	the product's annual operation by an estimated
19	dollar amount representing the result of incre-
20	mental energy and electricity cost savings that
21	would result from the Smart Grid best case for
22	that product.
23	(C) Submit a report to Congress summarizing
24	the results of the analyses for each class of products,
25	and presenting the potential national energy and

- 1 electricity cost savings that could be realized if cost-
- 2 effective Smart Grid capability were installed in the
- 3 relevant products reviewed by the Energy Star pro-
- 4 gram.

5 SEC. 143. SMART GRID PEAK DEMAND REDUCTION GOALS.

- 6 (a) Goals.—Not later than one year after the date
- 7 of enactment of this Act, load-serving entities, or States,
- 8 shall determine and publish peak demand reduction goals
- 9 for any load-serving entities that have an applicable base-
- 10 line in excess of 250 megawatts
- 11 (b) Baselines.—(1) The Commission, in consulta-
- 12 tion with the Secretary, shall develop and publish, after
- 13 an opportunity for public comment, a methodology to pro-
- 14 vide for adjustments or normalization to a load-serving en-
- 15 tity's applicable baseline over time to reflect changes in
- 16 the number of customers served, weather conditions, gen-
- 17 eral economic conditions, and any other appropriate fac-
- 18 tors external to peak load management, as determined by
- 19 the Commission.
- 20 (2) The Commission shall support load-serving enti-
- 21 ties in determining their applicable baselines, and in devel-
- 22 oping their peak demand reduction goals, including any
- 23 load-serving entity with an applicable baseline of less than
- 24 250 megawatts that volunteers to participate in achieving
- 25 the purposes of this Act.

- 1 (3) The Secretary, in consultation with the Commis-
- 2 sion and the National Electric Reliability Corporation,
- 3 shall develop a system and rules for measurement and
- 4 verification of demand reductions.
- 5 (c) Peak Demand Reduction Goals.—(1) Peak
- 6 demand reduction goals may be established for an indi-
- 7 vidual load-serving entity, or, at the determination of a
- 8 State or regional entity, by that State or regional entity
- 9 for a larger region that shares a common system peak de-
- 10 mand and for which peak demand reduction measures
- 11 would offer regional benefit.
- 12 (2) A State or regional entity establishing peak de-
- 13 mand reduction goals shall cooperate, as necessary and
- 14 appropriate, with the Commission, the Secretary, State
- 15 regulatory commissions, State energy offices, the National
- 16 Electric Reliability Corporation, and other relevant au-
- 17 thorities.
- 18 (3) In determining the applicable peak demand reduc-
- 19 tion goals, States and other jurisdictional entities may uti-
- 20 lize the results of the 2009 National Demand Response
- 21 Potential Assessment, as authorized by section 529 of the
- 22 Energy Independence and Security Act of 2007.
- 23 (4) The applicable peak demand reduction goals shall
- 24 provide that—

1	(A) load-serving entities will reduce or mitigate
2	peak demand by a minimum percentage amount
3	from the applicable baseline to a lower peak demand
4	during calendar year 2012;
5	(B) load-serving entities will reduce or mitigate
6	peak demand by a minimum percentage greater
7	amount from the applicable baseline to a lower peak
8	demand during calendar year 2015; and
9	(C) the minimum percentage reductions selected
10	are the percentage reductions that are realistically
11	achievable with an aggressive effort to deploy Smart
12	Grid and peak demand reduction technologies and
13	methods, including but not limited to those listed in
14	subsection (d).
15	(d) Plan.—Each load-serving entity shall prepare a
16	peak load reduction plan that demonstrates its ability to
17	meet each applicable goal by any or a combination of the
18	following options:
19	(1) Direct reduction in megawatts of peak de-
20	mand through energy efficiency measures with reli-
21	able and continued application during peak demand
22	periods.
23	(2) Demonstration that an amount of
24	megawatts equal to a stated portion of the applicable

1	goal is contractually committed to be available for
2	peak reduction through one or more of the following:
3	(A) Megawatts enrolled in demand re-
4	sponse programs.
5	(B) Megawatts subject to the ability of a
6	load-serving entity to call on demand response
7	programs, smart appliances, smart electricity
8	storage devices, distributed generation resources
9	on the entity's customers' premises, or other
10	measures directly capable of actively,
11	controllably, reliably, and dynamically reducing
12	peak demand ("dynamic peak management con-
13	trol".
14	(C) Megawatts available from distributed
15	dynamic electricity storage under agreement
16	with the owner of that storage.
17	(D) Megawatts committed from
18	dispatchable distributed generation dem-
19	onstrated to be reliable under peak period con-
20	ditions.
21	(E) Megawatts available from smart appli-
22	ances and equipment with Smart Grid capa-
23	bility available for direct control by the utility
24	through agreement with the customer owning
25	the appliances or equipment.

1	(F) Megawatts from a demonstrated and
2	assured minimum of distributed solar electric
3	generation capacity in instances where peak pe-
4	riod and peak load conditions are directly re-
5	lated to solar radiation and accompanying heat.
6	(3) If any of the methods listed in subpara-
7	graph (C), (D), or (E) of paragraph (2) are relied
8	upon to meet its peak demand reduction goals, the
9	load-serving entity must demonstrate this capability
10	by operating a test during the applicable calendar
11	year.
12	(4) Nothing in this subtitle shall require the
13	publication in peak demand reduction goals or in
14	any peak demand reduction plan of any information
15	that is confidential for competitive or other reasons
16	or that identifies individual customers.
17	(e) Existing Authority and Requirements.—
18	Nothing in this Act diminishes or supersedes any author-
19	ity of a State or political subdivision of a State to adopt
20	or enforce any law or regulation respecting peak load man-
21	agement, demand response, distributed storage, use of dis-
22	tributed generation, or the regulation of load-serving enti-
23	ties. The Commission, in consultation with States having
24	such peak management, demand response and distributed
25	storage programs, shall to the maximum extent prac-

- 1 ticable, facilitate coordination between the Federal pro-
- 2 gram and such State programs.
- 3 (f) Relief.— he Commission may, for good cause,
- 4 grant relief to load-serving entities from the requirements
- 5 of this section.
- 6 (g) Other Laws.—Except as provided in sub-
- 7 sections (e) and (f), no law or regulation shall relieve any
- 8 person of any requirement otherwise applicable under this
- 9 section.
- 10 (h) COMPLIANCE.— (1) The Commission shall within
- 11 one year after the enactment of this Act establish a public
- 12 domain website where the Commission will provide infor-
- 13 mation and data demonstrating compliance by States, re-
- 14 gional entities, and load-serving entities with this Act, in-
- 15 cluding the success of load-serving entities in meeting ap-
- 16 plicable peak demand reduction goals.
- 17 (2) The Commission shall, by April 1 of each year
- 18 beginning in 2012, provide a report to Congress on com-
- 19 pliance with this Act and success in meeting applicable
- 20 peak demand reduction goals and, as appropriate, shall
- 21 make recommendations as to how to increase peak de-
- 22 mand reduction efforts.
- 23 (3) The Commission shall note in each such report
- 24 any State, political subdivision of a State, or load-serving
- 25 entity that has failed to comply with this Act, or is not

1	a part of any region or group of load-serving entities serv-
2	ing a region that has complied with this subtitle.
3	(4) The Commission shall have and exercise the au-
4	thority to take reasonable steps to modify the process of
5	establishing peak demand reduction goals and to accept
6	adjustments to them as appropriate when sought by load-
7	serving entities.
8	(i) Assistance and Funding.—
9	(1) Assistance.—The Secretary may make
10	grants to States and to other entities with respon-
11	sibilities to be carried out under the Act to offset
12	any documented costs of carrying out such respon-
13	sibilities to the extent such costs are deemed burden-
14	some or extraordinary by the Secretary.
15	(2) Funding.—There are authorized to be ap-
16	propriated such sums as may be necessary to the
17	Commission, the Secretary, and the Administrator to
18	carry out the provisions of this subtitle.
19	SEC. 144. REAUTHORIZATION OF ENERGY EFFICIENCY PUB-
20	LIC INFORMATION PROGRAM TO INCLUDE
21	SMART GRID INFORMATION.
22	Section 134 of the Energy Policy Act of 2005 (42
23	U.S.C. 15832) is amended as follows:
24	(1) By amending the section heading to read as
25	follows "ENERGY EFFICIENCY AND

1	SMART GRID PUBLIC INFORMATION
2	INITIATIVE.".
3	(2) In paragraph (1) of subsection (a) by strik-
4	ing "reduce energy consumption during the 4-year
5	period beginning on the date of enactment of this
6	Act" and inserting "increase energy efficiency and
7	to adopt Smart Grid technology and practices".
8	(3) In paragraph (2) of subsection (a) by strik-
9	ing "benefits to consumers of reducing" and insert-
10	ing "economic and environmental benefits to con-
11	sumers and the United States of optimizing".
12	(4) In subsection (a) by inserting at the begin-
13	ning of paragraph (3) "the effect of energy effi-
14	ciency and Smart Grid capability in reducing energy
15	and electricity prices throughout the economy, to-
16	gether with".
17	(5) In subsection (a)(4) by redesignating sub-
18	paragraph (D) as (E), by striking "and" at the end
19	of subparagraph (C), and by inserting after subpara-
20	graph (C) the following:
21	"(D) purchasing and utilizing equipment
22	that includes Smart Grid features and capa-
23	bility; and".
24	(6) In subsection (e), by striking "Not later
25	than July 1, 2009," and inserting, "For each year

1	when appropriations pursuant to the authorization
2	in this section exceed \$10,000,000,".
3	(7) In subsection (d) by striking "2010" and
4	inserting "2020".
5	(8) In subsection (e) by striking "2010" and in-
6	serting "2020".
7	SEC. 145. INCLUSION OF SMART-GRID FEATURES IN APPLI-
8	ANCE REBATE PROGRAM.
9	(a) Amendment.—Section 124 of the Energy Policy
10	Act of 2005 (42 U.S.C. 15821) is amended as follows:
11	(1) By amending the section heading to read as
12	follows: "ENERGY EFFICIENT AND SMART AP-
13	PLIANCE REBATE PROGRAM.".
14	(2) By redesignating paragraphs (4) and (5) as
15	paragraphs (5) and (6), respectively, and inserting
16	after paragraph (3) the following:
17	"(4) SMART APPLIANCE.—The term 'smart ap-
18	pliance' means a product that the Administrator of
19	the Environmental Protection Agency or the Sec-
20	retary of Energy has determined qualifies for such
21	a designation in the Energy Star program pursuant
22	to section 213 of the American Clean Energy and
23	Security Act of 2009, or that the Secretary or the
24	Administrator has separately determined includes
25	the relevant Smart Grid capabilities listed in section

1	1301 of the Energy Independence and Security Act
2	of 2007 (15 U.S.C. 17381).".
3	(3) In subsection (b)(1) by inserting "and
4	smart" after "efficient" and by inserting after
5	"products" the first place it appears ", including
6	products designated as being smart appliances,".
7	(4) In subsection (b)(3), by inserting "the ad-
8	ministration of" after "carry out".
9	(5) In subsection (d), by inserting "the admin-
10	istration of" after "carrying out" and by inserting
11	", and up to 100 percent of the value of the rebates
12	provided pursuant to this section" before the period
13	at the end.
14	(6) In subsection (e)(3), by inserting "with sep-
15	arate consideration as applicable if the product is
16	also a smart appliance," after "Energy Star prod-
17	uct" the first place it appears and by inserting "or
18	smart appliance" before the period at the end.
19	(7) In subsection (f), by striking
20	"\$50,000,000" through the period at the end and
21	inserting "such sums as may be necessary for each
22	fiscal year from 2010 through 2015.".
23	(b) Table of Contents.—The item relating to sec-
24	tion 124 in the table of contents for the Energy Policy

- 1 Act of 2005 (42 U.S.C. 15801 and following) is amended
- 2 to read as follows:

"Sec. 124. Energy efficient and smart appliance rebate program.".

3 Subtitle F—Transmission Planning

- 4 SEC. 151. TRANSMISSION PLANNING.
- 5 Part II of the Federal Power Act (16 U.S.C. 824 et
- 6 seq.) is amended by adding after section 216 the following
- 7 new section:
- 8 "SEC. 216A. TRANSMISSION PLANNING.
- 9 "(a) Federal Policy.—
- 10 "(1) Objectives.—It is the policy of the 11 United States that regional electric grid planning 12 should facilitate the deployment of renewable and 13 other zero-carbon energy sources for generating elec-14 tricity to reduce greenhouse gas emissions while en-15 suring reliability, reducing congestion, ensuring 16 cyber-security, and providing for cost-effective elec-17 tricity services throughout the United States.
 - "(2) Options.—In addition to the policy under paragraph (1), it is the policy of the United States that regional electric grid planning to meet these objectives should take into account all significant demand-side and supply-side options, including energy efficiency, distributed generation, renewable energy and zero-carbon electricity generation technologies, smart-grid technologies and practices, demand re-

18

19

20

21

22

23

24

25

1 sponse, electricity storage, voltage regulation tech-2 high capacity conductor nologies, and 3 conductor technologies, underground transmission 4 technologies, and new conventional electric trans-5 mission capacity and corridors. 6 "(b) Planning.— 7 "(1) Planning Principles.—Not later than 1 8 year after the date of enactment of this section, the 9 Commission shall adopt, after notice and oppor-10 tunity for comment, national electricity grid plan-11 ning principles derived from the Federal policy es-12 tablished under subsection (a) to be applied in ongo-13 ing and future transmission planning that may im-14 plicate interstate transmission of electricity 15 "(2)REGIONAL PLANNING ENTITIES.—Not 16 later than 3 months after the date of adoption by 17 the Commission of national electricity grid planning 18 principles pursuant to paragraph (1), entities that 19 conduct or may conduct transmission planning pur-

later than 3 months after the date of adoption by the Commission of national electricity grid planning principles pursuant to paragraph (1), entities that conduct or may conduct transmission planning pursuant to State or Federal law or regulation, including States, entities designated by States, public utility transmission providers, operators and owners, regional organizations, and electric utilities, and that are willing to incorporate the national electricity grid planning principles adopted by the Commission in

20

21

22

23

24

25

1 their electric grid planning, shall identify themselves 2 and the regions for which they propose to develop 3 plans to the Commission. "(3) Coordination of regional planning 4 5 ENTITIES.—The Commission shall encourage re-6 gional planning entities described under paragraph 7 (2) to cooperate and coordinate across regions and 8 to harmonize regional electric grid planning with 9 planning in adjacent or overlapping jurisdictions to 10 the maximum extent feasible. The Commission shall 11 work with States, public utilities transmission pro-12 viders, load-serving entities, transmission operators, 13 and other organizations to resolve any conflict or 14 competition among proposed planning entities in 15 order to build consensus and promote the Federal 16 policy established under subsection (a). The Com-17 mission shall seek to ensure that planning that is 18 consistent with the national electricity grid planning 19 principles adopted pursuant to paragraph (1) is con-20 ducted in all regions of the United States and the 21 territories. 22 "(4) Relation to existing planning pol-23 ICY.—In implementing the Federal policy established 24 under subsection (a), the Commission shall—

1	"(A) incorporate any ongoing planning ef-
2	forts undertaken pursuant to section 217; and
3	"(B) consult with and invite the participa-
4	tion of the Secretary of Energy in relationship
5	to the Secretary's duties pursuant to section
6	216.
7	"(5) Assistance.—
8	"(A) In general.—The Commission shall
9	provide support to and participate in the re-
10	gional grid planning processes conducted by re-
11	gional planning entities. The Commission may
12	provide planning resources and assistance as re-
13	quired or as requested by regional planning en-
14	tities, including system data, cost information,
15	system analysis, technical expertise, modeling
16	support, dispute resolution services, and other
17	assistance to regional planning entities, as ap-
18	propriate.
19	"(B) AUTHORIZATION.—There are author-
20	ized to be appropriated such sums as may be
21	necessary to carry out this paragraph.
22	"(6) Conflict resolution.—In the event
23	that regional grid plans conflict, the Commission
24	shall assist the regional planning entities in resolving

1	such conflicts in order to achieve the objectives of
2	the Federal policy established under subsection (a).
3	"(7) Submission of Plans.—The Commission
4	shall require regional planning entities to submit ini-
5	tial regional electric grid plans to the Commission
6	not later than 18 months after the date the Commis-
7	sion promulgates national electricity grid planning
8	principles pursuant to paragraph (1). Regional elec-
9	tric grid plans should, in general, be developed from
10	sub-regional requirements and plans, including plan-
11	ning input reflecting individual utility service areas.
12	Regional plans may then in turn be combined into
13	larger regional plans, up to interconnection-wide and
14	national plans, as appropriate and necessary as de-
15	termined by the Commission. The Commission shall
16	review such plans for consistency with the national
17	grid planning principles and may return a plan to
18	one or more planning entities for further consider-
19	ation, along with the Commission's own rec-
20	ommendations for resolution of any conflict or for
21	improvement. To the extent practicable, all plans
22	submitted to the Commission shall be public docu-
23	ments and available on the Commission's website.
24	"(8) Multi-regional meetings.—As regional
25	grid plans are submitted to the Commission, the

1 Commission may convene multi-regional meetings to 2 discuss regional grid plan consistency and integra-3 requirements for multi-regional tion, including 4 projects, and to resolve any conflicts that emerge 5 from such multi-regional projects. The Commission 6 shall provide its recommendations for eliminating 7 any inter-regional conflicts. "(9) REPORT TO CONGRESS.—Not later than 3 8 9 years after the date of enactment of this section, the 10 Commission shall provide a report to Congress con-11 taining the results of the regional grid planning 12 process, including summaries of the adopted regional 13 plans. The Commission shall provide an electronic 14 version of its report on its website with links to all 15 regional and sub-regional plans taken into account. 16 The Commission shall note and provide its rec-17 ommended resolution for any conflicts not resolved 18 during the planning process. The Commission shall 19 make any recommendations to Congress on the ap-20 propriate Federal role or support required to ad-21 dress the needs of the electric grid, including rec-22 ommendations for addressing any needs that are be-23 yond the reach of existing State and Federal author-

24

itv.".

1	Subtitle G—Federal Purchases of
2	Electricity Generated by Renew-
3	able Energy
4	SEC. 161. FEDERAL PURCHASES OF ELECTRICITY GEN-
5	ERATED BY RENEWABLE ENERGY.
6	Section 203 of the Energy Policy Act of 2005 (42
7	U.S.C. 15852) is amended by adding at the end the fol-
8	lowing:
9	"(e) Contracts for Renewable Energy.—
10	"(1) In General.—Notwithstanding section
11	501(b)(1)(B) of title 40, United States Code, a con-
12	tract for the acquisition of renewable energy for the
13	Federal Government may be made for a period of
14	not more than 30 years.
15	"(2) Exclusion.—For purposes of this sub-
16	section, the term 'renewable energy' shall not include
17	energy generated from municipal solid waste.
18	"(3) Standardized renewable energy pur-
19	CHASE AGREEMENT.—Not later than 90 days after
20	the date of enactment of this subsection, the Sec-
21	retary, through the Federal Energy Management
22	Program, shall publish a standardized renewable en-
23	ergy purchase agreement, setting forth commercial
24	terms and conditions, that Federal agencies may use
25	to acquire renewable energy.

1	"(4) TECHNICAL ASSISTANCE.—The Secretary
2	shall provide technical assistance to assist Federal
3	agencies in implementing this subsection.".
4	Subtitle H—Technical Corrections
5	to Energy Laws
6	SEC. 171. TECHNICAL CORRECTIONS TO ENERGY INDE-
7	PENDENCE AND SECURITY ACT OF 2007.
8	(a) Title II—Energy Security Through In-
9	CREASED PRODUCTION OF BIOFUELS.—(1) Section
10	211(o)of the Clean Air Act (42 U.S.C. 7545(o)(1)), as
11	amended by section 201 of the Energy Independence and
12	Security Act of 2007 (Public Law 110-140; 121 Stat.
13	1519), is amended—
14	(A) in subparagraph (C) of paragraph (1),
15	by striking "for gasoline or diesel" and all that
16	follows through "in 2005" and inserting "for
17	the fossil fuel that is replaced by renewable
18	fuel"; and
19	(B) in subparagraphs (E) and (H) of para-
20	graph (1), by inserting "after notice and oppor-
21	tunity for comment" after "Administrator"
22	each place it appears.
23	(2) Section 211(o)(2)(A)(i) of the Clean Air Act (42
24	U.S.C. $7545(0)(2)(A)(i)$ (as amended by section
25	202(a)(1) of the Energy Independence and Security Act

- 1 of 2007 (121 Stat. 1521)) is amended in the last sentence
- 2 by striking "new facilities" and inserting "new plants".
- 3 (3) Section 211(0)(7)(F) of the Clean Air Act (42)
- 4 U.S.C. 7545(0)(7)(F)) (as amended by section 202(e)(3)
- 5 of the Energy Independence and Security Act of 2007
- 6 (121 Stat. 1527)) is amended in the first sentence by in-
- 7 serting after "before 2016" the following: "and that each
- 8 such modification shall be at a minimum equal to the pro-
- 9 jected volume available during the calendar year to which
- 10 the modification applies".
- 11 (4) Section 211(c)(1) of the Clean Air Act (42 U.S.C.
- 7545(c)(1) (as amended by section 208(1) of the Energy
- 13 Independence and Security Act of 2007 (121 Stat. 1531))
- 14 is amended by inserting "(A)" after "nonroad vehicle".
- 15 (5) Section 211(v)(2)(A) of the Clean Air Act (42)
- 16 U.S.C. 7545(v)(2)(A)) (as added by section 209 of the En-
- 17 ergy Independence and Security Act of 2007 (121 Stat.
- 18 (1531)) is amended by striking "achievable" and inserting
- 19 "practicable".
- 20 (6) Section 210(a)(1) of the Energy Independence
- 21 and Security Act of 2007 (42 U.S.C. 7545 note; Public
- 22 Law 110–140) is amended in the second sentence by strik-
- 23 ing "For calendar years 2008 and 2009, any ethanol
- 24 plant" and inserting "Renewable fuel from any ethanol

1	plant that commences construction in calendar year 2008
2	or 2009".
3	(7) Section 230(a)(1) of the Energy Independence
4	and Security Act of 2007 (42 U.S.C. 17034(a)(1))) is
5	amended by striking "7061" and inserting "7601".
6	(b) Title III—Energy Savings Through Im-
7	PROVED STANDARDS FOR APPLIANCE AND LIGHTING.—
8	(1) Section 325(u) of the Energy Policy and Conservation
9	Act (42 U.S.C. 6295(u)) (as amended by section 301(c)
10	of the Energy Independence and Security Act of 2007
11	(121 Stat. 1550)) is amended—
12	(A) by redesignating paragraph (7) as
13	paragraph (4); and
14	(B) in paragraph (4) (as so redesignated),
15	by striking "supplies is" and inserting "supply
16	is".
17	(2) Section 302 of the Energy Independence and Se-
18	curity Act of 2007 (121 Stat. 1551)) is amended—
19	(A) in subsection (a), by striking "end of the
20	paragraph" and inserting "end of subparagraph
21	(A)"; and
22	(B) in subsection (b), by striking "6313(a)"
23	and inserting "6314(a)".
24	(3) Section 343(a)(1) of the Energy Policy and Con-
25	servation Act (42 U.S.C. 6313(a)(1)) (as amended by sec-

1	tion 302(b) of the Energy Independence and Security Act
2	of 2007 (121 Stat. 1551)) is amended—
3	(A) by striking "Test procedures" and all
4	that follows through "At least once" and inserting
5	"Test procedures.—At least once"; and
6	(B) by redesignating clauses (i) and (ii) as sub-
7	paragraphs (A) and (B), respectively.
8	(4) Section 342(a)(6) of the Energy Policy and Con-
9	servation Act (42 U.S.C. 6313(a)(6)) (as amended by sec-
10	tion 305(b)(2) of the Energy Independence and Security
11	Act of 2007 (121 Stat. 1554)) is amended—
12	(A) in subparagraph (B)—
13	(i) by striking "If the Secretary" and in-
14	serting the following:
15	"(i) In General.—If the Secretary";
16	and
17	(ii) by adding at the end the following:
18	"(ii) Factors.—In determining
19	whether a standard is economically justi-
20	fied for the purposes of subparagraph
21	(A)(ii)(II), the Secretary shall, after receiv-
22	ing views and comments furnished with re-
23	spect to the proposed standard, determine
24	whether the benefits of the standard ex-
25	ceed the burden of the proposed standard

1	by, to the maximum extent practicable,
2	considering—
3	"(I) the economic impact of the
4	standard on the manufacturers and
5	on the consumers of the products sub-
6	ject to the standard;
7	"(II) the savings in operating
8	costs throughout the estimated aver-
9	age life of the product in the type (or
10	class) compared to any increase in the
11	price of, or in the initial charges for,
12	or maintenance expenses of, the prod-
13	ucts that are likely to result from the
14	imposition of the standard;
15	"(III) the total projected quan-
16	tity of energy savings likely to result
17	directly from the imposition of the
18	standard;
19	"(IV) any lessening of the utility
20	or the performance of the products
21	likely to result from the imposition of
22	the standard;
23	"(V) the impact of any lessening
24	of competition, as determined in writ-
25	ing by the Attorney General, that is

1	likely to result from the imposition of
2	the standard;
3	"(VI) the need for national en-
4	ergy conservation; and
5	"(VII) other factors the Sec-
6	retary considers relevant.
7	"(iii) Administration.—
8	"(I) Energy use and effi-
9	CIENCY.—The Secretary may not pre-
10	scribe any amended standard under
11	this paragraph that increases the
12	maximum allowable energy use, or de-
13	creases the minimum required energy
14	efficiency, of a covered product.
15	"(II) Unavailability.—
16	"(aa) In GENERAL.—The
17	Secretary may not prescribe an
18	amended standard under this
19	subparagraph if the Secretary
20	finds (and publishes the finding)
21	that interested persons have es-
22	tablished by a preponderance of
23	the evidence that a standard is
24	likely to result in the unavail-
25	ability in the United States in

1	any product type (or class) of
2	performance characteristics (in-
3	cluding reliability, features, sizes,
4	capacities, and volumes) that are
5	substantially the same as those
6	generally available in the United
7	States at the time of the finding
8	of the Secretary.
9	"(bb) Other types or
10	CLASSES.—The failure of some
11	types (or classes) to meet the cri-
12	terion established under this sub-
13	clause shall not affect the deter-
14	mination of the Secretary on
15	whether to prescribe a standard
16	for the other types or classes.";
17	and
18	(B) in subparagraph (C)(iv), by striking "An
19	amendment prescribed under this subsection" and
20	inserting "Notwithstanding subparagraph (D), an
21	amendment prescribed under this subparagraph".
22	(5) Section 306(c) of the Energy Independence and
23	Security Act of 2007 (121 Stat. 1559) is amended—
24	(A) by striking "Section" and all that follows
25	through "is amended" and inserting "Section

1	342(a)(6)(C) of the Energy Policy and Conservation
2	Act (42 U.S.C. 6313(a)(6)(C)) (as amended by sec-
3	tion 305(b)(2)) is amended";
4	(B)(i) by redesignating clause (iii) of section
5	342(a)(6)(B) of the Energy Policy and Conservation
6	Act (as added by section 306(c) of the Energy Inde-
7	pendence and Security Act of 2007) as clause (vi) of
8	section 342(a)(6)(C) of the Energy Policy and Con-
9	servation Act (as amended by section 305(b)(2) of
10	the Energy Independence and Security Act of 2007).
11	(6) Section 340 of the Energy Policy and Conserva-
12	tion Act (42 U.S.C. 6311) (as amended by sections
13	312(a)(2) and 314(a) of the Energy Independence and Se-
14	curity Act of 2007 (121 Stat. 1564, 1569) is amended
15	by redesignating paragraphs (22) and (23) (as added by
16	section 314(a) of that Act) as paragraphs (23) and (24),
17	respectively.
18	(7) Section 345 of the Energy Policy and Conserva-
19	tion Act (42 U.S.C. 6316) (as amended by section 312(e)
20	of the Energy Independence and Security Act of 2007
21	(121 Stat. 1567)) is amended—
22	(A) by striking "subparagraphs (B) through
23	(G)" each place it appears and inserting "subpara-
24	graphs (B), (C), (D), (I), (J), and (K)";

1	(B) by striking "part A" each place it appears
2	and inserting "part B"; and
3	(C) in subsection (h)(3), by striking "section
4	342(f)(3)" and inserting "section $342(f)(4)$ ".
5	(8) Section 340(13) of the Energy Policy and Con-
6	servation Act (42 U.S.C. 6311(13)) (as amended by sec-
7	tion 313(a) of the Energy Independence and Security Act
8	of 2007 (121 Stat. 1568)) is amended—
9	(A) by striking subparagraphs (A) and (B) and
10	inserting the following:
11	"(A) IN GENERAL.—The term 'electric
12	motor' means any motor that is—
13	"(i) a general purpose T-frame, sin-
14	gle-speed, foot-mounting, polyphase squir-
15	rel-cage induction motor of the National
16	Electrical Manufacturers Association, De-
17	sign A and B, continuous rated, operating
18	on $230/460$ volts and constant 60 Hertz
19	line power as defined in NEMA Standards
20	Publication MG1-1987; or
21	"(ii) a motor incorporating the design
22	elements described in clause (i) unless con-
23	figured as a—
24	"(I) U-frame motor;
25	"(II) NEMA Design C motor;

1	"(III) close-coupled pump motor;
2	"(IV) footless motor;
3	"(V) vertical solid shaft normal
4	thrust motor (as tested in a horizontal
5	configuration);
6	"(VI) 8-pole motor; or
7	"(VII) poly-phase motor with a
8	voltage rating of not more than 600
9	volts (other than 230 volts or 460
10	volts, or both, or can be operated on
11	230 volts or 460 volts, or both)."; and
12	(B) by redesignating subparagraphs (C)
13	through (I) as subparagraphs (B) through (H), re-
14	spectively.
15	(9)(A) Section 342(b) of the Energy Policy and Con-
16	servation Act (42 U.S.C. 6313(b)) is amended—
17	(i) in paragraph (1), by striking "paragraph (2)" and
18	inserting "paragraph (3)";
19	(ii) by redesignating paragraphs (2) and (3) as para-
20	graphs (3) and (4);
21	(iii) by inserting after paragraph (1) the following:
22	"(2) Standards effective beginning de-
23	CEMBER 19, 2010.—
24	"(A) In General.—Except for definite
25	purpose motors, special purpose motors, and

1	those motors exempted by the Secretary under
2	paragraph (3) and except as provided for in
3	subparagraphs (B), (C), and (D), each electric
4	motor manufactured (alone or as a component
5	of another piece of equipment) on or after De-
6	cember 19, 2010, shall have a nominal full load
7	efficiency of not less than the nominal full load
8	efficiency described in NEMA MG-1 (2006)
9	Table 12-12.
10	"(B) FIRE PUMP ELECTRIC MOTORS.—Ex-
11	cept for those motors exempted by the Sec-
12	retary under paragraph (3), each fire pump
13	electric motor manufactured (alone or as a com-
14	ponent of another piece of equipment) on or
15	after December 19, 2010, shall have a nominal
16	full load efficiency that is not less than the
17	nominal full load efficiency described in NEMA
18	MG-1 (2006) Table 12-11.
19	"(C) NEMA DESIGN B ELECTRIC MO-
20	TORS.—Except for those motors exempted by
21	the Secretary under paragraph (3), each
22	NEMA Design B electric motor with power rat-
23	ings of more than 200 horsepower, but not
24	greater than 500 horsepower, manufactured
25	(alone or as a component of another piece of

1	equipment) on or after December 19, 2010,
2	shall have a nominal full load efficiency of not
3	less than the nominal full load efficiency de-
4	scribed in NEMA MG-1 (2006) Table 12-11.
5	"(D) Motors incorporating certain
6	DESIGN ELEMENTS.—Except for those motors
7	exempted by the Secretary under paragraph
8	(3), each electric motor described in section
9	340(13)(A)(ii) manufactured (alone or as a
10	component of another piece of equipment) on or
11	after December 19, 2010, shall have a nominal
12	full load efficiency of not less than the nominal
13	full load efficiency described in NEMA MG-1
14	(2006) Table 12-11."; and
15	(iv) in paragraph (3) (as redesignated by clause (ii)),
16	by striking "paragraph (1)" each place it appears in sub-
17	paragraphs (A) and (D) and inserting "paragraphs (1)
18	and (2)".
19	(B) Section 313 of the Energy Independence and Se-
20	curity Act of 2007 (121 Stat. 1568) is repealed.
21	(C) The amendments made by—
22	(i) subparagraph (A) take effect on December
23	19, 2010; and
24	(ii) subparagraph (B) take effect on December
25	19, 2007.

1	(10) Section 321(30)(D)(i)(III) of the Energy Policy
2	and Conservation Act (42 U.S.C. 6291(30)(D)(i)(III)) (as
3	amended by section 321(a)(1)(A) of the Energy Independ-
4	ence and Security Act of 2007 (121 Stat. 1574)) is
5	amended by inserting before the semicolon the following:
6	"or, in the case of a modified spectrum lamp, not less than
7	232 lumens and not more than 1,950 lumens".
8	(11) Section 321(30)(T) of the Energy Policy and
9	Conservation Act (42 U.S.C. 6291(30)(T) (as amended by
10	section 321(a)(1)(B) of the Energy Independence and Se-
11	curity Act of 2007 (121 Stat. 1574)) is amended—
12	(A) in clause (i)—
13	(i) by striking the comma after "household
14	appliance" and inserting "and"; and
15	(ii) by striking "and is sold at retail,"; and
16	(B) in clause (ii), by inserting "when sold at re-
17	tail," before "is designated".
18	(12) Section 325 of the Energy Policy and Conserva-
19	tion Act (42 U.S.C. 6295) (as amended by sections
20	321(a)(3)(A) and $322(b)$ of the Energy Independence and
21	Security Act of 2007 (121 Stat. 1577, 1588)) is amended
22	by striking subsection (i) and inserting the following:
23	"(i) GENERAL SERVICE FLUORESCENT LAMPS GEN-
24	ERAL SERVICE INCANDESCENT LAMPS, INTERMEDIATE
25	BASE INCANDESCENT LAMPS, CANDELABRA BASE INCAN-

11

12

DESCENT Lamps, and Incandescent Reflector Lamps.— "(1) Energy efficiency standards.— 3 "(A) IN GENERAL.—Each of the following 4 general service fluorescent lamps, general service incandescent lamps, intermediate base in-6 candescent lamps, candelabra base incandescent 7 lamps, and incandescent reflector lamps manu-8 factured after the effective date specified in the 9 10 tables listed in this subparagraph shall meet or

"FLUORESCENT LAMPS

imum wattage, and CRI standards:

exceed the following lamp efficacy, new max-

Nominal Lamp Wattage	Minimum CRI	Minimum Average Lamp Efficacy (LPW)	Effective Date (Period of Months)
>35 W	69	75.0	36
≤35 W	45	75.0	36
>35 W	69	68.0	36
≤35 W	45	64.0	36
65 W	69	80.0	18
≤65 W	45	80.0	18
$> 100 \ W$	69	80.0	18
$\leq\!\!100~\mathrm{W}$	45	80.0	18
	Lamp Wattage >35 W ≤35 W >35 W ≤35 W ≤35 W ≤65 W >100 W	Lamp Wattage Minimum CRI >35 W 69 ≤35 W 45 >35 W 69 ≤35 W 45 65 W 69 ≤65 W 45 >100 W 69	Lamp Wattage Minimum CRI Lamp Efficacy (LPW) >35 W 69 75.0 ≤35 W 45 75.0 >35 W 69 68.0 ≤35 W 45 64.0 65 W 69 80.0 ≤65 W 45 80.0 >100 W 69 80.0

"INCANDESCENT REFLECTOR LAMPS

Nominal Lamp Wattage	Minimum Average Lamp Efficacy (LPW)	Effective Date (Period of Months)
40–50	10.5	36
51–66	11.0	36
67–85	12.5	36
86–115	14.0	36
116–155	14.5	36
156–205	15.0	36

125
"GENERAL SERVICE INCANDESCENT LAMPS

Rated Lumen Ranges	Maximum Rate Wattage	Minimum Rated Life- time	Effective Date
1490–2600	72	1,000 hrs	1/1/2012
1050-1489	53	1,000 hrs	1/1/2013
750–1049	43	1,000 hrs	1/1/2014
310–749	29	$1{,}000~\mathrm{hrs}$	1/1/2014

"MODIFIED SPECTRUM GENERAL SERVICE INCANDESCENT LAMPS

Rated Lumen Ranges	Maximum Rate Wattage	Minimum Rated Life- time	Effective Date
1118–1950	72	1,000 hrs	1/1/2012
788–1117	53	1,000 hrs	1/1/2013
563-787	43	1,000 hrs	1/1/2014
232–562	29	$1{,}000~\mathrm{hrs}$	1/1/2014

1 "(B) APPLICATION.— "(i) APPLICATION CRITERIA.—This 2 subparagraph applies to each lamp that— 3 "(I) is intended for a general 4 5 service or general illumination application (whether incandescent or not); 6 "(II) has a medium screw base 7 or any other screw base not defined in 8 ANSI C81.61–2006; 9 "(III) is capable of being oper-10 11 ated at a voltage at least partially 12 within the range of 110 to 130 volts; 13 and 14 "(IV) is manufactured or im-15 ported after December 31, 2011.

126

1	"(ii) Requirement.—For purposes
2	of this paragraph, each lamp described in
3	clause (i) shall have a color rendering
4	index that is greater than or equal to—
5	"(I) 80 for nonmodified spectrum
6	lamps; or
7	"(II) 75 for modified spectrum
8	lamps.
9	"(C) CANDELABRA INCANDESCENT LAMPS
10	AND INTERMEDIATE BASE INCANDESCENT
11	LAMPS.—
12	"(i) Candelabra base incandes-
13	CENT LAMPS.—Effective beginning Janu-
14	ary 1, 2012, a candelabra base incandes-
15	cent lamp shall not exceed 60 rated watts.
16	"(ii) Intermediate base incandes-
17	CENT LAMPS.—Effective beginning Janu-
18	ary 1, 2012, an intermediate base incan-
19	descent lamp shall not exceed 40 rated
20	watts.
21	"(D) Exemptions.—
22	"(i) STATUTORY EXEMPTIONS.—The
23	standards specified in subparagraph (A)
24	shall not apply to the following types of in-
25	candescent reflector lamps:

127

1	"(I) Lamps rated at 50 watts or
2	less that are ER30, BR30, BR40, or
3	ER40 lamps.
4	"(II) Lamps rated at 65 watts
5	that are BR30, BR40, or ER40
6	lamps.
7	"(III) R20 incandescent reflector
8	lamps rated 45 watts or less.
9	"(ii) Administrative exemp-
10	TIONS.—
11	"(I) Petition.—Any person may
12	petition the Secretary for an exemp-
13	tion for a type of general service lamp
14	from the requirements of this sub-
15	section.
16	"(II) Criteria.—The Secretary
17	may grant an exemption under sub-
18	clause (I) only to the extent that the
19	Secretary finds, after a hearing and
20	opportunity for public comment, that
21	it is not technically feasible to serve a
22	specialized lighting application (such
23	as a military, medical, public safety,
24	or certified historic lighting applica-

1	tion) using a lamp that meets the re-
2	quirements of this subsection.
3	"(III) Additional criterion.—
4	To grant an exemption for a product
5	under this clause, the Secretary shall
6	include, as an additional criterion,
7	that the exempted product is unlikely
8	to be used in a general service lighting
9	application.
10	"(E) Extension of coverage.—
11	"(i) Petition.—Any person may peti-
12	tion the Secretary to establish standards
13	for lamp shapes or bases that are excluded
14	from the definition of general service
15	lamps.
16	"(ii) Increased sales of exempt-
17	ED LAMPS.—The petition shall include evi-
18	dence that the availability or sales of ex-
19	empted incandescent lamps have increased
20	significantly since the date on which the
21	standards on general service incandescent
22	lamps were established.
23	"(iii) Criteria.—The Secretary shall
24	grant a petition under clause (i) if the Sec-
25	retary finds that—

1	"(I) the petition presents evi-
2	dence that demonstrates that commer-
3	cial availability or sales of exempted
4	incandescent lamp types have in-
5	creased significantly since the stand-
6	ards on general service lamps were es-
7	tablished and likely are being widely
8	used in general lighting applications;
9	and
10	"(II) significant energy savings
11	could be achieved by covering exempt-
12	ed products, as determined by the
13	Secretary based in part on sales data
14	provided to the Secretary from manu-
15	facturers and importers.
16	"(iv) No presumption.—The grant
17	of a petition under this subparagraph shall
18	create no presumption with respect to the
19	determination of the Secretary with respect
20	to any criteria under a rulemaking con-
21	ducted under this section.
22	"(v) Expedited proceeding.—If
23	the Secretary grants a petition for a lamp
24	shape or base under this subparagraph,
25	the Secretary shall—

1	"(I) conduct a rulemaking to de-
2	termine standards for the exempted
3	lamp shape or base; and
4	"(II) complete the rulemaking
5	not later than 18 months after the
6	date on which notice is provided
7	granting the petition.
8	"(F) Effective dates.—
9	"(i) IN GENERAL.—In this paragraph,
10	except as otherwise provided in a table
11	contained in subparagraph (A) or in clause
12	(ii), the term 'effective date' means the last
13	day of the month specified in the table
14	that follows October 24, 1992.
15	"(ii) Special effective dates.—
16	"(I) ER, BR, AND BPAR
17	LAMPS.—The standards specified in
18	subparagraph (A) shall apply with re-
19	spect to ER incandescent reflector
20	lamps, BR incandescent reflector
21	lamps, BPAR incandescent reflector
22	lamps, and similar bulb shapes on and
23	after January 1, 2008, or the date
24	that is 180 days after the date of en-

1	actment of the Energy Independence
2	and Security Act of 2007.
3	"(II) Lamps between 2.25-2.75
4	INCHES IN DIAMETER.—The stand-
5	ards specified in subparagraph (A)
6	shall apply with respect to incandes-
7	cent reflector lamps with a diameter
8	of more than 2.25 inches, but not
9	more than 2.75 inches, on and after
10	the later of January 1, 2008, or the
11	date that is 180 days after the date of
12	enactment of the Energy Independ-
13	ence and Security Act of 2007.
14	"(2) Compliance with existing law.—Not-
15	withstanding section 332(a)(5) and section 332(b),
16	it shall not be unlawful for a manufacturer to sell
17	a lamp that is in compliance with the law at the
18	time the lamp was manufactured.
19	"(3) Rulemaking before october 24,
20	1995.—
21	"(A) In General.—Not later than 36
22	months after October 24, 1992, the Secretary
23	shall initiate a rulemaking procedure and shall
24	publish a final rule not later than the end of
25	the 54-month period beginning on October 24,

1	1992, to determine whether the standards es-
2	tablished under paragraph (1) should be
3	amended.
4	"(B) Administration.—The rule shall
5	contain the amendment, if any, and provide
6	that the amendment shall apply to products
7	manufactured on or after the 36-month period
8	beginning on the date on which the final rule is
9	published.
10	"(4) Rulemaking before october 24,
11	2000.—
12	"(A) In general.—Not later than 8 years
13	after October 24, 1992, the Secretary shall ini-
14	tiate a rulemaking procedure and shall publish
15	a final rule not later than 9 years and 6 months
16	after October 24, 1992, to determine whether
17	the standards in effect for fluorescent lamps
18	and incandescent lamps should be amended.
19	"(B) Administration.—The rule shall
20	contain the amendment, if any, and provide
21	that the amendment shall apply to products
22	manufactured on or after the 36-month period
23	beginning on the date on which the final rule is
24	published.

1	"(5) Rulemaking for additional general
2	SERVICE FLUORESCENT LAMPS.—
3	"(A) IN GENERAL.—Not later than the
4	end of the 24-month period beginning on the
5	date labeling requirements under section
6	324(a)(2)(C) become effective, the Secretary
7	shall—
8	"(i) initiate a rulemaking procedure to
9	determine whether the standards in effect
10	for fluorescent lamps and incandescent
11	lamps should be amended so that the
12	standards would be applicable to additional
13	general service fluorescent lamps; and
14	"(ii) publish, not later than 18
15	months after initiating the rulemaking, a
16	final rule including the amended stand-
17	ards, if any.
18	"(B) Administration.—The rule shall
19	provide that the amendment shall apply to
20	products manufactured after a date which is 36
21	months after the date on which the rule is pub-
22	lished.
23	"(6) Standards for general service
24	LAMPS.—

1	"(A) Rulemaking before January 1,
2	2014.—
3	"(i) In general.—Not later than
4	January 1, 2014, the Secretary shall ini-
5	tiate a rulemaking procedure to determine
6	whether—
7	"(I) standards in effect for gen-
8	eral service lamps should be amended;
9	and
10	"(II) the exclusions for certain
11	incandescent lamps should be main-
12	tained or discontinued based, in part,
13	on excluded lamp sales collected by
14	the Secretary from manufacturers.
15	"(ii) Scope.—The rulemaking—
16	"(I) shall not be limited to incan-
17	descent lamp technologies; and
18	"(II) shall include consideration
19	of a minimum standard of 45 lumens
20	per watt for general service lamps.
21	"(iii) Amended standards.—If the
22	Secretary determines that the standards in
23	effect for general service lamps should be
24	amended, the Secretary shall publish a
25	final rule not later than January 1, 2017,

1	with an effective date that is not earlier
2	than 3 years after the date on which the
3	final rule is published.
4	"(iv) Phased-in effective
5	DATES.—The Secretary shall consider
6	phased-in effective dates under this sub-
7	paragraph after considering—
8	"(I) the impact of any amend-
9	ment on manufacturers, retiring and
10	repurposing existing equipment,
11	stranded investments, labor contracts,
12	workers, and raw materials; and
13	"(II) the time needed to work
14	with retailers and lighting designers
15	to revise sales and marketing strate-
16	gies.
17	"(v) Backstop requirement.—If
18	the Secretary fails to complete a rule-
19	making in accordance with clauses (i)
20	through (iv) or if the final rule does not
21	produce savings that are greater than or
22	equal to the savings from a minimum effi-
23	cacy standard of 45 lumens per watt, effec-
24	tive beginning January 1, 2020, the Sec-
25	retary shall prohibit the manufacture of

1	any general service lamp that does not
2	meet a minimum efficacy standard of 45
3	lumens per watt.
4	"(vi) State Preemption.—Neither
5	section 327 nor any other provision of law
6	shall preclude California or Nevada from
7	adopting, effective beginning on or after
8	January 1, 2018—
9	"(I) a final rule adopted by the
10	Secretary in accordance with clauses
11	(i) through (iv);
12	"(II) if a final rule described in
13	subclause (I) has not been adopted,
14	the backstop requirement under
15	clause (v); or
16	"(III) in the case of California, if
17	a final rule described in subclause (I)
18	has not been adopted, any California
19	regulations relating to these covered
20	products adopted pursuant to State
21	statute in effect as of the date of en-
22	actment of the Energy Independence
23	and Security Act of 2007.
24	"(B) Rulemaking before January 1,
25	2020 —

1	"(i) In general.—Not later than
2	January 1, 2020, the Secretary shall ini-
3	tiate a rulemaking procedure to determine
4	whether—
5	"(I) standards in effect for gen-
6	eral service lamps should be amended;
7	and
8	"(II) the exclusions for certain
9	incandescent lamps should be main-
10	tained or discontinued based, in part,
11	on excluded lamp sales data collected
12	by the Secretary from manufacturers.
13	"(ii) Scope.—The rulemaking shall
14	not be limited to incandescent lamp tech-
15	nologies.
16	"(iii) Amended standards.—If the
17	Secretary determines that the standards in
18	effect for general service lamps should be
19	amended, the Secretary shall publish a
20	final rule not later than January 1, 2022,
21	with an effective date that is not earlier
22	than 3 years after the date on which the
23	final rule is published.
24	"(iv) Phased-in effective
25	DATES.—The Secretary shall consider

1	phased-in effective dates under this sub-
2	paragraph after considering—
3	"(I) the impact of any amend-
4	ment on manufacturers, retiring and
5	repurposing existing equipment,
6	stranded investments, labor contracts,
7	workers, and raw materials; and
8	"(II) the time needed to work
9	with retailers and lighting designers
10	to revise sales and marketing strate-
11	gies.
12	"(7) Federal actions.—
13	"(A) COMMENTS OF SECRETARY.—
14	"(i) In general.—With respect to
15	any lamp to which standards are applicable
16	under this subsection or any lamp specified
17	in section 346, the Secretary shall inform
18	any Federal entity proposing actions that
19	would adversely impact the energy con-
20	sumption or energy efficiency of the lamp
21	of the energy conservation consequences of
22	the action.
23	"(ii) Consideration.—The Federal
24	entity shall carefully consider the com-
25	ments of the Secretary.

1	"(B) Amendment of standards.—Not-
2	withstanding section 325(n)(1), the Secretary
3	shall not be prohibited from amending any
4	standard, by rule, to permit increased energy
5	use or to decrease the minimum required en-
6	ergy efficiency of any lamp to which standards
7	are applicable under this subsection if the ac-
8	tion is warranted as a result of other Federal
9	action (including restrictions on materials or
10	processes) that would have the effect of either
11	increasing the energy use or decreasing the en-
12	ergy efficiency of the product.
13	"(8) Compliance.—
14	"(A) IN GENERAL.—Not later than the
15	date on which standards established pursuant
16	to this subsection become effective, or, with re-
17	spect to high-intensity discharge lamps covered
18	under section 346, the effective date of stand-
19	ards established pursuant to that section, each
20	manufacturer of a product to which the stand-
21	ards are applicable shall file with the Secretary
22	a laboratory report certifying compliance with
23	the applicable standard for each lamp type.
24	"(B) Contents.—The report shall include
25	the lumen output and wattage consumption for

1	each lamp type as an average of measurements
2	taken over the preceding 12-month period.
3	"(C) OTHER LAMP TYPES.—With respect
4	to lamp types that are not manufactured during
5	the 12-month period preceding the date on
6	which the standards become effective, the re-
7	port shall—
8	"(i) be filed with the Secretary not
9	later than the date that is 12 months after
10	the date on which manufacturing is com-
11	menced; and
12	"(ii) include the lumen output and
13	wattage consumption for each such lamp
14	type as an average of measurements taken
15	during the 12-month period.".
16	(13) Section 325(l)(4)(A) of the Energy Policy and
17	Conservation Act (42 U.S.C. 6295(l)(4)(A)) (as amended
18	by section 321(a)(3)(B) of the Energy Independence and
19	Security Act of 2007 (121 Stat. 1581)) is amended by
20	striking "only".
21	(14) Section 327(b)(1)(B) of the Energy Policy and
22	Conservation Act (42 U.S.C. 6297(b)(1)(B)) (as amended
23	by section 321(d)(3) of the Energy Independence and Se-
24	curity Act of 2007 (121 Stat. 1585)) is amended—

1	(A) in clause (i), by inserting "and" after the
2	semicolon at the end;
3	(B) in clause (ii), by striking "; and and in-
4	serting a period; and
5	(C) by striking clause (iii).
6	(15) Section 321(e) of the Energy Independence and
7	Security Act of 2007 (121 Stat. 1586) is amended—
8	(A) in the matter preceding paragraph (1), by
9	striking "is amended" and inserting "(as amended
10	by section 306(b)) is amended"; and
11	(B) by striking paragraphs (1) and (2) and in-
12	serting the following:
13	"(1) in paragraph (5), by striking 'or' after the
14	semicolon at the end;
15	"(2) in paragraph (6), by striking the period at
16	the end and inserting '; or'; and".
17	(16) Section 332(a) of the Energy Policy and Con-
18	servation Act (42 U.S.C. 6302(a)) (as amended by section
19	321(e) of the Energy Independence and Security Act of
20	2007 (121 Stat. 1586)) is amended by redesignating the
21	second paragraph (6) as paragraph (7).
22	(17) Section 321(30)(C)(ii) of the Energy Policy and
23	Conservation Act (42 U.S.C. 6291(30)(C)(ii)) (as amend-
24	ed by section 322(a)(1)(B) of the Energy Independence

1	and Security Act of 2007 (121 Stat. 1587)) is amended
2	by inserting a period after "40 watts or higher".
3	(18) Section 322(b) of the Energy Independence and
4	Security Act of 2007 (121 Stat. 1588)) is amended by
5	striking "6995(i)" and inserting "6295(i)".
6	(19) Section 327(c) of the Energy Policy and Con-
7	servation Act (42 U.S.C. 6297(c)) (as amended by sec-
8	tions 324(f) of the Energy Independence and Security Act
9	of 2007 (121 Stat. 1594)) is amended—
10	(A) in paragraph (6), by striking "or" after the
11	semicolon at the end;
12	(B) in paragraph (8)(B), by striking "and"
13	after the semicolon at the end;
14	(C) in paragraph (9)—
15	(i) by striking "except that—" and all that
16	follows through "if the Secretary fails to issue"
17	and inserting "except that if the Secretary fails
18	to issue'';
19	(ii) by redesignating clauses (i) and (ii) as
20	subparagraphs (A) and (B), respectively; and
21	(iii) by striking the period at the end and
22	inserting a semicolon; and
23	(D) by adding at the end the following:

1	"(10) is a regulation for general service lamps
2	that conforms with Federal standards and effective
3	dates; or
4	"(11) is an energy efficiency standard for gen-
5	eral service lamps enacted into law by the State of
6	Nevada prior to December 19, 2007, if the State has
7	not adopted the Federal standards and effective
8	dates pursuant to subsection (b)(1)(B)(ii).".
9	(20) Section 325(b) of the Energy Independence and
10	Security Act of 2007 (121 Stat. 1596)) is amended by
11	striking "6924(c)" and inserting "6294(c)".
12	(e) TITLE IV—ENERGY SAVINGS IN BUILDINGS AND
13	Industry.—
14	(1) Section 401 of the Energy Independence and Se-
15	curity Act of 2007 (42 U.S.C. 17061) is amended—
16	(A) in paragraph (2), by striking "484" and in-
	(11) in paragraph (2), by surking 101 and in
17	serting "494"; and
17 18	
	serting "494"; and
18	serting "494"; and (B) in paragraph (13), by striking "Agency"
18 19	serting "494"; and (B) in paragraph (13), by striking "Agency" and inserting "Administration".
18 19 20	serting "494"; and (B) in paragraph (13), by striking "Agency" and inserting "Administration". (2) Section 422 of the Energy Conservation and Pro-
18 19 20 21	serting "494"; and (B) in paragraph (13), by striking "Agency" and inserting "Administration". (2) Section 422 of the Energy Conservation and Production Act (42 U.S.C. 6872) (as amended by section

1	(3) Section 543 of the National Energy Conservation
2	Policy Act (42 U.S.C. 8253) (as amended by sections 432
3	and 434(a) of the Energy Independence and Security Act
4	of 2007 (121 Stat. 1607, 1614) is amended by redesig-
5	nating subsection (f) (as added by section 434(a) of that
6	Act) as subsection (g).
7	(4) Section 305(a)(3)(D)(i) of the Energy Conserva-
8	tion and Production Act (42 U.S.C. 6834(a)(3)(D)(i)) (as
9	amended by section 433(a) of the Energy Independence
10	and Security Act of 2007 (121 Stat. 1612)) is amended—
11	(A) in subclause (I)
12	(i) by striking "in fiscal year 2003 (as
13	measured by Commercial Buildings Energy
14	Consumption Survey or Residential Energy
15	Consumption Survey data from the Energy In-
16	formation Agency" and inserting "as measured
17	by the calendar year 2003 Commercial Build-
18	ings Energy Consumption Survey or the cal-
19	endar year 2005 Residential Energy Consump-
20	tion Survey data from the Energy Information
21	Administration"; and
22	(ii) in the table at the end, by striking
23	"Fiscal Year" and inserting "Calendar Year";
24	and
25	(B) in subclause (II)—

1	(i) by striking "(II) Upon petition" and in-
2	serting the following:
3	"(II) Downward adjustment
4	OF NUMERIC REQUIREMENT.—
5	"(aa) In general.—On pe-
6	tition'; and
7	(ii) by striking the last sentence and in-
8	serting the following:
9	"(bb) Exceptions to Re-
10	QUIREMENT FOR CONCURRENCE
11	OF SECRETARY.—
12	"(AA) IN GENERAL.—
13	The requirement to petition
14	and obtain the concurrence
15	of the Secretary under this
16	subclause shall not apply to
17	any Federal building with
18	respect to which the Admin-
19	istrator of General Services
20	is required to transmit a
21	prospectus to Congress
22	under section 3307 of title
23	40, United States Code, or
24	to any other Federal build-
25	ing designed, constructed, or

1	renovated by the Adminis-
2	trator if the Administrator
3	certifies, in writing, that
4	meeting the applicable nu-
5	meric requirement under
6	subclause (I) with respect to
7	the Federal building would
8	be technically impracticable
9	in light of the specific func-
10	tional needs for the building.
11	"(BB) Adjustment.—
12	In the case of a building de-
13	scribed in subitem (AA), the
14	Administrator may adjust
15	the applicable numeric re-
16	quirement of subclause (I)
17	downward with respect to
18	the building.".
19	(5) Section $436(c)(3)$ of the Energy Independence
20	and Security Act of 2007 (42 U.S.C. $17092(c)(3)$) is
21	amended by striking "474" and inserting "494".
22	(6) Section 440 of the Energy Independence and Se-
23	curity Act of 2007 (42 U.S.C. 17096) is amended by strik-
24	ing "and 482".

(7) Section 373(c) of the Energy Policy and Con-
servation Act (42 U.S.C. 6343(c)) (as amended by section
451(a) of the Energy Independence and Security Act of
2007 (121 Stat. 1628)) is amended by striking "Adminis-
trator" and inserting "Secretary".
(d) Title V—Energy Savings in Government
AND PUBLIC INSTITUTIONS.—(1) Section 303 of the Pub-
lic Utility Regulatory Policies Act of 1978 (15 U.S.C.
3203) (as amended by subsections (b) and (c) of section
532 of the Energy Independence and Security Act of 2007
(121 Stat. 1666)) is amended—
(A) in subsection (a), by striking "(or"
and all that follows through ", each State" and
inserting "(or after October 24, 1992, in the
case of standards under paragraphs (3) and (4)
of subsection (b), or after December 19, 2007,
in the case of standards under paragraphs (5)
and (6) of subsection (b)), each State"; and
(B) in the second sentence of subsection
(b)(6)(B), by striking "subtitle" each place it
appears and inserting "title".
(2) Section 521(a) of the Energy Independence and
Security Act of 2007 (121 Stat. 1661) is amended by
striking "the Sun Wall Design Project" and inserting "an
approved project prospectus".

- 1 (3) Section 541(3)(A)(i)(II) of the Energy Independ-
- 2 ence and Security Act of 2007 (42 U.S.C.
- 3 17151(3)(A)(i)(II)) is amended by striking "and" after
- 4 the semicolon at the end and inserting "or".
- 5 (e) TITLE VI—ACCELERATED RESEARCH AND DE-
- 6 VELOPMENT.—(1) Section 641(h)(7)(A) of the Energy
- 7 Independence and Security Act of 2007 (42 U.S.C.
- 8 17231(h)(7)(A)) is amended by striking "a energy" and
- 9 inserting "an energy".
- 10 (2) Section 655(b) of the Energy Independence and
- 11 Security Act of 2007 (42 U.S.C. 17243(b)) is amended—
- 12 (A) in paragraph (1), by striking "solid-state
- light package" and inserting "solid-state-light pack-
- 14 age"; and
- 15 (B) in paragraph (3), by striking "sold-state-
- light-light" and inserting "solid-state-light package".
- 17 (f) TITLE VIII—IMPROVED MANAGEMENT OF EN-
- 18 Ergy Policy.—Section 807(a)(2) of the Energy Inde-
- 19 pendence and Security Act of 2007 (42 U.S.C.
- 20 17286(a)(2)) is amended by striking "the the" and insert-
- 21 ing "the".
- 22 (g) TITLE IX—INTERNATIONAL ENERGY PRO-
- 23 GRAMS.—Section 916(b) of the Energy Independence and
- 24 Security Act of 2007 (42 U.S.C. 17336(b)) is amended
- 25 by striking "the Export of Clean and Efficient Energy

- 1 Technologies" each place it appears in paragraphs (1) and
- 2 (4)(A) and inserting "Clean and Efficient Energy Tech-
- 3 nology Exports".
- 4 (h) TITLE X—GREEN JOBS.—Section 171(e)(4)(A)
- 5 of the Workforce Investment Act of 1998 (29 U.S.C.
- 6 2916(e)(4)(A)) (as added by section 1002 of the Energy
- 7 Independence and Security Act of 2007 (121 Stat. 1754))
- 8 is amended by striking "of the Workforce Investment Act
- 9 of 1998 (29 U.S.C. 2931 and 2938)".
- 10 (i) TITLE XI—ENERGY TRANSPORTATION AND IN-
- 11 FRASTRUCTURE.—(1) Section 53501(5)(A)(iii) of title 46,
- 12 United States Code (as amended by section 1122(a)(1) of
- 13 the Energy Independence and Security Act of 2007 (121
- 14 Stat. 1762)), is amended by striking "trade trade" and
- 15 inserting "trade".
- 16 (2) Section 53501 of title 46, United States Code (as
- 17 amended by section 1122(a)(2) of the Energy Independ-
- 18 ence and Security Act of 2007 (121 Stat. 1762)), is
- 19 amended by redesignating the second paragraph (7) (re-
- 20 lating to the definition of "United States foreign trade")
- 21 and paragraph (8) (relating to the definition of "vessel")
- 22 as paragraphs (8) and (9), respectively.
- 23 (j) Title XII—Small Business Energy Pro-
- 24 GRAMS.—(1) Section 103(18)(E) of the Small Business
- 25 Investment Act of 1958 (15 U.S.C. 662(18)(E)) (as added

- 1 by section 1205(b)(3) of the Energy Independence and Se-
- 2 curity Act of 2007 (121 Stat. 1772)) is amended by in-
- 3 serting "Federal" before "Credit".
- 4 (2) Section 1206(b) of the Energy Independence and
- 5 Security Act of 2007 (121 Stat. 1774) is amended by
- 6 striking "(15 U.S.C. 303(b)(4)) is amended by adding at
- 7 the end" and inserting "(15 U.S.C. 683(b)(4)) is amended
- 8 by inserting after subparagraph (D)".
- 9 (3) Section 394 of the Small Business Investment Act
- 10 of 1958 (15 U.S.C. 690m) (as added by section 1207 of
- 11 the Energy Independence and Security Act of 2007 (121
- 12 Stat. 1783)) is amended by inserting a comma after
- 13 "314".
- 14 (k) TITLE XIII—SMART GRID.—(1) Section 1302 of
- 15 the Energy Independence and Security Act of 2007 (42
- 16 U.S.C. 17382) is amended in the first sentence by striking
- 17 "enactment" and inserting "the date of enactment of this
- 18 Act".
- 19 (2) Section 1305 of the Energy Independence and Se-
- 20 curity Act of 2007 (42 U.S.C. 17385(c)) is amended—
- 21 (A) in subsection (a)(2), by striking "Inter-
- 22 national" and inserting "Institute of"; and
- (B) in subsection (c), by striking "of enact-
- 24 ment' and inserting "after the date of enactment of
- 25 this Act".

- 1 (3) Section 1306(c)(3) of the Energy Independence
- 2 and Security Act of 2007 (42 U.S.C. 17386(c)(3)) is
- 3 amended by striking "section 1307 (paragraph (17) of
- 4 section 111(d) of the Public Utility Regulatory Policies
- 5 Act of 1978)" and inserting "paragraph (19) of section
- 6 111(d) of the Public Utility Regulatory Policies Act of
- 7 1978 (16 U.S.C. 2621(d))".
- 8 (1) Effective Date.—This section and the amend-
- 9 ments made by this section take effect as if included in
- 10 the Energy Independence and Security Act of 2007 (Pub-
- 11 lie Law 110–140; 121 Stat. 1492).
- 12 SEC. 172. TECHNICAL CORRECTIONS TO ENERGY POLICY
- 13 **ACT OF 2005.**
- 14 (a) Table of Contents; Definitions.—(1) The
- 15 table of contents in section 1(b) of the Energy Policy Act
- 16 of 2005 (Public Law 109-58; 119 Stat. 594) is amended
- 17 by inserting after the item relating to section 1 the fol-
- 18 lowing:
 - "Sec. 2. Definitions.".
- 19 (2) Section 2(2)(A) of the Energy Policy Act of 2005
- 20 (42 U.S.C. 15801(2)(A)) is amended by striking "Higher
- $21\,$ Education Act of 1065" and inserting "Higher Education
- 22 Act of 1965".
- 23 (b) TITLE I—ENERGY EFFICIENCY.—Section
- 24 325(g)(8)(C)(ii) of the Energy Policy and Conservation
- 25 Act (42 U.S.C. 6295(g)(8)(C)(ii)) (as added by section

1	135(c)(2)(B) of the Energy Policy Act of 2005) is amend-
2	ed by striking " 20 °F" and inserting " -20 °F".
3	(c) Title II—Renewable Energy.—(1) Section
4	2(g) of the Geothermal Steam Act of 1970 (30 U.S.C.
5	1001(g)) (as added by section 236(2) of the Energy Policy
6	Act of 2005) is amended by striking "; and" at the end
7	and inserting a period.
8	(2) Section 33(a)(2)(B) of the Federal Power Act (16
9	U.S.C. 823d(a)(2)(B)) (as added by section 241(c) of the
10	Energy Policy Act of 2005) is amended by inserting "de-
11	termined necessary" after "initially".
12	(d) TITLE III—OIL AND GAS.—Section 347(b) of the
13	Energy Policy Act of 2005 (119 Stat. 704) is amended—
14	(1) in paragraph (2), by striking the ending
15	quotation marks after "Alaska" and the following
16	period and inserting a period;
17	(2) in paragraph (3), by striking the ending
18	quotation marks after "Reserve" and the following
19	period and inserting a period;
20	(3) in paragraph (4), by striking the ending
21	quotation marks after "seq.)" and the following pe-
22	riod and inserting a period;
23	(4) in paragraph (5), by striking the ending
24	quotation marks after "this section" and the fol-
25	lowing period and inserting a period;

1	(5) in paragraph (6), by striking the ending
2	quotation marks after "629)" and the following pe-
3	riod and inserting a period;
4	(6) in paragraph (7), by striking the ending
5	quotation marks after "structures" and the following
6	period and inserting a period;
7	(7) in paragraph (8), by striking the ending
8	quotation marks after "Secretary" and the following
9	period and inserting a period; and
10	(8) in paragraph (11), by inserting a period
11	after "provided therein".
12	(e) Title IV—Coal.—Section 417(d)(3) of the En-
13	ergy Policy Act of 2005 (42 U.S.C. $15977(d)(3)$) is
14	amended by striking "the Act" and inserting "this Act".
15	(f) TITLE VI—NUCLEAR MATTERS.—(1) Section
16	641(b)(1) of the Energy Policy Act of 2005 (42 U.S.C.
17	16021(b)(1)) is amended by striking "942(d)" and insert-
18	ing "952(d)".
19	(2) Section 655(a) of the Energy Policy Act of 2005
20	(119 Stat. 813) is amended by striking "236a." and in-
21	serting "236 a.".
22	(g) TITLE VII—VEHICLES AND FUELS.—(1) Section
23	514(b)(1)(B) of the Energy Policy Act of 1992 (42 U.S.C.
24	13263a(b)(1)(B)) (as added by section $703(a)(2)$ of the
25	Energy Policy Act of 2005) is amended—

1	(A) by striking "a reduction equal to"; and
2	(B) by striking "given credit under section
3	508".
4	(2) Section 782(c)(1)(A)(i) of the Energy Policy Act
5	of 2005 (42 U.S.C. $16122(c)(1)(A)(i)$) is amended by
6	striking "March 2000" and inserting "January 1, 1999".
7	(3) Section 783(c) of the Energy Policy Act of 2005
8	(42 U.S.C. 16123(e)) is amended by striking "section 808
9	of this Act" and inserting "section 782(c)".
10	(h) TITLE IX—RESEARCH AND DEVELOPMENT.—
11	(1) Section 306(b)(1)(F) of the Biomass Research and
12	Development Act of 2000 (7 U.S.C. $8605(b)(1)(F)$) (as
13	redesignated by section $941(d)(1)(B)$ of the Energy Policy
14	Act of 2005) is amended by striking "an individual" and
15	inserting "2 individuals".
16	(2) Section 999B(c)(1) of the Energy Policy Act of
17	2005 (42 U.S.C. $16372(c)(1)$) is amended in the first sen-
18	tence by striking "this chapter" and inserting "this sub-
19	title".
20	(3) Section 5(b)(2) of the Federal Nonnuclear En-
21	ergy Research and Development Act of 1974 (42 U.S.C.
22	5904(b)(2)) is amended by striking "Administrator" and
23	inserting "Secretary".

1	(i) TITLE XI—PERSONNEL AND TRAINING.—Section
2	1102(b) of the Energy Policy Act of 2005 (Public Law
3	109–58) is amended—
4	(1) by striking "3165" and inserting
5	"3165(a)"; and
6	(2) by striking "7381b" and inserting
7	"7381b(a)".
8	(j) Title XII—Electricity.—(1) Section 112 of
9	the Public Utility Regulatory Policies Act of 1978 (16
10	U.S.C. 2622) (as amended by section 1254(b)(2) of the
11	Energy Policy Act of 2005) is amended as follows:
12	(A) By striking the last sentence of subsection
13	(d).
14	(B) By inserting at the end of subsection (c)
15	the following: "In the case of the standards estab-
16	lished by paragraphs (16) through (19) of section
17	111(d), the reference contained in this subsection to
18	the date of enactment of this Act shall be deemed
19	to be a reference to the date of enactment of such
20	paragraphs.".
21	(2) Section 314(d) of the Federal Power Act
22	$(16~\mathrm{U.S.C.}~825\mathrm{m(d)})$ (as added by section $1288~\mathrm{of}$
23	the Energy Policy Act of 2005) is amended by strik-
24	ing "section 221" and inserting "section 222".

1	(k) TITLE XV—ETHANOL AND MOTOR FUELS.—(1)
2	Section 211 of the Clean Air Act (42 U.S.C. 7545) is
3	amended—
4	(A) by redesignating subsection (q) (as
5	added by section 1506 of the Energy Policy Act
6	of 2005) as subsection (p); and
7	(B) by redesignating subsections (r)
8	through (v) as subsections (q) through (u), re-
9	spectively.
10	(2) Section 212(b) of the Clean Air Act (42 U.S.C.
11	7546(b)) (as added by section 1511 of the Energy Policy
12	Act of 2005) is amended—
13	(A) in paragraph (1)—
14	(i) by striking "title XIV of the Energy
15	Policy Act" and inserting "title XV of the En-
16	ergy Policy Act of 2005 (42 U.S.C. 16501 et
17	seq.)"; and
18	(ii) by striking "sucrose-derived"; and
19	(B) in paragraph (2)(A), by striking "sucrose-
20	derived".
21	(3) Section 1530(d) of the Energy Policy Act of
22	2005 (Public Law 109–58) is amended by striking
23	paragraphs (1) through (3) and inserting the fol-
24	lowing:

1	"(1) By striking the comma at the end of sub-
2	paragraph (E) and inserting '; or'.
3	"(2) By adding after subparagraph (E) the fol-
4	lowing:
5	"(F) the requirements established in sec-
6	tion 9003.'.".
7	(4) Section 211(c)(4)(C) of the Clean Air Act (42
8	U.S.C. 7545(e)(4)(C)) (as amended by section 1541(b) of
9	the Energy Policy Act of 2005) is amended by redesig-
10	nating the second clause (v) as clause (vi).
11	(l) Title XVIII—Studies.—Sections 1808 and
12	1832 of the Energy Policy Act of 2005 (42 U.S.C. 16522,
13	16524) are repealed.
14	(m) Effective Date.—This section and the amend-
15	ments made by this section take effect as if included in
16	the Energy Policy Act of 2005 (Public Law 109–58; 119
17	Stat. 594).
18	TITLE II—ENERGY EFFICIENCY
19	Subtitle A—Building Energy
20	Efficiency Programs
21	SEC. 201. GREATER ENERGY EFFICIENCY IN BUILDING
22	CODES.
23	(a) In General.—Section 304 of the Energy Con-
24	servation and Production Act (42 U.S.C. 6833) is amend-
25	ed to read as follows:

1	"SEC. 304. UPDATING STATE BUILDING ENERGY EFFI-
2	CIENCY CODES.
3	"(a) Updating National Model Building En-
4	ERGY CODES.—(1)(A) The Secretary shall support updat-
5	ing the national model building energy codes and stand-
6	ards at least every 3 years to achieve the energy savings
7	targets set under subparagraph (B).
8	"(B)(i) The applicable target for overall nationwide
9	energy savings, compared to the 2006 IECC for residen-
10	tial buildings and ASHRAE Standard 90.1-2004 for com-
11	mercial buildings, for the national model building energy
12	codes and standards shall be—
13	"(I) 30 percent in editions of each model code
14	or standard released after the date of enactment of
15	the American Clean Energy and Security Act of
16	2009;
17	"(II) 50 percent in editions of each model code
18	or standard released after January 1, 2016; and
19	"(III) as set by the Secretary under clause (ii).
20	"(ii) The Secretary—
21	"(I) may set targets to supplement the targets
22	set under clause $(i)(I)$ or (II) and under subclause
23	(II) of this clause for any year after 2012; and
24	"(II) shall set targets at least once every 3
25	years after 2016.

1	"(iii) Any target set by the Secretary under clause
2	(ii)—
3	"(I) shall be set at least 3 years in advance of
4	the year in which it first applies;
5	"(II) shall be coordinated with the IECC and
6	ASHRAE Standard 90.1 cycles;
7	"(III) shall be set at the maximum level of en-
8	ergy efficiency that is technologically feasible and
9	life-cycle cost effective, and on a path to achieving
10	net-zero-energy buildings; and
11	"(IV) shall provide for at least an equivalent
12	level of energy efficiency as that of any previous tar-
13	get set under this subparagraph.
14	"(iv) If the Secretary fails to set a target as required
15	under clause (ii)(II), the target shall be the maximum of
16	previous targets set under clause (i).
17	"(2)(A) Not later than 90 days after the date of en-
18	actment of the American Clean Energy and Security Act
19	of 2009, and not later than 90 days after the date of a
20	revision of the provisions of the IECC or ASHRAE Stand-
21	ard 90.1 regarding building energy use, the Secretary
22	shall make a preliminary determination on—
23	"(i) whether the then current version of the
24	IECC or ASHRAE Standard 90.1 regarding build-

1	ing energy use, as so revised, if applicable, will im-
2	prove energy efficiency in buildings; and
3	"(ii) whether such code, standard, or revision
4	will meet the targets set by the Secretary under
5	paragraph (1).
6	The Secretary shall make a final determination not
7	later than 6 months after the date of such prelimi-
8	nary determination.
9	"(B) If the Secretary makes a determination under
10	subparagraph (A)(ii) that a code or standard, or portion
11	of a code or standard, does not meet the targets set under
12	paragraph (1), or if a national model building energy code
13	or standard is not updated for more than 3 years, then
14	the Secretary shall, within 12 months after such deter-
15	mination or such failure to update, establish a modified
16	code or standard that meets such targets. Any such modi-
17	fied code or standard—
18	"(i) shall achieve the maximum level of energy
19	savings that is technologically feasible and life-cycle
20	cost-effective, and on a path to achieving net-zero-
21	energy buildings;
22	"(ii) shall be based on the latest revision of the
23	IECC or ASHRAE Standard 90.1, but may also
24	consider other model codes or standards: and

1	"(iii) shall serve as the baseline for the next de-
2	termination under subparagraph (A)(i).
3	"(C) The Secretary shall provide the opportunity for
4	public comment on targets, determinations, and modified
5	codes and standards under this subsection, and shall pub-
6	lish notice of targets, determinations, and modified codes
7	and standards under this subsection in the Federal Reg-
8	ister.
9	"(D) If the Secretary establishes a code or standard
10	under subparagraph (B) relating to roofs, the Secretary
11	shall include a requirement for the use of roofing materials
12	that demonstrate—
13	"(i) on residential single family homes and
14	other buildings with slanted roofs—
15	"(I) for fiberglass asphalt-shingle roofing,
16	an initial solar reflectance of 0.3 or higher; and
17	"(II) for all other roofing materials, an ini-
18	tial solar reflectance of 0.4 or higher; and
19	"(ii) on commercial buildings and all buildings
20	with flat roofs, roofing materials with—
21	"(I) an initial solar reflectance of 0.7 or
22	higher;
23	"(II) a solar reflectance value 3 years after
24	installation ('h' solar reflectance) of 0.55 or
25	higher; and

1	"(III) a thermal emittance of 0.8 or high-
2	er.
3	Any national model building energy code or standard es-
4	tablished after January 1, 2016, shall include the require-
5	ments specified in this subparagraph.
6	"(b) State Certification of Building Energy
7	CODE UPDATES.—(1) Not later than 12 months after the
8	date of enactment of the American Clean Energy and Se-
9	curity Act of 2009, subject to the provisions of this sec-
10	tion, each State shall certify to the Secretary that it has
11	reviewed and updated the provisions of its residential and
12	commercial building codes regarding energy efficiency.
13	Such certification shall include a demonstration that such
14	State's code provisions meet or exceed the 2009 IECC for
15	residential buildings and the ASHRAE Standard 90.1-
16	2007 for commercial buildings, or achieve equivalent or
17	greater energy savings.
18	"(2)(A) Not later than 12 months after the Secretary
19	makes an affirmative determination under subsection
20	(a)(2)(A)(i) or establishes a modified code or standard
21	under subsection (a)(2)(B), each State shall certify to the
22	Secretary that it has reviewed and updated the provisions
23	of its building code regarding energy efficiency. Such cer-
24	tification shall include a demonstration that such State's

1	code provisions meet or exceed the revised code or stand-
2	ard, or achieve equivalent or greater energy savings.
3	"(B) If the Secretary fails to make the determina-
4	tions under subsection (a)(2)(A)(i) and (ii) by the date
5	specified in subsection (a)(2)(A), or fails to establish a
6	modified code or standard by the date specified in sub-
7	section (a)(2)(B), each State shall within 18 months after
8	the specified date certify that it has reviewed the revised
9	code or standard described in subsection (a)(2)(A), and
10	updated the provisions of its building code regarding en-
11	ergy efficiency to meet or exceed any provisions found to
12	improve energy efficiency in buildings, or to achieve equiv-
13	alent or greater energy savings in other ways.
14	"(c) State Certification of Compliance With
15	BUILDING CODES.—(1) Each State shall, not later than
16	2 years after any certification under subsection (b), certify
17	that it has—
18	"(A) achieved compliance under paragraph (3)
19	with the certified State building energy code or with
20	the associated model code or standard; or
21	"(B) made significant progress under para-
22	graph (4) toward achieving compliance with the cer-
23	tified State building energy code or with the associ-
24	ated model code or standard.

1	If the State does not certify under subparagraph (A) that
2	is has achieved compliance, the State shall repeat the cer-
3	tification under this paragraph each year until it certifies
4	that it has achieved compliance.
5	"(2) A certification under paragraph (1) shall include
6	documentation of the rate of compliance based on inde-
7	pendent inspections of a random sample of the new and
8	renovated buildings covered by the code or standard in the
9	preceding year, or based on an alternative method that
10	yields an accurate measure of compliance.
11	"(3)(A) A State shall be considered to achieve compli-
12	ance under paragraph (1)(A) if—
13	"(i) at least 90 percent of new and renovated
14	building space covered by the code or standard in
15	the preceding year substantially meets all the re-
16	quirements of the code or standard regarding energy
17	efficiency, or achieves an equivalent energy savings
18	level; or
19	"(ii) the estimated excess energy use of new
20	and renovated buildings that did not meet the code
21	or standard in the preceding year, compared to a
22	baseline of comparable buildings that meet the code
23	or standard, is not more than 5 percent of the esti-
24	mated energy use of all new and renovated buildings

1	covered by the code or standard in the preceding
2	year.
3	"(B) Only renovations with building permits are cov-
4	ered under this paragraph. If the Secretary determines the
5	percentage targets under subparagraph (A) are not rea-
6	sonably achievable for renovated residential or commercial
7	buildings, the Secretary may reduce the targets for such
8	renovated buildings to the highest achievable level.
9	"(4)(A) A State shall be considered to have made sig-
10	nificant progress toward achieving compliance for pur-
11	poses of paragraph (1)(B) if the State has developed and
12	is implementing a plan for achieving compliance within 6
13	years after the date the State was required to make a cer-
14	tification under paragraph (1), including training and en-
15	forcement programs and—
16	"(i) after 1 or more years of adequate funding,
17	after the date the State was required to make a cer-
18	tification under paragraph (1), has demonstrated
19	progress, in conformance with such plan, toward
20	compliance;
21	"(ii) after 4 or more years of adequate funding,
22	after the date the State was required to make a cer-
23	tification under paragraph (1), meets the require-
24	ment in paragraph (3), substituting 80 percent for

1	90 percent or substituting 10 percent for 5 percent;
2	or
3	"(iii) has not had more than 6 years of ade-
4	quate funding, after the date the State was required
5	to make a certification under paragraph (1).
6	"(B) Funding shall be considered adequate, for pur-
7	poses of this paragraph, when the Federal Government
8	provides to States in the aggregate at least [amount to
9	be determined in a year in funding and support for devel-
10	opment and implementation of State building energy
11	codes, including for training and enforcement.
12	"(d) Failure To Meet Deadlines.—(1) A State
13	that has not made a certification required under sub-
14	section (b) or (c) by the applicable deadline shall submit
15	to the Secretary—
16	"(A) a report on the status of the State with
17	respect to meeting the requirements and submitting
18	the certification; and
19	"(B) a plan for meeting the requirements and
20	submitting the certification.
21	"(2) Any State from which the Secretary has not re-
22	ceived a certification by a deadline under subsection (b)
23	or (c) of this section is out of compliance with this section.
24	"(3) In any State that is out of compliance with this
25	section, a local government may be in compliance with this

- 1 section by meeting the certification requirements under
- 2 subsections (b) and (c) of this section, not later than 1
- 3 year after the deadline for the State meeting those re-
- 4 quirements.
- 5 "(4) The Secretary shall annually submit to Con-
- 6 gress, and publish in the Federal Register, a report on
- 7 the status of national model building energy codes and
- 8 standards, the status of code and standard adoption and
- 9 compliance in the States, and implementation of this sec-
- 10 tion. The report shall include estimates of impacts of past
- 11 action under this section and projected impacts of future
- 12 action on lifetime energy use by buildings and resulting
- 13 energy costs.
- 14 "(e) Technical Assistance.—(1) The Secretary
- 15 shall on a timely basis provide technical assistance to
- 16 building energy efficiency model code-setting and standard
- 17 development organizations. This assistance shall include
- 18 technical assistance as requested by the organizations in
- 19 evaluating code or standards proposals or revisions, build-
- 20 ing energy analysis and design tools, building demonstra-
- 21 tions, and design assistance and training. The Secretary
- 22 shall submit code and standard amendment proposals,
- 23 with supporting evidence, sufficient to enable the national
- 24 model building energy codes and standards to meet the
- 25 targets in subsection (a)(1).

1	"(2) The Secretary shall support the development of
2	voluntary advanced model codes and standards for resi-
3	dential and commercial buildings, for potential use as na-
4	tional model building energy codes and standards, that
5	achieve energy savings of at least 30 percent compared
6	to the national model building energy codes and standards
7	in effect at that time. Such advanced codes and standards
8	may include elements that address green building design,
9	voluntary and market transformation programs, incentive
10	criteria, and voluntary adoption by States. In providing
11	support under this paragraph, the Secretary shall give
12	preference to voluntary model codes and standards devel-
13	oped by the International Code Council and by ASHRAE.
14	"(3) The Secretary shall provide technical assistance
15	to States—
16	"(A) to implement the requirements of this sec-
17	tion, including procedures for States to demonstrate
18	that their code provisions achieve equivalent or
19	greater energy savings than the national model codes
20	and standards and to document rates of compliance,
21	and to improve and implement State residential and
22	commercial building energy efficiency codes; or
23	"(B) to otherwise promote the design and con-
24	struction of energy efficient buildings.

1	"(f) Availability of Incentive Funding.—(1)
2	The Secretary shall provide incentive funding to States to
3	implement the requirements of this section, and to im-
4	prove and implement State residential and commercial
5	building energy efficiency codes, including increasing and
6	verifying compliance with such codes. In determining
7	whether, and in what amount, to provide incentive funding
8	under this subsection, the Secretary shall consider the ac-
9	tions proposed by the State to implement the requirements
10	of this section.
11	"(2) Additional funding shall be provided under this
12	subsection for implementation of a plan to achieve compli-
13	ance under subsection (c)—
14	"(A) to a State that has adopted residential
15	and commercial building energy efficiency codes on
16	a Statewide basis that meet the requirements of sub-
17	sections (b) and (c); or
18	"(B) in a State that does not meet the criteria
19	in subparagraph (A), to a local government that has
20	adopted and is implementing residential and com-
21	mercial building energy efficiency codes as described
22	in subparagraph (A).
23	"(3) Of the amounts made available under this sub-
24	section, the Secretary may use amounts required, not ex-

1	ceeding \$500,000 for each State, to train State and local
2	officials to implement codes described in paragraph (2).
3	"(4) There are authorized to be appropriated to the
4	Secretary of Energy to carry out this section such sums
5	as are necessary for fiscal year 2010 and each fiscal year
6	thereafter.
7	"(g) Definition.—In this section, the term 'national
8	model building energy codes and standards' means codes
9	and standards—
10	"(1) with respect to which the Secretary has
11	made an affirmative determination under subsection
12	(a)(2)(A)(i) and (ii) ; or
13	"(2) established by the Secretary under sub-
14	section $(a)(2)(B)$.".
15	(b) Definition.—Section 303 of the Energy Con-
16	servation and Production Act (42 U.S.C. 6832) is amend-
17	ed by adding at the end the following new paragraph:
18	"(17) The term 'IECC' means the International
19	Energy Conservation Code.".
20	SEC. 202. BUILDING RETROFIT PROGRAM.
21	(a) Definitions.—For purposes of this section:
22	(1) Performance-based building retrofit
23	PROGRAM.—The term "performance-based building
24	retrofit program" means a program that determines

1	success in energy efficiency based on actual meas-
2	ured savings after a retrofit is complete.
3	(2) Prescriptive building retrofit pro-
4	GRAM.—The term "prescriptive building retrofit pro-
5	gram" means a program that projects success in en-
6	ergy efficiency based on the known effectiveness of
7	measures prescribed to be included in a retrofit.
8	(3) STATE ENERGY PROGRAM.—The term
9	"State Energy Program" means the program under
10	part D of title III of the Energy Policy and Con-
11	servation Act (42 U.S.C. 6321 et seq.)
12	(b) Establishment.—The Administrator shall de-
13	velop and implement, in consultation with the Secretary
14	of Energy, standards for a national energy and environ-
15	mental building retrofit policy for single-family and multi-
16	family residences. The Secretary of Energy shall develop
17	and implement, in consultation with the Administrator,
18	standards for a national energy and environmental build-
19	ing retrofit policy for commercial buildings. The programs
20	to implement the residential and commercial policies based
21	on the standards developed under this section shall to-
22	gether be known as the Retrofit for Energy and Environ-
23	mental Performance (REEP) program.
24	(c) Program Design.—

1	(1) Purpose.—The purpose of the REEP pro-
2	gram is to facilitate the retrofitting of existing build-
3	ings across the United States to achieve maximum
4	cost-effective energy efficiency improvements and
5	significant improvements in water use and other en-
6	vironmental attributes.
7	(2) Federal resources.—The REEP pro-
8	gram shall utilize Federal personnel and resources
9	as needed for development, design, program mate-
10	rials, administration, seed capital, and other activi-
11	ties and support.
12	(3) Assistance to states.—The REEP pro-
13	gram shall provide Federal financial assistance to
14	States, for deposit in their State Energy and Envi-
15	ronment Development Fund, to be administered
16	through the State Energy Program, for management
17	and the accomplishment of the program's objectives
18	at the individual building level, through local agen-
19	cies as appropriate, in accordance with standards
20	and requirements established under this section.
21	(4) State and local assistance.—State and
22	local agencies may offer free or low-cost building au-
23	dits, incentives, technical assistance, training, incen-
24	tive financing, and other forms of assistance to indi-
25	vidual building owners under the standards and

1	guidelines developed for the REEP program in ac-
2	cordance with this section, as well as promotion and
3	management of the REEP program.
4	(5) STRUCTURE OF PROGRAM OPERATIONS.—
5	State and local agencies shall have broad flexibility
6	in the structure of REEP program operations and
7	in the choice of retrofit agencies or contractors.
8	(d) Federal Administration.—
9	(1) Existing programs.— In creating and op-
10	erating the residential REEP program—
11	(A) the Administrator shall make appro-
12	priate use of existing programs, including the
13	Energy Star program and in particular the En-
14	vironmental Protection Agency Energy Star for
15	Buildings program; and
16	(B) the Secretary of Energy shall make
17	appropriate use of existing programs, including
18	delegating authority to the Director of Commer-
19	cial High-Performance Green Buildings ap-
20	pointed under section 421 of the Energy Inde-
21	pendence and Security Act of 2007 (42 U.S.C.
22	17081), who shall designate and provide fund-
23	ing to support a High-Performance Green
24	Building Partnership Consortium pursuant to
25	such section to support efforts under this Act.

1	(2) Consultation and coordination.—The
2	Administrator and the Secretary of Energy shall
3	consult with and coordinate with the Secretary of
4	Housing and Urban Development in carrying out the
5	REEP program.
6	(3) Administration of funding.—The Sec-
7	retary of Energy shall administer the financing for
8	the REEP program, providing funds to and adminis-
9	tration through State Energy Offices under the
10	State Energy Program, or through such existing
11	State offices or entities regulated by the State that
12	the Governor of the State designates to carry out
13	the purposes of this Act. The Secretary shall ensure
14	accountability for funds dispensed, including meas-
15	urement and verification of energy, water, and envi-
16	ronmental savings achieved.
17	(4) Assistance.—The Administrator and the
18	Secretary of Energy shall provide consultation and
19	assistance to State and local agencies for the estab-
20	lishment of revolving loan funds or other forms of fi-
21	nancial assistance under this section.
22	(e) STATE AND LOCAL ADMINISTRATION.—
23	(1) Delegation.—The State Energy Office or
24	designated State agency described in subsection
25	(d)(3) may delegate performance of appropriate ele-

1	ments of the REEP program, upon their request
2	and subject to State law, to counties, municipalities
3	appropriate public agencies, and other divisions of
4	local government, as well as to entities regulated by
5	the State. The State shall ensure accountability for
6	expended funds provided under this section, and
7	shall maintain responsibility for meeting the stand-
8	ards and requirements of the REEP program.
9	(2) Employment.—States and local govern-
10	ment entities may employ public or regulated inves-
11	tor-owned utilities, building auditors and inspectors
12	contractors, nonprofit organizations, and other enti-
13	ties to perform audits and retrofit services under
14	this section.
15	(f) Elements of REEP Program.—The elements
16	of the REEP program shall include the following:
17	(1) The Administrator and the Secretary of En-
18	ergy shall establish goals and standards for accom-
19	plishing the purpose stated in subsection (c)(1), and
20	shall annually review and, as appropriate, revise
21	such goals and standards.
22	(2) Residential Energy Services Network
23	(RESNET) certification of building energy and envi-
24	ronment auditors, inspectors, and raters, or ar

1	equivalent certification system as determined by the
2	Administrator.
3	(3) Building Performance Institute (BPI) cer-
4	tification or licensing by States of building energy
5	and environmental retrofit contractors, or an equiva-
6	lent certification or licensing system as determined
7	by the Administrator.
8	(4) Building Performance Institute, Residential
9	Energy Services Network, or other appropriate in-
10	formation on equipment and procedures, as deter-
11	mined by the Administrator, that contractors can
12	use to test the energy and environmental efficiency
13	of buildings effectively (such as infrared photog-
14	raphy and pressurized testing, and tests for water
15	use and indoor air quality).
16	(5) Provision of clear and effective materials to
17	describe the testing and retrofit processes for typical
18	buildings.
19	(6) Suggested guidelines for offering and man-
20	aging prescriptive building retrofit programs and
21	performance-based building retrofit programs for
22	residential and commercial buildings.
23	(7) Suggested guidelines for applying
24	retrocommissioning principles to improve a build-
25	ing's operations and maintenance procedures.

1	(8) Determination of energy savings in a per-
2	formance-based building retrofit program through—
3	(A) for residential buildings, comparison of
4	before and after retrofit scores on the Home
5	Energy Rating System (HERS) Index, where
6	the final score is produced by an objective third
7	party;
8	(B) for commercial buildings, Environ-
9	mental Protection Agency Portfolio Manager
10	benchmarks; or
11	(C) for either residential or commercial
12	buildings, use of an Administrator-approved
13	simulation program, subject to appropriate soft-
14	ware standards and verification of at least 15
15	percent of all work done.
16	(9) Suggested guidelines for utilizing the En-
17	ergy Star Portfolio Manager, the Home Energy Rat-
18	ing System (HERS) rating system, Home Perform-
19	ance with Energy Star program approvals, and any
20	other tools associated with the retrofit program.
21	(10) Requirements and guidelines for post-ret-
22	rofit inspection and confirmation of work and energy
23	savings.
24	(11) Detailed descriptions of funding options
25	for the benefit of State and local governments, along

1	with model forms, accounting aids, agreements, and
2	guides to best practices.
3	(12) Guidelines for obtaining certification of
4	buildings after retrofit as Energy Star buildings, as-
5	signing Home Energy Rating System (HERS) rat-
6	ing, and completing applicable building performance
7	labels.
8	(13) Sample materials for publicizing the pro-
9	gram to building owners, including public service an-
10	nouncements and advertisements.
11	(14) Processes for tracking the numbers and lo-
12	cations of buildings retrofitted under the REEP pro-
13	gram, with information on projected and actual sav-
14	ings of energy and its value over time.
15	(15) A requirement that building retrofits con-
16	ducted pursuant to a REEP program shall use roof-
17	ing materials that demonstrate—
18	(A) on residential single family homes and
19	other buildings with slanted roofs—
20	(i) for fiberglass asphalt-shingle roof-
21	ing, an initial solar reflectance of 0.3 or
22	higher; or
23	(ii) for all other roofing materials, an
24	initial solar reflectance of 0.4 or higher;
25	and

1	(B) on commercial buildings and all build-
2	ings with flat roofs, roofing materials with—
3	(i) an initial solar reflectance of 0.7 or
4	higher;
5	(ii) a solar reflectance value 3 years
6	after installation ("h" solar reflectance) of
7	0.55 or higher; and
8	(iii) a thermal emittance of 0.8 or
9	higher.
10	(g) Requirements.—As a condition of receiving
11	funding for the REEP program appropriated pursuant to
12	this section, a State shall—
13	(1) adopt the standards for training, certifi-
14	cation of contractors, certification of buildings, and
15	post-retrofit inspection as developed by the Adminis-
16	trator and the Secretary of Energy for residential
17	and commercial buildings, respectively, except as
18	necessary to match local conditions, needs, efficiency
19	opportunities, or other local factors, or to accord
20	with State laws or regulations, and then only after
21	the Administrator or the Secretary of Energy, as ap-
22	propriate, approves such a variance; and
23	(2) establish fiscal controls and accounting pro-
24	cedures (which conform to generally accepted gov-
25	ernment accounting principles) sufficient to ensure

1	proper accounting during appropriate accounting pe-
2	riods for payments received and disbursements, and
3	for fund balances.
4	The Secretary of Energy shall conduct or require each
5	State to have such independent financial audits of REEP-
6	related funding as the Secretary of Energy considers nec-
7	essary or appropriate to carry out the purposes of this
8	section.
9	(h) FINANCIAL OPTIONS TO SUPPORT REEP PRO-
10	GRAM.—The Secretary of Energy and the Administrator
11	shall support the implementation through State REEP
12	programs of alternate means of creating incentives for, or
13	reducing financial barriers to, improved energy and envi-
14	ronmental performance in buildings, consistent with this
15	section, including—
16	(1) implementing prescriptive building retrofit
17	programs and performance-based building retrofit
18	programs;
19	(2) providing credit enhancement, interest rate
20	subsidies, or other credit support;
21	(3) providing initial capital for public revolving
22	fund financing of retrofits, with repayments by bene-
23	ficiary building owners over time through their tax
24	payments, calibrated to create net positive cash flow
25	to the building owner;

1	(4) providing funds to support utility-operated
2	retrofit programs with repayments over time
3	through utility rates, calibrated to create net positive
4	cash flow to the building owner, and transferable
5	from one building owner to the next with the build-
6	ing's utility services; and
7	(5) other means proposed by State and local
8	agencies, subject to the approval of the Secretary of
9	Energy.
10	(i) FEDERAL FINANCIAL SUPPORT.—
11	(1) In general.—Financial support shall be
12	provided to a State Energy Program, for the specific
13	purpose of supporting the REEP program. The Sec-
14	retary and the Administrator may vary or adjust the
15	specific amounts provided pursuant to paragraph (3)
16	in years subsequent to the first year after the date
17	of enactment of this Act as they determine necessary
18	to achieve optimum cost-effectiveness and to maxi-
19	mize incentives to achieve energy efficiency within
20	the total building award amounts provided in that
21	paragraph.
22	(2) Allocation of funding.—
23	(A) INITIAL YEAR.—The Secretary of En-
24	ergy shall allocate amounts appropriated during
25	the initial year of the REEP program among

1	the States in accordance with the State Energy
2	Program formula under section 363 of the En-
3	ergy Policy and Conservation Act (42 U.S.C.
4	6323).
5	(B) Subsequent Years.—In the second
6	year of the REEP program and thereafter, the
7	Secretary of Energy shall allocate amounts
8	among the States as follows:
9	(i) $\frac{1}{2}$ of available or appropriated
10	funds shall be allocated among the States
11	in accordance with the State Energy Pro-
12	gram formula described in subparagraph
13	(A).
14	(ii) ½ of available or appropriated
15	funds shall be allocated among the States
16	in accordance with the relative building en-
17	ergy efficiency and environmental perform-
18	ance of the various States in retrofitting
19	buildings in accordance with this section
20	during the preceding year, with higher allo-
21	cations going to States showing greater
22	success in improving energy and environ-
23	mental performance of the buildings retro-
24	fitted in that State during that preceding
25	year.

1	(3) Forms of support.—State and local
2	REEP programs may make per-building direct ex-
3	penditures for retrofit improvements, or their equiv-
4	alent in indirect financial support, from Federal
5	funds as follows:
6	(A) Residential program.—
7	(i) AWARDS.—For residential build-
8	ings, a program may provide—
9	(I) up to \$500 to support a free
10	or low-cost detailed building energy
11	audit that prescribes energy-reducing
12	measures, with such amount fully re-
13	coverable from the recipient if the pre-
14	scribed measures are not performed,
15	within 1 year after completion of the
16	audit, sufficiently to enable the build-
17	ing to achieve at least a 20 percent
18	reduction in energy use;
19	(II) a total of \$1,000 for meas-
20	ures, prescribed in an audit conducted
21	under subclause (I), designed to re-
22	duce energy consumption by more
23	than 10 percent, and \$2,000 for
24	measures prescribed in such an audit,

1	designed to reduce energy consump-
2	tion by more 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) \$150 for each additional
8	percentage point 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 to exceed 50 per-
17	cent of retrofit costs for each building.
18	(iii) Additional Awards.—Addi-
19	tional awards may be provided, for build-
20	ings achieving at least 20 percent energy
21	savings using funding provided under
22	clause (i), as follows:
23	(I) Water.—Grants of \$600
24	may be made for measures projected
25	or measured (using an appropriate

1	method approved by the Adminis-
2	trator) to achieve at least 35 percent
3	potable water savings through equip-
4	ment or systems with an estimated
5	service life of not less than seven
6	years, and an additional \$20 may be
7	provided for each additional one per-
8	cent of such savings, up to a max-
9	imum total grant of \$1,200.
10	(II) Renewable energy use.—
11	For cost-effective use of renewable en-
12	ergy, an award of up to \$2,000 may
13	be provided for uses with respect to
14	which Federal tax credits are not
15	available, and the Administrator shall
16	develop relevant standards for docu-
17	menting compliance.
18	(B) Commercial Program.—
19	(i) Awards.—For commercial build-
20	ings, a program may provide—
21	(I) \$1,000 to support a free or
22	low-cost building audit of energy-re-
23	duction potential that prescribes en-
24	ergy efficiency improvements and im-
25	provements of other building at-

1	tributes, with such amount fully re-
2	coverable from the recipient if the pre-
3	scribed improvements are not per-
4	formed, within 1 year after completion
5	of the audit, sufficiently to enable the
6	building to achieve at least a 20 per-
7	cent reduction in energy use;
8	(II) \$0.15 per square foot of ret-
9	rofit area for demonstrated energy use
10	reductions from 20 percent to 30 per-
11	$\operatorname{cent};$
12	(III) \$0.75 per square foot for
13	demonstrated energy use reductions
14	from 30 percent to 40 percent;
15	(IV) \$1.60 per square foot for
16	demonstrated energy use reductions
17	from 40 percent to 50 percent; and
18	(V) \$2.50 per square foot for
19	demonstrated energy use reductions
20	exceeding 50 percent.
21	(ii) Limitation.—Amounts provided
22	under subclauses (II) through (V) of clause
23	(i) combined shall not exceed 50 percent of
24	the total retrofit cost of a building.

1	(iii) Additional Awards.—Addi-
2	tional awards may be provided, for build-
3	ings achieving at least 20 percent energy
4	savings using funding provided under
5	clause (i), as follows:
6	(I) Water.—Grants may be
7	made for whole building potable water
8	use reduction (using an appropriate
9	method approved by the Secretary of
10	Energy) for up to 50 percent of the
11	total retrofit cost, including amounts
12	up to—
13	(aa) \$24.00 per thousand
14	gallons per year of potable water
15	savings of 40 percent or more;
16	(bb) \$27.00 per thousand
17	gallons per year of potable water
18	savings of 50 percent or more;
19	and
20	(cc) \$30.00 per thousand
21	gallons per year of potable water
22	savings of 60 percent or more.
23	(II) Renewable energy use.—
24	For cost-effective use of renewable en-
25	ergy, an award of up to \$10,000 may

1	be provided for uses with respect to
2	which Federal tax credits are not
3	available, and the Secretary of Energy
4	shall develop relevant standards for
5	documenting compliance.
6	(III) Environmental improve-
7	MENTS.—For other environmental im-
8	provements relating to—
9	(aa) indoor air quality;
10	(bb) natural lighting;
11	(cc) use of renewable mate-
12	rials; and
13	(dd) any other such im-
14	provements, as determined by the
15	Secretary of Energy, that do not
16	result in a decrease in energy ef-
17	ficiency,
18	an award of up to \$1,000 for improve-
19	ments in each such category.
20	(C) HISTORIC BUILDINGS.—Notwith-
21	standing subparagraphs (A) and (B), a building
22	in or eligible for the National Register of His-
23	toric Places shall be eligible for awards under
24	this paragraph in amounts up to 120 percent of

1	the amounts set forth in subparagraphs (A) and
2	(B).
3	(D) Supplemental support.—State and
4	local governments may supplement the per-
5	building expenditures under this paragraph
6	with funding from other sources.
7	(j) Sources of Federal Funds.—
8	(1) Additional state energy program
9	FUNDS.—Any appropriated funding provided to a
10	State Energy Program that is not specifically re-
11	quired to be expended for a different federally des-
12	ignated purpose may be used to support a REEP
13	program.
14	(2) Program administration.—State Energy
15	Offices or designated State agencies may expend up
16	to 10 percent of funding provided under this section
17	for program administration.
18	(3) Authorization of appropriations.—
19	There are authorized to be appropriated for the pur-
20	poses of this section, for each of fiscal years 2010,
21	2011, 2012, and 2013—
22	(A) such sums as may be necessary to the
23	Secretary of Energy for distribution to State
24	Energy Offices and other designated State
25	agencies in accordance with this section;

1	(B) such sums as may be necessary to the
2	Administrator for program administration
3	costs;
4	(C) such sums as may be necessary to the
5	Secretary of Energy for program administration
6	costs; and
7	(D) such sums as may be necessary to the
8	Secretary of Housing and Urban Development
9	for program administration costs.
10	SEC. 203. ENERGY EFFICIENT MANUFACTURED HOMES.
11	(a) Definitions.—In this section:
12	(1) Manufactured home.—The term "manu-
13	factured home" has the meaning given such term in
14	section 603 of the National Manufactured Housing
15	Construction and Safety Standards Act of 1974 (42
16	U.S.C. 5402).
17	(2) Energy star qualified manufactured
18	HOME.—The term "Energy Star qualified manufac-
19	tured home" means a manufactured home that has
20	been designed, produced, and installed in accordance
21	with Energy Star's guidelines by an Energy Star
22	certified plant.
23	(b) Purpose.—The purpose of this section is to as-
24	sist low-income households residing in manufactured
25	homes constructed prior to 1976 to save energy and en-

1	ergy expenditures by providing support toward the pur-
2	chase of new Energy Star qualified manufactured homes.
3	(c) Grants to State Agencies.—
4	(1) Grants.—The Secretary of Energy may
5	make grants to State agencies responsible for devel-
6	oping State energy conservation plans under section
7	362 of the Energy Policy and Conservation Act (42
8	U.S.C. 6322) (or such other existing State agency
9	that exercises similar functions as the Governor of
10	a State may designate), to provide owners of manu-
11	factured homes constructed prior to 1976 rebates to
12	use toward purchases of new Energy Star qualified
13	manufactured homes.
14	(2) Allocation of grants.—Grants under
15	paragraph (1) shall be distributed to State agencies
16	in States on the basis of their proportionate share
17	of all manufactured homes constructed prior to 1976
18	that are occupied as primary residences in the
19	United States, based on the most recent and accu-
20	rate data available.
21	(3) Rebates.—
22	(A) Primary residence require-
23	MENT.—A rebate described under paragraph
24	(1) may only be made to an owner of a manu-
25	factured home constructed prior to 1976 that is

1	used on a year-round basis as a primary resi-
2	dence.
3	(B) DESTRUCTION AND REPLACEMENT.—
4	A rebate described under paragraph (1) may be
5	made only if the manufactured home con-
6	structed prior to 1976 will be—
7	(i) destroyed (including appropriate
8	recycling); and
9	(ii) replaced, in the same general loca-
10	tion, as determined by the applicable State
11	agency, with an Energy Star qualified
12	manufactured home.
13	(C) SINGLE REBATE.—A rebate described
14	under paragraph (1) may not be provided to
15	any owner of a manufactured home constructed
16	prior to 1976 that was or is a member of a
17	household for which any member of the house-
18	hold was provided a rebate pursuant to this sec-
19	tion.
20	(D) ELIGIBLE HOUSEHOLDS.—To be eligi-
21	ble to receive a rebate described under para-
22	graph (1), an owner of a manufactured home
23	constructed prior to 1976 shall demonstrate to
24	the applicable State agency that the total in-
25	come of all members the owner's household does

1	not exceed 200 percent of the Federal poverty
2	level for income in the applicable area.
3	(4) Rebate Limitation.—Rebates provided by
4	State agencies under this section shall not exceed
5	\$7,500 per manufactured home from any funds ap-
6	propriated pursuant to this section.
7	(5) Use of state funds.—A State agency
8	providing rebates under this section may supplement
9	the amount of such rebates under paragraph (4) by
10	any amount such agency approves if such additional
11	amount is from State funds and other sources, in-
12	cluding private donations or grants from charitable
13	foundations.
14	(6) Similar programs.—
15	(A) STATE PROGRAMS.—A State agency
16	conducting a program that has the purpose of
17	replacing manufactured homes constructed
18	prior to 1976 with Energy Star qualified manu-
19	factured homes, may use funding provided
20	under this section to support such a program,
21	provided such funding does not exceed the re-
22	bate limitation amount under paragraph (4).
23	(B) Federal programs.—The Secretary
24	of Energy shall seek to achieve the purpose of

1	this section through similar Federal programs
2	including—
3	(i) the Weatherization Assistance Pro-
4	gram under part A of title IV of the En-
5	ergy Conservation and Production Act (42
6	U.S.C. 6861 et seq.); and
7	(ii) the program under part D of title
8	III of the Energy Policy and Conservation
9	Act (42 U.S.C. 6321 et seq.).
10	(7) Administration.—
11	(A) Controls and Procedures.—Each
12	State agency receiving funding under this sec-
13	tion shall establish fiscal controls and account-
14	ing procedures sufficient, as determined by the
15	Secretary of Energy, to ensure proper account-
16	ing for disbursements made from such funds
17	and fund balances. Such procedures shall con-
18	form to generally accepted government account-
19	ing principles.
20	(B) Coordination with other state
21	AGENCIES.—A State agency receiving funding
22	under this section may coordinate its efforts,
23	and share funds for administration, with other
24	State agencies involved in low-income housing
25	programs.

1	(C) Administrative expenses.—A State
2	agency receiving funding under this section may
3	expend not more than 10 percent of such funds
4	for administrative expenses.
5	(d) Authorization of Appropriations.—
6	(1) In general.—There are authorized to be
7	appropriated to the Secretary of Energy such sums
8	as may be necessary to carry out this section.
9	(2) Administrative expenses.—Of the
10	amounts available each fiscal year to carry out this
11	section, the Secretary of Energy may expend not
12	more than 5 percent to pay administrative expenses
13	SEC. 204. BUILDING ENERGY PERFORMANCE LABELING
	SEC. 204. BUILDING ENERGY PERFORMANCE LABELING PROGRAM.
14	
14 15	PROGRAM.
14 15 16	PROGRAM. (a) Establishment.—
14 15 16 17	PROGRAM. (a) Establishment.— (1) Purpose.—The Administrator shall established.
14 15 16 17	PROGRAM. (a) Establishment.— (1) Purpose.—The Administrator shall establish a building energy performance labeling program
114 115 116 117 118	PROGRAM. (a) ESTABLISHMENT.— (1) PURPOSE.—The Administrator shall establish a building energy performance labeling program with broad applicability to the residential and com-
114 115 116 117 118 119 220	PROGRAM. (a) ESTABLISHMENT.— (1) PURPOSE.—The Administrator shall establish a building energy performance labeling program with broad applicability to the residential and commercial markets to enable and encourage knowledge
14 15 16 17 18 19 20 21	PROGRAM. (a) ESTABLISHMENT.— (1) PURPOSE.—The Administrator shall establish a building energy performance labeling program with broad applicability to the residential and commercial markets to enable and encourage knowledge about building energy performance by owners and
13 14 15 16 17 18 19 20 21 22 23	PROGRAM. (a) Establishment.— (1) Purpose.—The Administrator shall establish a building energy performance labeling program with broad applicability to the residential and commercial markets to enable and encourage knowledge about building energy performance by owners and occupants and to inform efforts to reduce energy

1	(A) consider existing programs, such as
2	Environmental Protection Agency's Energy
3	Star program, the Home Energy Rating System
4	(HERS) Index, and Federal programs at the
5	Department of Energy;
6	(B) support the development of model per-
7	formance labels for residential and commercial
8	buildings; and
9	(C) utilize incentives and other means to
10	spur use of energy performance labeling by pub-
11	lie and private sector buildings nationwide.
12	(b) Data Assessment for Building Energy Per-
13	FORMANCE.—
14	(1) Initial report.—Not later than 90 days
15	after the date of enactment of this Act, the Adminis-
16	trator shall provide to Congress, as well as to the
17	Secretary of Energy and the Office of Management
18	and Budget, a report identifying—
19	(A) all principal building types for which
20	statistically significant energy performance data
21	exists to serve as the basis of measurement pro-
22	tocols and labeling requirements for achieved
23	building energy performance; and

1	(B) those building types for which addi-
2	tional data is required to enable the develop-
3	ment of such protocols and requirements.
4	(2) Additional updated
5	reports shall be provided as often as considered
6	practicable by the Administrator, but not less than
7	every 2 years.
8	(c) Building Data Acquisition.—
9	(1) Resource requirements.—For all prin-
10	cipal building types identified under subsection (b),
11	the Secretary of Energy, not later than 90 days
12	after a report by the Administrator under subsection
13	(b), shall provide to Congress, the Administrator,
14	and the Office of Management and Budget a state-
15	ment of additional resources needed, if any, to fully
16	develop the relevant data, as well as the anticipated
17	timeline for data development.
18	(2) Consultation.—The Secretary of Energy
19	shall consult with the Administrator concerning the
20	ability to use data series for these additional build-
21	ing types to support the achieved performance com-
22	ponent in the labeling program.
23	(3) Improvements to building energy con-
24	SUMPTION DATABASES.—

1	(A) COMMERCIAL DATABASE.—The Sec-
2	retary of Energy shall support improvements to
3	the Commercial Buildings Energy Consumption
4	Survey (CBECS) as authorized by section
5	205(k) of the Department of Energy Organiza-
6	tion Act (42 U.S.C. 7135(k))—
7	(i) to enable complete and robust data
8	for the actual energy performance of prin-
9	cipal building types currently covered by
10	survey;
11	(ii) to cover additional building types
12	as identified by the Administrator, such
13	that achieved performance measurement
14	protocols are developed for at least 90 per-
15	cent of all major commercial building types
16	within 5 years; and
17	(iii) to include third-party audits of
18	random data samplings to ensure the qual-
19	ity and accuracy of survey information.
20	(B) RESIDENTIAL DATABASES.—The Ad-
21	ministrator, in consultation with the Energy In-
22	formation Administration and the Secretary of
23	Energy, shall support improvements to the Res-
24	idential Energy Consumption Survey (RECS)
25	as authorized by section 205(k) of the Depart-

1	ment of Energy Organization Act (42 U.S.C.
2	7135(k)), or such other residential energy per-
3	formance databases as the Administrator con-
4	siders appropriate, to aid the development of
5	achieved performance measurement protocols
6	for residential building energy use for at least
7	90 percent of the residential market within 5
8	years.
9	(C) Consultation.—The Secretary of
10	Energy and the Administrator shall consult
11	with public, private, and nonprofit sector rep-
12	resentatives from the building industry and real
13	estate industry to assist in the evaluation and
14	improvement of building energy performance
15	databases and labeling programs.
16	(d) Identification of Measurement Protocols
17	FOR ACHIEVED PERFORMANCE.—
18	(1) Proposed protocols and require-
19	MENTS.—At the earliest practicable date, but not
20	later than 1 year after identifying a building type
21	under subsection (b)(1)(A), the Administrator shall
22	propose a measurement protocol for that building
23	type and a requirement detailing how to use that
24	protocol in completing applicable commercial or resi-

1	dential performance labels created pursuant to this
2	section.
3	(2) Final Rule.—After providing for appro-
4	priate notice and comment, the Administrator shall
5	publish a final rule containing a measurement pro-
6	tocol and the corresponding requirements for apply-
7	ing that protocol. Such a rule—
8	(A) shall define the minimum period for
9	measurement of energy use by buildings of that
10	type and other details for determining achieved
11	performance, to include leased buildings or
12	parts thereof;
13	(B) shall identify necessary data collection
14	and record retention requirements; and
15	(C) may specify transition rules and ex-
16	emptions for classes of buildings within the
17	building type.
18	(e) Procedures for Evaluating Designed Per-
19	FORMANCE.—The Administrator shall develop procedures
20	for evaluating the designed performance of individual
21	building types. The Administrator may conduct such feasi-
22	bility studies and demonstration projects as are necessary
23	to evaluate the sufficiency of proposed protocols for de-
24	signed performance.

1	(f) Creation of Building Energy Performance
2	Labeling Program.—
3	(1) Model label.—Not later than 1 year
4	after the date of enactment of this Act, the Adminis-
5	trator shall propose a model building energy label
6	that provides a format—
7	(A) to display achieved performance and
8	designed performance data;
9	(B) that may be tailored for residential
10	and commercial buildings, and for single-occu-
11	pancy and multitenanted buildings; and
12	(C) to display other appropriate elements
13	identified during the development of measure-
14	ment protocols under subsections (d) and (e).
15	(2) Inclusions.—Nothing in this section shall
16	require the inclusion on such a label of designed per-
17	formance data where impracticable or not cost effec-
18	tive, or to preclude the display of both achieved per-
19	formance and designed performance data for a par-
20	ticular building where both such measures are avail-
21	able, practicable, and cost effective.
22	(3) Existing programs.—In developing the
23	model label, the Administrator shall consider exist-
24	ing programs, including—

1	(A) the Environmental Protection Agency's
2	Energy Star Portfolio Manager program and
3	the California HERS II program Custom Ap-
4	proach for the achieved performance component
5	of the label;
6	(B) the Home Energy Rating System
7	(HERS) Index system for the designed per-
8	formance component of the label; and
9	(C) other Federal and State programs, in-
10	cluding the Department of Energy's related
11	programs on building technologies and those of
12	the Federal Energy Management Program.
13	(4) Final Rule.—After providing for appro-
14	priate notice and comment, the Administrator shall
15	publish a final rule containing the label applicable to
16	covered building types.
17	(g) Demonstration Projects for Labeling
18	Program.—
19	(1) IN GENERAL.—The Administrator shall con-
20	duct building energy performance labeling dem-
21	onstration projects for different building types—
22	(A) to ensure the sufficiency of the current
23	Commercial Buildings Energy Consumption
24	Survey and other data to serve as the basis for
25	new measurement protocols for the achieved

1	performance component of the building energy
2	performance labeling program;
3	(B) to inform the development of measure-
4	ment protocols for building types not currently
5	covered by the Commercial Buildings Energy
6	Consumption Survey; and
7	(C) to identify any additional criteria need-
8	ed to ensure effective use of the model label.
9	(2) Participation.—Such demonstration
10	projects shall include participation of—
11	(A) buildings from diverse geographical
12	and climate regions;
13	(B) buildings in both urban and rural
14	areas;
15	(C) single-family residential buildings;
16	(D) multihousing residential buildings with
17	more than 50 units, including at least one
18	project that provides affordable housing to indi-
19	viduals of diverse incomes;
20	(E) single-occupant commercial buildings
21	larger than 30,000 square feet;
22	(F) multitenanted commercial buildings
23	larger than 50,000 square feet; and
24	(G) buildings from both the public and pri-
25	vate sectors.

1	(3) Priority in the selection of dem-
2	onstration projects shall be given to projects that fa-
3	cilitate large-scale implementation of the labeling
4	program for samples of buildings across neighbor-
5	hoods, geographic regions, cities, or States.
6	(4) FINDINGS.—The Administrator shall report
7	any findings from demonstration projects under this
8	subsection, including an identification of any areas
9	of needed data improvement, to the Department of
10	Energy's Energy Information Administration and
11	Building Technologies Program.
12	(5) Coordination.—The Administrator and
13	the Secretary of Energy shall coordinate demonstra-
14	tion projects undertaken pursuant to this subsection
15	with those undertaken as part of the Zero-Net-En-
16	ergy Commercial Buildings Initiative adopted under
17	section 422 of the Energy Independence and Secu-
18	rity Act of 2007 (42 U.S.C. 17082).
19	(h) Implementation of Labeling Program.—
20	(1) In general.—The Administrator, in con-
21	sultation with the Secretary of Energy, shall work
22	with all State Energy Offices established pursuant
23	to part D of title III of the Energy Policy and Con-
24	servation Act (42 U.S.C. 6321 et seq.) or other
25	State authorities as necessary for the purpose of im-

1	plementing the labeling program established under
2	this section for commercial and residential buildings.
3	(2) OUTREACH TO LOCAL AUTHORITIES.—The
4	Administrator shall, acting in consultation and co-
5	ordination with the respective States, encourage use
6	of the labeling program by counties and other local-
7	ities to broaden access to information about building
8	energy use, for example, through disclosure of build-
9	ing label contents in tax, title, and other records
10	those localities maintain. For this purpose, the Ad-
11	ministrator shall develop an electronic version of the
12	label and information that can be readily trans-
13	mitted and read in widely-available computer pro-
14	grams but is protected from unauthorized manipula-
15	tion.
16	(3) Means of implementation.—In adopting
17	the model labeling program established under this
18	section, a State shall require that labeled informa-
19	tion be made accessible to new and prospective own-
20	ers, lenders, tenants, occupants, or other relevant
21	parties in such a way that the information is more
22	fully factored into market transactions. Such
23	accessability may be accomplished through—
24	(A) labeling the building and public disclo-
25	sure of the label at the time of—

1	(i) a building audit conducted with
2	support from Federal or State funds;
3	(ii) a building energy-efficiency ret-
4	rofit conducted in response to such an
5	audit;
6	(iii) a final inspection of major ren-
7	ovations or additions made to a building in
8	accordance with a building permit issued
9	by a local government entity;
10	(iv) a sale that is recorded for title
11	and tax purposes;
12	(v) a new lien recorded on the prop-
13	erty for more than a set percentage of the
14	assessed value of the property if that lien
15	reflects public financial assistance for en-
16	ergy-related improvements to that building;
17	or
18	(vi) a change in ownership or oper-
19	ation of the building for purposes of utility
20	billing; or
21	(B) other appropriate means.
22	(4) Distribution of funds.—
23	(A) ELIGIBLE STATES.—The Adminis-
24	trator shall distribute funds allocated to the
25	program under this section to States that—

1	(i) adopt by statute or regulation a re-
2	quirement that buildings be assessed and
3	labeled, consistent with the labeling re-
4	quirements of the program established
5	under this section, including a requirement
6	described in paragraph (3); or
7	(ii) adopt a plan to implement a
8	model labeling program established under
9	this section within 6 months after the es-
10	tablishment of that program and within 3
11	years after the date of enactment of this
12	Act.
13	(B) ALLOCATION FORMULA.—The alloca-
14	tion of such funds to States shall be as follows:
15	(i) $\frac{1}{3}$ shall be allocated equally among
16	eligible States.
17	(ii) ² / ₃ shall be allocated in proportion
18	to the number of buildings potentially sub-
19	ject to the model labeling program in each
20	State.
21	(5) Guidance.—The Administrator may create
22	or identify model programs and resources to provide
23	guidance to offer to States and localities for creating
24	labeling programs consistent with the model pro-
25	gram established under this section.

1	(6) Progress report.—The Administrator, in
2	consultation with the Secretary of Energy, shall pro-
3	vide a progress report to Congress not later than 3
4	years after the date of enactment of this Act that—
5	(A) evaluates the effectiveness of efforts to
6	advance use of the model labeling program by
7	States and localities;
8	(B) recommends any legislative changes
9	necessary to broaden the use of the model label-
10	ing program; and
11	(C) identifies any changes to broaden the
12	use of the model labeling program that the Ad-
13	ministrator has made or intends to make that
14	do not require additional legislative authority.
15	(i) Implementation of Labeling Program in
16	Federal Buildings.—
17	(1) Use of labeling program.—The Sec-
18	retary of Energy and the Administrator shall use the
19	labeling program established under this section to
20	evaluate energy performance in the facilities of the
21	Department of Energy and the Environmental Pro-
22	tection Agency, respectively, to the extent prac-
23	ticable, and shall encourage and support implemen-
24	tation efforts in other Federal agencies.

1	(2) Annual progress report.—The Sec-
2	retary of Energy and Administrator shall provide an
3	annual progress report to Congress and the Office of
4	Management and Budget detailing efforts to imple-
5	ment this subsection, as well as any best practices
6	or needed resources identified as a result of such ef-
7	forts.
8	(j) Public Outreach.—The Secretary of Energy
9	and the Administrator, in consultation with nonprofit and
10	industry stakeholders with specialized expertise, and in
11	conjunction with other energy efficiency public awareness
12	efforts, shall establish a business and consumer education
13	program to increase awareness about the importance of
14	building energy efficiency and to facilitate widespread use
15	of the labeling program established under this section.
16	(k) Definitions.—In this section:
17	(1) Building Type.—The term "building
18	type" means a grouping of buildings as identified by
19	their principal building activities, or as grouped by
20	their use, including office buildings, laboratories, li-
21	braries, data centers, retail hotels, warehouses, and
22	educational facilities.
23	(2) Measurement Protocol.—The term
24	"measurement protocol" means the methodology,
25	prescribed by the Administrator, for defining a

1	benchmark for building energy performance for a
2	specific building type and for measuring that per-
3	formance against the benchmark.
4	(3) ACHIEVED PERFORMANCE.—The term
5	"achieved performance" means the actual energy
6	consumption of a building as compared to a baseline
7	building of the same type and size, determined by
8	actual consumption data normalized for appropriate
9	variables.
10	(4) Designed Performance.—The term "de-
11	signed performance" means the energy consumption
12	performance a building would achieve if operated
13	consistent with its design intent for building energy
14	use, utilizing a standardized set of operational condi-
15	tions informed by data collected or confirmed during
16	an energy audit.
17	(l) Authorization of Appropriations.—There
18	are authorized to be appropriated—
19	(1) to the Administrator for implementation of
20	this section such sums as may be necessary for each
21	fiscal year; and
22	(2) to the Secretary of Energy for implementa-
23	tion of this section such sums as may be necessary
24	for each fiscal year.

Subtitle B—Lighting and Appliance Energy Efficiency Programs

_	Energy Efficiency Frograms
3	SEC. 211. LIGHTING EFFICIENCY STANDARDS.
4	(a) Outdoor Lighting.—
5	(1) Definitions.—(A) Section 340(1) of the
6	Energy Policy and Conservation Act (42 U.S.C.
7	6311(1)) is amended by striking subparagraph (L)
8	and inserting the following:
9	"(L) Outdoor luminares.
10	"(M) Outdoor high light output lamps.
11	"(N) Any other type of industrial equip-
12	ment which the Secretary classifies as covered
13	equipment under section 341(b).".
14	(B) Section 340 of the Energy Policy and Con-
15	servation Act (42 U.S.C. 6311) is amended by add-
16	ing at the end the following:
17	"(25) The term 'luminaire' means a complete
18	lighting unit consisting of a lamp or lamps, together
19	with parts designed to distribute the light, to posi-
20	tion and protect such lamps, and to connect such
21	lamps to the power supply.
22	"(26) The term 'outdoor luminaire' means a lu-
23	minaire that is listed as suitable for wet locations
24	pursuant to Underwriters Laboratories Inc. stand-
25	ard UL 1598 and is labeled as 'Suitable for Wet Lo-

1	cations' consistent with section 410.4(A) of the Na-
2	tional Electrical Code 2005, except for—
3	"(A) luminaires designed solely for signs
4	that cannot be used in general lighting applica-
5	tions;
6	"(B) portable luminaires designed for use
7	at theatrical and television performance areas
8	and construction sites;
9	"(C) luminaires designed for continuous
10	immersion in swimming pools and other water
11	features;
12	"(D) seasonal luminaires incorporating
13	solely individual lamps rated at 10 watts or
14	less;
15	"(E) luminaires designed solely to be used
16	in emergency conditions;
17	"(F) landscape luminaries, with an inte-
18	grated photoelectric switch or programmable
19	time switch, with a nominal voltage of 15 volts
20	or less; and
21	"(G) components used for repair of in-
22	stalled luminaries.
23	"(27) The term 'outdoor high light output
24	lamp' means a lamp that—

1	"(A) has a rated lumen output not less
2	than 2601 lumens and not greater than $35,000$
3	lumens;
4	"(B) is capable of being operated at a volt-
5	age not less than 110 volts and not greater
6	than 300 volts, or driven at a constant current
7	of 6.6 amperes; and
8	"(C) is not a Parabolic Aluminized Reflec-
9	tor lamp.
10	"(28) The term 'outdoor lighting control' means
11	a device incorporated in a luminaire that receives a
12	signal, from either a sensor (such as an occupancy
13	sensor, motion sensor, or daylight sensor) or an
14	input signal (including analog or digital signals com-
15	municated through wired or wireless technology),
16	and can adjust the light level according to the sig-
17	nal.".
18	(2) Standards.—Section 342 of the Energy
19	Policy and Conservation Act (42 U.S.C. 6313) is
20	amended by adding at the end the following:
21	"(g) Outdoor Luminaires.—
22	"(1) Each outdoor luminaire manufactured on
23	or after January 1, 2011, shall have—
24	"(A) a lighting efficiency of at least 50
25	lumens per watt; and

1	"(B) a lumen maintenance, calculated as
2	mean rated lumens divided by initial lumens, of
3	at least 0.6.
4	"(2) Each outdoor luminaire manufactured on
5	or after January 1, 2013, shall have—
6	"(A) a lighting efficiency of at least 70
7	lumens per watt; and
8	"(B) a lumen maintenance, calculated as
9	mean rated lumens divided by initial lumens, of
10	at least 0.6.
11	"(3) Each outdoor luminaire manufactured on
12	or after January 1, 2015, shall have—
13	"(A) a lighting efficiency of at least 80
14	lumens per watt; and
15	"(B) a lumen maintenance, calculated as
16	mean rated lumens divided by initial lumens, of
17	at least 0.65.
18	"(4) In addition to the requirements of para-
19	graphs (1) through (3), each outdoor luminaire man-
20	ufactured on or after January 1, 2011, shall have
21	the capability of producing at least two different
22	light levels, including 100 percent and 60 percent of
23	full lamp output.
24	"(5)(A) Not later than January 1, 2017, the
25	Secretary shall issue a final rule amending the appli-

1	cable standards established in paragraphs (3) and
2	(4) if technologically feasible and economically justi-
3	fied. Such a final rule shall be effective no later than
4	January 1, 2020.
5	"(B) A final rule issued under subparagraph
6	(A) shall establish efficiency standards at the max-
7	imum level that is technically feasible and economi-
8	cally justified, as provided in subsections (o) and (p)
9	of section 325. The Secretary may also, in such rule-
10	making, amend or discontinue the product exclusions
11	listed in section 340(23)(A) through (G), or amend
12	the lumen maintenance requirements in paragraph
13	(3) if he determines that such amendments are con-
14	sistent with the purposes of this Act.
15	"(C) If the Secretary issues a final rule under
16	subparagraph (A) establishing amended standards,
17	the final rule shall provide that the amended stand-
18	ards apply to products manufactured on or after
19	January 1, 2020, or one year after the date on
20	which the final amended standard is published,
21	whichever is later.
22	"(h) OUTDOOR HIGH LIGHT OUTPUT LAMPS.—Each
23	outdoor high light output lamp manufactured on or after
24	January 1, 2012, shall have a lighting efficiency of at least
25	45 lumens per watt.".

1	(3) Test procedures.—Section 343(a) of the
2	Energy Policy and Conservation Act (42 U.S.C.
3	6314(a)) is amended by adding at the end the fol-
4	lowing:
5	"(10) Outdoor lighting.—
6	"(A) With respect to outdoor luminaries
7	and outdoor high light output lamps, the test
8	procedures shall be based upon the test proce-
9	dures specified in Illuminating Engineering So-
10	ciety procedure LM-79 as of March 1, 2009,
11	and/or other appropriate consensus test proce-
12	dures developed by the Illuminating Engineer-
13	ing Society or other appropriate consensus
14	standards bodies.
15	"(B) If Illuminating Engineering Society
16	procedure LM-79 is amended, the Secretary
17	shall amend the test procedures established in
18	subparagraph (A) as necessary to be consistent
19	with the amended LM-79 test procedure, unless
20	the Secretary determines, by rule, published in
21	the Federal Register and supported by clear
22	and convincing evidence, that to do so would
23	not meet the requirements for test procedures
24	under paragraph (2).

1	"(C) The Secretary may revise the test
2	procedures for outdoor luminaries or outdoor
3	high light output lamps by rule consistent with
4	paragraph (2), and may incorporate as appro-
5	priate consensus test procedures developed by
6	the Illuminating Engineering Society or other
7	appropriate consensus standards bodies.".
8	(4) Preemption.—Section 345 of the Energy
9	Policy and Conservation Act (42 U.S.C. 6316) is
10	amended by adding at the end the following:
11	"(i)(1) Except as provided in paragraph (2), section
12	327 shall apply to outdoor luminaries to the same extent
13	and in the same manner as the section applies under part
14	В.
15	"(2) Any State standard that is adopted on or before
16	January 1, 2015, pursuant to a statutory requirement to
17	adopt efficiency standards for reducing outdoor lighting
18	energy use enacted prior to January, 31, 2008, shall not
19	be preempted.".
20	(b) Portable Lighting.—
21	(1) Portable light fixtures.—
22	(A) Definitions.—Section 321 of the En-
23	ergy Policy and Conservation Act (42 U.S.C.
24	6291) is amended by adding at the end the fol-
25	lowing:

1	"(67) ART WORK LIGHT FIXTURE.—The term
2	'art work light fixture' means a light fixture de-
3	signed only to be mounted directly to an art work
4	and for the purpose of illuminating that art work.
5	"(68) LED LIGHT ENGINE.—The term 'LED
6	light engine' or 'LED light engine with integral heat
7	sink' means a subsystem of an LED light fixture
8	that—
9	"(A) includes 1 or more LED components,
10	including—
11	"(i) an LED driver power source with
12	electrical and mechanical interfaces; and
13	"(ii) an integral heat sink to provide
14	thermal dissipation; and
15	"(B) may be designed to accept additional
16	components that provide aesthetic, optical, and
17	environmental control.
18	"(69) LED LIGHT FIXTURE.—The term 'LED
19	light fixture' means a complete lighting unit con-
20	sisting of—
21	"(A) an LED light source with 1 or more
22	LED lamps or LED light engines; and
23	"(B) parts—
24	"(i) to distribute the light;

1	"(ii) to position and protect the light
2	source; and
3	"(iii) to connect the light source to
4	electrical power.
5	"(70) Light fix-The term 'light fix-
6	ture' means a product designed to provide light that
7	includes—
8	"(A) at least 1 lamp socket; and
9	"(B) parts—
10	"(i) to distribute the light;
11	"(ii) position and protect 1 or more
12	lamps; and
13	"(iii) to connect 1 or more lamps to a
14	power supply.
15	"(71) Portable light fixture.—
16	"(A) IN GENERAL.—The term 'portable
17	light fixture' means a light fixture that has a
18	flexible cord and an attachment plug for con-
19	nection to a nominal 120-volt circuit that—
20	"(i) allows the user to relocate the
21	product without any rewiring; and
22	"(ii) typically can be controlled with a
23	switch located on the product or the power
24	cord of the product.

220

1	"(B) Exclusions.—The term 'portable
2	light fixture' does not include—
3	"(i) direct plug-in night lights, sun or
4	heat lamps, medical or dental lights, port-
5	able electric hand lamps, signs or commer-
6	cial advertising displays, photographic
7	lamps, germicidal lamps, or light fixtures
8	for marine use or for use in hazardous lo-
9	cations (as those terms are defined in
10	ANSI/NFPA 70 of the National Electrical
11	Code); or
12	"(ii) decorative lighting strings, deco-
13	rative lighting outfits, or electric candles or
14	candelabra without lamp shades that are
15	covered by Underwriter Laboratories (UL)
16	standard 588, 'Seasonal and Holiday Dec-
17	orative Products'.".
18	(B) Coverage.—
19	(i) In General.—Section 322(a) of
20	the Energy Policy and Conservation Act
21	(42 U.S.C. 6292(a)) is amended—
22	(I) by redesignating paragraph
23	(20) as paragraph (21); and
24	(II) by inserting after paragraph
25	(19) the following:

1	"(20) Portable light fixtures.".
2	(ii) Conforming amendments.—
3	Section 325(l) of the Energy Policy and
4	Conservation Act (42 U.S.C. 6295(l)) is
5	amended by striking "paragraph (19)"
6	each place it appears in paragraphs (1)
7	and (2) and inserting "paragraph (21)".
8	(C) Test procedures.—Section 323(b)
9	of the Energy Policy and Conservation Act (42
10	U.S.C. 6293(b)) is amended by adding at the
11	end the following:
12	"(19) LED FIXTURES AND LED LIGHT EN-
13	GINES.—Test procedures for LED fixtures and LED
14	light engines shall be based on Illuminating Engi-
15	neering Society of North America (IESNA) test pro-
16	cedure LM-79, Approved Method for Electrical and
17	Photometric Testing of Solid-State Lighting Devices,
18	and IESNA-approved test procedure for testing
19	LED light engines.".
20	(D) STANDARDS.—Section 325 of the En-
21	ergy Policy and Conservation Act (42 U.S.C.
22	6295) is amended—
23	(i) by redesignating subsection (ii) as
24	subsection (nn);

1	(ii) in subsection (nn)(2), as redesig-
2	nated in clause (i) of this subparagraph, by
3	striking "(hh)" and inserting "(mm)"; and
4	(iii) by inserting after subsection (hh)
5	the following:
6	"(ii) Portable Light Fixtures.—
7	"(1) In general.—Subject to paragraphs (2)
8	and (3), portable light fixtures manufactured on or
9	after January 1, 2012, shall meet 1 or more of the
10	following requirements:
11	"(A) Be a fluorescent light fixture that
12	meets the requirements of the Energy Star Pro-
13	gram for Residential Light Fixtures, Version
14	4.2.
15	"(B) Be equipped with only 1 or more
16	GU-24 line-voltage sockets and not be rated for
17	use with incandescent lamps of any type (as de-
18	fined in ANSI standards), and meet the re-
19	quirements of version 4.2 of the Energy Star
20	program for residential light fixtures.
21	"(C) Be an LED light fixture or a light
22	fixture with an LED light engine and comply
23	with the following minimum requirements:
24	"(i) Minimum light output: 200
25	lumens (initial).

1	"(ii) Minimum LED light engine effi-
2	cacy: 40 lumens/watt installed in fixtures
3	that meet the minimum light fixture effi-
4	cacy of 29 lumens/watt or, alternatively, a
5	minimum LED light engine efficacy of 60
6	lumens/watt for fixtures that do not meet
7	the minimum light fixture efficacy of 29
8	lumens/watt.
9	"(iii) All portable fixtures shall have a
10	minimum LED light fixture efficacy of 29
11	lumens/watt and a minimum LED light
12	engine efficacy of 60 lumens/watt by Janu-
13	ary 1, 2016.
14	"(iv) Color Correlated Temperature
15	(CCT): 2700K through 4000K.
16	"(v) Minimum Color Rendering Index
17	(CRI): 75.
18	"(vi) Power factor equal to or greater
19	than 0.70.
20	"(vii) Portable luminaries that have
21	internal power supplies shall have zero
22	standby power when the luminaire is
23	turned off.

1	"(viii) LED light sources shall deliver
2	at least 70 percent of initial lumens for at
3	least 25,000 hours.
4	"(D)(i) Be equipped with an ANSI-des-
5	ignated E12, E17, or E26 screw-based socket
6	and be prepackaged and sold together with 1
7	screw-based compact fluorescent lamp or screw-
8	based LED lamp for each screw-based socket
9	on the portable light fixture.
10	"(ii) The compact fluorescent or LED
11	lamps prepackaged with the light fixture shall
12	be fully compatible with any light fixture con-
13	trols incorporated into the light fixture (for ex-
14	ample, light fixtures with dimmers shall be
15	packed with dimmable lamps).
16	"(iii) Compact fluorescent lamps pre-
17	packaged with light fixtures shall meet the re-
18	quirements of the Energy Star Program for
19	CFLs Version 4.0.
20	"(iv) Screw-based LED lamps shall comply
21	with the minimum requirements described in
22	subparagraph (C).
23	"(E) Be equipped with 1 or more single-
24	ended, non-screw based halogen lamp sockets
25	(line or low voltage), a dimmer control or high-

1	low control, and be rated for a maximum of 100
2	watts.
3	"(2) Review.—
4	"(A) REVIEW.—The Secretary shall review
5	the criteria and standards established under
6	paragraph (1) to determine if revised standards
7	are technologically feasible and economically
8	justified.
9	"(B) Components.—The review shall in-
10	clude consideration of—
11	"(i) whether a separate compliance
12	procedure is still needed for halogen fix-
13	tures described in subparagraph (E) and,
14	if necessary, what an appropriate standard
15	for halogen fixtures shall be;
16	"(ii) whether the specific technical cri-
17	teria described in subparagraphs (A), (C),
18	and (D)(iii) should be modified; and
19	"(iii) which fixtures should be exempt-
20	ed from the light fixture efficacy standard
21	as of January 1, 2016, because the fix-
22	tures are primarily decorative in nature (as
23	defined by the Secretary) and, even if ex-
24	empted, are likely to be sold in limited
25	quantities.

1	"(C) TIMING.—
2	"(i) Determination.—Not later
3	than January 1, 2014, the Secretary shall
4	publish amended standards, or a deter-
5	mination that no amended standards are
6	justified, under this subsection.
7	"(ii) Standards.—Any standards
8	under this paragraph shall take effect on
9	January 1, 2016.
10	"(3) Art work light fixtures.—Art work
11	light fixtures manufactured on or after January 1,
12	2012, shall—
13	"(A) comply with paragraph (1); or
14	"(B)(i) contain only ANSI-designated E12
15	screw-based line-voltage sockets;
16	"(ii) have not more than 3 sockets;
17	"(iii) be controlled with an integral high/
18	low switch;
19	"(iv) be rated for not more than 25 watts
20	if fitted with 1 socket; and
21	"(v) be rated for not more than 15 watts
22	per socket if fitted with 2 or 3 sockets.
23	"(4) Exception from preemption.—Not-
24	withstanding section 327, Federal preemption shall
25	not apply to a regulation concerning portable light

1	fixtures adopted by the California Energy Commis-
2	sion on or before January 1, 2014.".
3	(2) GU-24 BASE LAMPS.—
4	(A) Definitions.—Section 321 of the En-
5	ergy Policy and Conservation Act (42 U.S.C.
6	6291) (as amended by paragraph $(1)(A)$) is
7	amended by adding at the end the following:
8	"(72) GU–24.—The term 'GU–24'" means the
9	designation of a lamp socket, based on a coding sys-
10	tem by the International Electrotechnical Commis-
11	sion, under which—
12	"(A) 'G' indicates a holder and socket type
13	with 2 or more projecting contacts, such as pins
14	or posts;
15	"(B) 'U' distinguishes between lamp and
16	holder designs of similar type that are not
17	interchangeable due to electrical or mechanical
18	requirements; and
19	"(C) 24 indicates the distance in millime-
20	ters between the electrical contact posts.
21	"(73) GU-24 ADAPTOR.—
22	"(A) IN GENERAL.—The term 'GU-24
23	Adaptor' means a 1-piece device, pig-tail, wiring
24	harness, or other such socket or base attach-
25	ment that—

1	"(i) connects to a GU-24 socket on 1
2	end and provides a different type of socket
3	or connection on the other end; and
4	"(ii) does not alter the voltage.
5	"(B) Exclusion.—The term 'GU-24
6	Adaptor' does not include a fluorescent ballast
7	with a GU-24 base.
8	"(74) GU-24 base lamp".—"GU-24 base lamp"
9	means a light bulb designed to fit in a GU-24 sock-
10	et.".
11	(B) Standards.—Section 325 of the En-
12	ergy Policy and Conservation Act (42 U.S.C.
13	6295) (as amended by paragraph $(1)(D)$) is
14	amended by inserting after subsection (ii) the
15	following:
16	"(jj) GU-24 BASE LAMPS.—
17	"(1) In general.—A GU-24 base lamp shall
18	not be an incandescent lamp as defined by ANSI.
19	"(2) GU-24 ADAPTORS.—GU-24 adaptors shall
20	not adapt a GU-24 socket to any other line voltage
21	socket.".
22	(3) Standards for certain incandescent
23	REFLECTOR LAMPS.—Section 325(i) of the Energy
24	Policy and Conservation Act (42 U.S.C. 6293(i)) is

1	amended by adding at the end the following new
2	paragraphs:
3	"(9) Standards for certain incandescent
4	REFLECTOR LAMPS.—(A) No later than 12 months
5	after enactment of this paragraph, the Secretary
6	shall publish a final rule establishing standards for
7	incandescent reflector lamp types specified in para-
8	graph (1)(C) of this subsection. Such standards
9	shall be effective 2 years after publication of the
10	final rule.
11	"(B) If the Secretary fails to issue a final rule
12	before the deadline specified in (i), then, effective
13	three years from the date of enactment of this para-
14	graph, the minimum standard for lamp types speci-
15	fied in 325(i)(1)(C) shall be the same as the stand-
16	ard for other incandescent reflector lamps estab-
17	lished by the Secretary pursuant to this section.
18	"(C) Any rulemaking for incandescent reflector
19	lamps completed after enactment of this section
20	shall consider standards for all incandescent reflec-
21	tor lamps, inclusive of those specified in paragraph
22	(1)(C).
23	"(10) Reflector Lamps.—No later than Jan-
24	uary 1, 2015, the Secretary shall publish a final rule
25	establishing and amending standards for reflector

1	lamps, including incandescent reflector lamps. Such
2	standards shall be effective no sooner than three
3	years after publication of the final rule. Such rule-
4	making shall consider incandescent and non-
5	incandescent technologies.".
6	SEC. 212. OTHER APPLIANCE EFFICIENCY STANDARDS.
7	(a) Standards for Water Dispensers, Hot
8	FOOD HOLDING CABINETS, AND PORTABLE ELECTRIC
9	Spas.—
10	(1) Definitions.—Section 321 of the Energy
11	Policy and Conservation Act (42 U.S.C. 6291), as
12	amended by section 211 of this Act, is further
13	amended by adding at the end the following:
14	"(75) The term 'water dispenser' means a fac-
15	tory-made assembly that mechanically cools and
16	heats potable water and that dispenses the cooled or
17	heated water by integral or remote means.
18	"(76) The term 'bottle-type water dispenser'
19	means a water dispenser that uses a bottle or res-
20	ervoir as the source of potable water.
21	"(77) The term 'point of use water dispenser'
22	means a water dispenser that uses a building's water
23	pipes as the source of potable water.
24	"(78) The term 'commercial hot food holding
25	cabinet' means a heated, fully-enclosed compartment

1	with one or more solid or glass doors that is de-
2	signed to maintain the temperature of hot food that
3	has been cooked in a separate appliance. Such term
4	does not include heated glass merchandizing cabi-
5	nets, drawer warmers, or cook-and-hold appliances.
6	"(79) The term 'portable electric spa' means a
7	factory-built electric spa or hot tub, supplied with
8	equipment for heating and circulating water.".
9	(2) Test procedures.—Section 323(b) of the
10	Energy Policy and Conservation Act (42 U.S.C.
11	6293(b)) is amended by adding at the end the fol-
12	lowing:
13	"(20) Bottle type water dispensers and
14	POINT OF USE WATER DISPENSERS.—Test proce-
15	dures for bottle type water dispenser and point of
16	use water dispensers shall be based on 'Energy Star
17	Program Requirements for Bottled Water Coolers
18	version 1' published by the Environmental Protec-
19	tion Agency. Units with an integral, automatic timer
20	shall not be tested using section D, 'Timer Usage,'
21	of the test criteria.
22	"(21) Commercial hot food holding cabi-
23	NETS.—Test procedures for commercial hot food
24	holding cabinets shall be based on the test proce-
25	dures described in ANSI/ASTM F2140-01 (Test for

1	idle energy rate-dry test). Interior volume shall be
2	based on the method shown in the Environmental
3	Protection Agency's 'Energy Star Program Require-
4	ments for Commercial Hot Food Holding Cabinets'
5	as in effect on August 15, 2003.
6	"(22) Portable electric spas.—Test proce-
7	dures for portable electric spas shall be based on the
8	test method for portable electric spas contained in
9	section 1604, title 20, California Code of Regula-
10	tions as amended on December 3, 2008.".
11	(3) Standards.—Section 325 of the Energy
12	Policy and Conservation Act (42 U.S.C. 6295), as
13	amended by section 211 of this Act, is further
14	amended by adding after subsection (ii) the fol-
15	lowing:
16	"(kk) Bottle Type Water Dispensers and
17	Point of Use Water Dispensers.—Effective January
18	1, 2012, bottle-type water dispensers and point of use
19	water dispensers designed for dispensing both hot and cold
20	water shall not have standby energy consumption greater
21	than 1.2 kilowatt-hours per day.
22	"(ll) Commercial Hot Food Holding Cabi-
23	NETS.—Effective January 1, 2012, commercial hot food
24	holding cabinets with interior volumes of 5 cubic feet or
25	greater shall have a maximum idle energy rate of 40 watts

	255
1	per cubic foot of interior volume. Commercial hot food
2	holding cabinets with interior volumes of less than 5 cubic
3	feet or less shall have a maximum idle energy rate of 40
4	watts.
5	"(mm) Portable Electric Spas.—Effective Janu-
6	ary 1, 2012, portable electric spas shall not have a normal-
7	ized standby power greater than $5(V^2/3)$ Watts where
8	V=the fill volume in gallons.
9	The Secretary of Energy shall consider revisions to the
10	standards in subsections (kk), (ll), and (mm) in accord-
11	ance with subsection (o) and publish a final rule no later
12	than January 1, 2013 establishing such revised standards,
13	or make a finding that no revisions are technically feasible
14	and economically justified. Any such revised standards
15	shall take effect January 1, 2016.".
16	(b) Commercial Furnace Efficiency Stand-
17	ARDS.—Section 342(a) of the Energy Policy and Con-
18	servation Act (42 U.S.C. 6312(a))is amended by inserting
19	after paragraph (10) the following new paragraph
20	"(11) Warm air furnaces.—Each warm air
21	furnace with an input rating of 225,000 Btu per
22	hour or more and manufactured after one year from
23	date of enactment of this paragraph shall meet the
24	following standard levels:

"(A) Gas-fired units.—

25

1	"(i) Minimum combustion efficiency of
2	80 percent.
3	"(ii) Include an interrupted or inter-
4	mittent ignition device.
5	"(iii) Have jacket losses not exceeding
6	0.75 percent of the input rating.
7	"(iv) Have either power venting or a
8	flue damper.
9	"(B) OIL-FIRED UNITS.—
10	"(i) Minimum thermal efficiency of 81
11	percent
12	"(ii) Have jacket losses not exceeding
13	0.75 percent of the input rating;
14	"(iii) Have either power venting or a
15	flue damper.".
16	SEC. 213. APPLIANCE EFFICIENCY DETERMINATIONS AND
17	PROCEDURES.
18	(a) Definition of Energy Conservation Stand-
19	ARD.—Section 321(6) of the Energy Policy and Conserva-
20	tion Act (42 U.S.C. 6291(6)) is amended to read as fol-
21	lows:
22	"(6) Energy conservation standard.—
23	"(A) In general.—The term 'energy con-
24	servation standard' means 1 or more perform-
25	ance standards that—

1	"(i) for covered products (excluding
2	clothes washers, dishwashers, showerheads,
3	faucets, water closets, and urinals), pre-
4	scribe a minimum level of energy efficiency
5	or a maximum quantity of energy use, de-
6	termined in accordance with test proce-
7	dures prescribed under section 323;
8	"(ii) for showerheads, faucets, water
9	closets, and urinals, prescribe a minimum
10	level of water efficiency or a maximum
11	quantity of water use, determined in ac-
12	cordance with test procedures prescribed
13	under section 323; and
14	"(iii) for clothes washers and dish-
15	washers—
16	"(I) prescribe a minimum level of
17	energy efficiency or a maximum quan-
18	tity of energy use, determined in ac-
19	cordance with test procedures pre-
20	scribed under section 323; and
21	"(II) may include a minimum
22	level of water efficiency or a maximum
23	quantity of water use, determined in
24	accordance with those test procedures.

1	"(B) Inclusions.—The term 'energy con-
2	servation standard' includes—
3	"(i) 1 or more design requirements, if
4	the requirements were established—
5	"(I) on or before the date of en-
6	actment of this subclause;
7	"(II) as part of a consensus
8	agreement under section $325(p)(4)$; or
9	"(III) as part of a final rule pub-
10	lished on or after January 1, 2012,
11	and
12	"(ii) any other requirements that the
13	Secretary may prescribe under section
14	325(r).
15	"(C) Exclusion.—The term 'energy con-
16	servation standard' does not include a perform-
17	ance standard for a component of a finished
18	covered product, unless regulation of the com-
19	ponent is authorized or established pursuant to
20	this title.".
21	(b) Adopting Consensus Test Procedures and
22	Test Procedures in Use Elsewhere.—Section
23	323(b) of the Energy Policy and Conservation Act (42
24	U.S.C. 6293(b)), as amended by section 212 of this Act,

1	is further amended by adding the following new paragraph
2	after paragraph (21):
3	"(23) Consensus and alternate test pro-
4	CEDURES.—
5	"(A) RECEIPT OF JOINT RECOMMENDA-
6	TION OR ALTERNATE TESTING PROCEDURE.—
7	On receipt of—
8	"(i) a statement that is submitted
9	jointly by interested persons that are fairly
10	representative of relevant points of view
11	(including representatives of manufactur-
12	ers of covered products, States, and effi-
13	ciency advocates), as determined by the
14	Secretary, and contains recommendations
15	with respect to the testing procedure for a
16	covered product, or
17	"(ii) a submission of a testing proce-
18	dure currently in use for a covered product
19	by a State, nation, or group of nations—
20	"(I) if the Secretary determines
21	that the recommended testing proce-
22	dure contained in the statement or
23	submission is in accordance with sub-
24	section (b)(3), the Secretary may
25	issue a final rule that establishes an

1	energy or water conservation testing
2	procedure that is published simulta-
3	neously with a notice of proposed rule-
4	making that proposes a new or
5	amended energy or water conservation
6	testing procedure that is identical to
7	the testing procedure established in
8	the final rule to establish the rec-
9	ommended testing procedure (referred
10	to in this paragraph as a 'direct final
11	rule'); or
12	"(II) if the Secretary determines
13	that a direct final rule cannot be
14	issued based on the statement or sub-
15	mission, the Secretary shall publish a
16	notice of the determination, together
17	with an explanation of the reasons for
18	the determination.
19	"(B) Public Comment.—The Secretary
20	shall solicit public comment for a period of at
21	least 110 days with respect to each direct final
22	rule issued by the Secretary under subpara-
23	graph(A)(ii)(I).
24	"(C) WITHDRAWAL OF DIRECT FINAL
25	RULES.—

1	"(i) In general.—Not later than
2	120 days after the date on which a direct
3	final rule issued under subparagraph
4	(A)(ii)(I) is published in the Federal Reg-
5	ister, the Secretary shall withdraw the di-
6	rect final rule if—
7	"(I) the Secretary receives 1 or
8	more adverse public comments relat-
9	ing to the direct final rule under sub-
10	paragraph (B)or any alternative joint
11	recommendation; and
12	"(II) based on the rulemaking
13	record relating to the direct final rule,
14	the Secretary determines that such
15	adverse public comments or alter-
16	native joint recommendation may pro-
17	vide a reasonable basis for with-
18	drawing the direct final rule under
19	paragraph (3) or any other applicable
20	law.
21	"(ii) Action on withdrawal.—On
22	withdrawal of a direct final rule under
23	clause (i), the Secretary shall—
24	"(I) proceed with the notice of
25	proposed rulemaking published simul-

1	taneously with the direct final rule as
2	described in subparagraph (A)(ii)(I);
3	and
4	"(II) publish in the Federal Reg-
5	ister the reasons why the direct final
6	rule was withdrawn.
7	"(iii) Treatment of withdrawn di-
8	RECT FINAL RULES.—A direct final rule
9	that is withdrawn under clause (i) shall
10	not be considered to be a final rule for
11	purposes of subsection (b).
12	"(D) Effect of Paragraph.—Nothing
13	in this paragraph authorizes the Secretary to
14	issue a direct final rule based solely on receipt
15	of more than 1 statement containing rec-
16	ommended test procedures relating to the direct
17	final rule.".
18	(c) Updating Television Test Methods.—Sec-
19	tion 323(b) of the Energy Policy and Conservation Act
20	$(42\ U.S.C.\ 6293(b))(42\ U.S.C.\ 6293(b)), as amended by$
21	subsection $(a)(2)$ is further amended by adding at the end
22	the following new paragraph:
23	"(24) Televisions.—(A) On the date of enact-
24	ment of this section, Appendix H to Subpart B of
25	Part 430 of the United States Code of Federal Reg-

1	ulations, 'Uniform Test Method for Measuring the
2	Energy Consumption of Television Sets', is repealed.
3	"(B) No later than 12 months after enactment
4	of this paragraph the Secretary shall publish in the
5	Federal Register a final rule prescribing a new test
6	method for televisions.".
7	(d) Criteria for Prescribing New or Amended
8	Standards.—(1) Section 325(o)(2)(B)(i) of the Energy
9	Policy and Conservation Act (42 U.S.C. 6295(o)(2)(B)(i))
10	is amended as follows:
11	(A) By striking "and" at the end of subclause
12	(VI).
13	(B) By and inserting the following new sub-
14	clauses after subclause (VI):
15	"(VII) the estimated value of the
16	carbon dioxide or other greenhouse
17	gas emission reductions that will be
18	achieved by virtue of the higher en-
19	ergy efficiency of the covered products
20	resulting from the imposition of the
21	standard;
22	"(VIII) the estimated impact of
23	standards for a particular product on
24	average consumer energy prices;

1	"(IX) the increased energy effi-
2	ciency that may be attributable to the
3	installation of Smart Grid tech-
4	nologies or capabilities in the covered
5	products, if applicable in the deter-
6	mination of the Secretary;
7	"(X) the commercial availability
8	in the United States or in other na-
9	tions of examples of covered products
10	that achieve significantly higher effi-
11	ciency standards for energy or for
12	water, including their degree of mar-
13	ket penetration; and".
14	(C) By redesignating subclause (VII) as sub-
15	clause (XI).
16	(2) Section 325(o)(2)(B)(iii) of such Act is amended
17	as follows:
18	(A) By striking "three" and inserting "5".
19	(B) By striking the last sentence and inserting
20	the following: "Such a presumption may be rebutted
21	only if the Secretary finds, based on clear, con-
22	vincing, and reliable evidence, that—
23	"(I) such standard level would
24	cause serious and unavoidable hard-
25	ship to the average consumer of the

1	product, or to manufacturers sup-
2	plying a significant portion of the
3	market for the product, that substan-
4	tially outweighs the standard level's
5	benefits;
6	"(II) the standard and imple-
7	menting regulations cannot be de-
8	signed to avoid or mitigate the hard-
9	ship identified under subparagraph I,
10	through the adoption of regional
11	standards consistent with paragraph
12	(6) of this subsection, or other reason-
13	able means consistent with this chap-
14	ter;
15	"(III) the same or substantially
16	similar hardship would not occur
17	under a standard adopted in the ab-
18	sence of the presumption, but that
19	otherwise meets the requirements of
20	this section; and
21	"(IV) the hardship cannot be
22	avoided or mitigated pursuant the
23	procedures specified in section 504 of
24	the Department of Energy Organiza-
25	tion Act (42 U.S.C. 7194).

1	A determination by the Secretary that the
2	criteria triggering the such presumption
3	are not met, or that the criterion for rebut-
4	ting the presumption are met shall not be
5	taken into consideration in the Secretary's
6	determination of whether a standard is
7	economically justified.".
8	(e) Obtaining Appliance Information From
9	Manufacturers.—Section 326(d) of the Energy Policy
10	and Conservation Act (42 U.S.C. 6295(d)) is amended to
11	read as follows:
12	"(d) Information Requirements.—(1) For pur-
13	poses of carrying out this part, the Secretary shall publish
14	proposed regulations not later than one year from the en-
15	actment of the American Clean Energy and Security Act
16	of 2009, and after receiving public comment, final regula-
17	tions not later than 18 months from such date of enact-
18	ment under this part or other provision of law adminis-
19	tered by the Secretary, which shall require each manufac-
20	turer of a covered product to submit information or re-
21	ports to the Secretary on an annual basis in a form adopt-
22	ed by the Secretary. Such reports shall include informa-
23	tion or data with respect to—
24	"(A) the manufacturers' compliance with all re-
25	quirements applicable pursuant to this part;

1	"(B) the economic impact of any proposed en-
2	ergy conservation standard;
3	"(C) the manufacturers' annual shipments of
4	each class or category of covered products, orga-
5	nized, to the maximum extent practicable, by—
6	"(i) energy efficiency, energy use, and, if
7	applicable, water use;
8	"(ii) the presence or absence of such effi-
9	ciency related or energy consuming operational
10	characteristics or components as the Secretary
11	determines are relevant for the purposes of car-
12	rying out this part; and
13	"(iii) the State or regional location of sale,
14	for covered products for which the Secretary
15	may adopt regional standards; and
16	"(D) such other categories of information as
17	the Secretary deems relevant to carry out this part,
18	including such other information as may be nec-
19	essary to establish and revise test procedures, label-
20	ing rules, and energy conservation standards and to
21	insure compliance with the requirements of this
22	part.
23	"(2) In adopting regulations under this subsection,
24	the Secretary shall consider existing public sources of in-

- 1 formation, including nationally recognized certification
- 2 programs of trade associations.
- 3 "(3) The Secretary shall exercise authority under this
- 4 section in a manner designed to minimize unnecessary
- 5 burdens on manufacturers of covered products.
- 6 "(4) To the extent that they do not conflict with the
- 7 duties of the Secretary in carrying out this part, the provi-
- 8 sions of section 796(d) of title 15 shall apply with respect
- 9 to information obtained under this subsection to the same
- 10 extent and in the same manner as they apply with respect
- 11 to other energy information obtained under section 15
- 12 U.S.C. 796.".
- 13 (f) State Waiver.—Section 327(c) of the Energy
- 14 Policy and Conservation Act (42 U.S.C. 6297(c)) is
- 15 amended by striking "and" at the end of paragraph (8),
- 16 by striking the period at the end of paragraph (9) and
- 17 inserting "; and" and by adding at the end the following:
- 18 "(10) is a regulation concerning standards for
- 19 hot food holding cabinets, drinking water dispensers
- and portable electric spas adopted by the California
- 21 Energy Commission on or before January 1, 2013.".
- 22 (g) Waiver of Federal Preemption.—Subsection
- 23 (b) of section 327 of the Energy Policy and Conservation
- 24 Act (42 U.S.C. 6297(d)) is amended as follows:

1	(1) In subparagraph (A) of paragraph (1) of
2	such subsection (b) by inserting "statute or" be-
3	tween "State" and "regulation" in both instances
4	where it occurs.
5	(2) In subparagraph (B) of paragraph (1) of
6	such subsection (b) by adding at the following at the
7	end thereof: "In making such a finding, the Sec-
8	retary may not reject a petition for failure of the pe-
9	titioning State or river basin commission to produce
10	confidential information maintained by any manu-
11	facturer or distributor, or group or association of
12	manufacturers or distributors, and which the peti-
13	tioning party does not have the legal right to ob-
14	tain.".
15	(3) In clause (ii) of paragraph (1)(C) of such
16	subsection (b) by inserting "estimated"
17	before "costs" in both instances where it appears.
18	(4) In paragraph (1)(C)(ii) of such subsection
19	(b) by striking "in the context of the State's energy
20	plan and forecast,".
21	(h) Inclusion of Carbon Output on Appliance
22	"Energyguide" Labels.—(1) Section 324(a)(2) of the
23	Energy Policy and Conservation Act (42 U.S.C.
24	6294(a)(2)) is amended by adding the following at the
25	end:

1	"(I)(i) Not later than 90 days after the
2	date of enactment of this subparagraph, the
3	Commission shall initiate a rulemaking to im-
4	plement the additional labeling requirements
5	specified in subsection $(c)(1)(C)$ of this section
6	with an effective date for the revised labeling
7	requirement not later than 6 months from
8	issuance of the final rule.
9	"(ii) Not later than 18 months after the
10	date of enactment of this subparagraph, the
11	Commission shall complete the rulemaking initi-
12	ated under clause (i).
13	"(iii) Not later than 90 days after issuance
14	of the final rule as provided in this subpara-
15	graph, the Secretary shall issue calculation
16	methods required to effectuate the labeling re-
17	quirements specified in subsection $(c)(1)(C)$ of
18	this section."
19	(2) Section 324(c)(1) of the Energy Policy and
20	Conservation Act (42 U.S.C. 6294(c)(1)) is amend-
21	ed —
22	(A) by striking "and" at the end of sub-
23	paragraph (A);
24	(B) by striking the period at the end of
25	subparagraph (B); and

1	(C) by adding at the end the following new
2	subparagraphs:
3	"(C) for products or groups of products
4	providing a comparable function (including the
5	group of products comprising the heating func-
6	tion of heat pumps and furnaces) among cov-
7	ered products listed in paragraphs (3), (4), (5),
8	(8), (9), (10) and (11) of section 322 (a) of this
9	part, and others designated by the Secretary,
10	the estimated total annual atmospheric carbon
11	dioxide emissions (or their equivalent in other
12	greenhouse gases) associated with, or caused
13	by, the product, calculated utilizing the fol-
14	lowing:
15	"(i) national average energy use for
16	the product including energy consumed at
17	the point of end use based on test proce-
18	dures developed under section 323 of this
19	part;
20	"(ii) national average energy con-
21	sumed or lost in the production, genera-
22	tion, transportation, storage, and distribu-
23	tion of energy to the point of end use; and

1	"(iii) any direct emissions of green-
2	house gases from the product during nor-
3	mal use;
4	"(D) In determining the national average
5	energy consumption and total annual atmos-
6	pheric carbon dioxide emissions, the Secretary
7	shall utilize Federal government sources, includ-
8	ing the Energy Information Administration An-
9	nual Energy Review, the Environmental Protec-
10	tion Agency eGRID data base, Environmental
11	Protection Agency AP-42 Emission Factors as
12	amended, and other sources determined to be
13	appropriate by the Secretary; and
14	"(E) information presenting, for each
15	product (or group of products providing the
16	comparable function) identified in section
17	(c)(1)(C) of this section, the estimated annual
18	carbon dioxide emissions calculated within the
19	range of emissions calculated for all models of
20	the product or group according to its function,
21	including those models consuming fuels and
22	those models not consuming fuels.".
23	(i) Permitting States to Seek Injunctive En-
24	FORCEMENT.—Section 334 of the Energy Policy and Con-

1	servation Act (42 U.S.C. 6304(a)) is amended to read as
2	follows:
3	"SEC. 334. JURISDICTION AND VENUE.
4	"(a) Jurisdiction.—The United States district
5	courts shall have jurisdiction to restrain—
6	"(1) any violation of section 332; and
7	"(2) any person from distributing in commerce
8	any covered product which does not comply with an
9	applicable rule under section 324 or 325.
10	"(b) AUTHORITY.—Any action referred to in sub-
11	section (a) shall be brought by the Commission or by the
12	attorney general of a State in the name of the State, ex-
13	cept that—
14	"(1) any such action to restrain any violation of
15	section 332(a)(3) which relates to requirements pre-
16	scribed by the Secretary or any violation of section
17	332(a)(4) which relates to request of the Secretary
18	under section 326(b)(2) shall be brought by the Sec-
19	retary; and
20	"(2) any violation of section 332(a)(5) or
21	332(a)(7) shall be brought by the Secretary or by
22	the attorney general of a State in the name of the
23	State.
24	"(c) Venue and Service of Process.—Any such
25	action may be brought in the United States district court

1	for a district wherein any act, omission, or transaction
2	constituting the violation occurred, or in such court of the
3	district wherein the defendant is found or transacts busi-
4	ness. In any action under this section, process may be
5	served on a defendant in any other district in which the
6	defendant resides or may be found.".
7	(j) Treatment of Appliances Within Building
8	Codes.—(1) Section 327(f)(3) of the Energy Policy and
9	Conservation Act (42 U.S.C. 6297(f)(3))is amended by
10	striking subparagraphs (B) through (E) and inserting the
11	following:
12	"(B) The code meets at least one of the
13	following requirements—
14	"(i) The code does not require that
15	the covered product have an energy effi-
16	ciency exceeding—
17	"(I) the applicable energy con-
18	servation standard established in or
19	prescribed under section 325;
20	
	"(II) the level required by a reg-
21	"(II) the level required by a reg- ulation of that State for which the
2122	
	ulation of that State for which the

1 "(III) the required level es	tab-
2 lished in the International En	ergy
Conservation Code or in a standar	d of
4 the American Society of Heating,	Re-
5 frigerating and Air-Conditioning	En-
6 gineers.	
7 "(ii) If the code uses one or n	nore
8 baseline building designs against which	ı all
9 submitted building designs are to be ev	alu-
ated and such baseline building des	igns
11 contain a covered product subject to an	en-
12 ergy conservation standard established	l in
or prescribed under section 325, the b	ase-
line building designs are based on an	effi-
ciency level for such covered product w	hich
meets but does not exceed one of the le	evels
specified in clause (i).	
18 "(iii) If the code sets forth one	or
more optional combinations of items w	hich
20 meet the energy consumption or conse	rva-
21 tion objective, in at least one combina	tion
that the State has found to be reason	ably
23 achievable using commercially avail	able
24 technologies the efficiency of the covered	ered

1	product meets but does not exceed one of
2	the levels specified in clause (i).
3	"(C) The credit to the energy consumption
4	or conservation objective allowed by the code for
5	installing covered products having energy effi-
6	ciencies exceeding one of the levels specified in
7	subparagraph (B)(i) is on a one-for-one equiva-
8	lent energy use or equivalent energy cost basis,
9	taking into account the typical lifetime of the
10	product.
11	"(D) The energy consumption or conserva-
12	tion objective is specified in terms of an esti-
13	mated total consumption of energy (which may
14	be calculated from energy loss- or gain-based
15	codes) utilizing an equivalent amount of energy
16	(which may be specified in units of energy or its
17	equivalent cost) and equivalent lifetimes.
18	"(E) The estimated energy use of any cov-
19	ered product permitted or required in the code,
20	or used in calculating the objective, is deter-
21	mined using the applicable test procedures pre-
22	scribed under section 323, except that the State
23	may permit the estimated energy use calcula-
24	tion to be adjusted to reflect the conditions of
25	the areas where the code is being applied if

1	such adjustment is based on the use of the ap-
2	plicable test procedures prescribed under sec-
3	tion 323 or other technically accurate docu-
4	mented procedure.".
5	(2) Section 327(f)(4)(B) of the Energy Policy
6	and Conservation Act (42 U.S.C. 6297(f)(4)(B)) is
7	amended to read as follows:
8	"(B) If a building code requires the instal-
9	lation of covered products with efficiencies ex-
10	ceeding the levels and requirements specified in
11	paragraph (3)(B), such requirement of the
12	building code shall not be applicable unless the
13	Secretary has granted a waiver for such re-
14	quirement under subsection (d) of this sec-
15	tion.".
16	SEC. 214. BEST-IN-CLASS APPLIANCES DEPLOYMENT PRO-
17	GRAM.
18	(a) In General.—The Secretary of Energy shall, in
19	consultation with the Administrator, establish and admin-
20	ister a program to be known as the "Best-in-Class Appli-
21	ances Deployment Program".
22	(b) Purpose.—The purpose of the Best-in-Class Ap-
23	pliances Deployment Program is to reward retailers with
24	bonuses for increasing the sales of best-in-class high-effi-
25	ciency installed building equipment, high-efficiency con-

1	sumer electronics, and high-efficiency household appliance
2	models, with the goal of reducing life-cycle costs for con-
3	sumers, encouraging innovation, and maximizing energy
4	savings and public benefit. The program shall include
5	bounties under subsection (c) to retailers for the replace-
6	ment and recycling of old, inefficient, and environmentally
7	harmful appliances. The program shall also include bo-
8	nuses under subsection (d) to manufacturers for devel-
9	oping new Superefficient Best-in-Class Products.
10	(b) Incentives for Sales of Best-in-Class
11	PRODUCT MODELS.—
12	(1) Selection of Best-in-class product
13	MODELS.—In establishing the program, the Sec-
14	retary of Energy shall use broad product classes and
15	select as qualifying Best-in-Class Product models no
16	more than the most efficient ten percent of the com-
17	mercially available product models in a class that
18	demonstrate, as a group, a distinctly greater energy
19	efficiency than the average energy efficiency of that
20	class of appliances. In selecting models, the Sec-
21	retary shall—
22	(A) identify commercially available models
23	in the relevant class of products;
24	(B) identify the subgroup and percentage
25	of those models (not greater than 10 percent)

1	that the Secretary believes share the distinctly
2	higher energy-efficiency characteristics that
3	warrant designation as best-in-class;
4	(C) specify the higher energy-efficiency
5	characteristic they share;
6	(D) announce the best-in-class designation
7	and the best-in-class bonus to be paid for each
8	sale of an eligible best-in-class model over a 3-
9	year period beginning on the date of the an-
10	nouncement;
11	(E) add other models in that class to the
12	list of best-in-class models eligible for the bonus
13	as they demonstrate their ability to meet the
14	higher-efficiency characteristics on which the
15	designation was made; and
16	(F) make bonus payments for qualifying
17	models sold during the 3-year period.
18	(2) Review of Best-in-class standards.—
19	The Secretary shall review annually the product-spe-
20	cific criteria and the product models that qualify as
21	Best-in-Class Products and, after a 30-day comment
22	period, make upwards adjustments in the efficiency
23	criteria as required to maintain an appropriate ratio
24	of such product models to the total number of prod-
25	uct models in the product class.

1	(3) Upgrade of Best-in-class product eli-
2	GIBILITY.—To the extent that the Secretary deter-
3	mines to increase the energy efficiency required to
4	qualify for best-in-class designation within any group
5	of product models, the Secretary shall—
6	(A) consider any Superefficient Best-in-
7	Class Product models that have been designated
8	pursuant to subsection (d);
9	(B) specify and announce the new higher
10	best-in-class standard;
11	(C) list those models that qualify as best-
12	in-class under the new higher standard;
13	(D) announce any change in the bonus
14	payment appropriate to increase the market
15	share of such best-in-class models, which shall
16	not be lower than any ongoing bonus payment
17	during the 3-year period for any prior designa-
18	tion of best-in-class models;
19	(E) pay the new bonus payment for any
20	models already qualifying under the earlier
21	best-in-class standard that continue to qualify
22	under the revised standard for a new 3-year-pe-
23	riod; and
24	(F) continue paying bonus payments at the
25	original level to any models that qualified at

1	that level but do not qualify at the new level for
2	the remainder of the 3-year period announced
3	with the original designation.
4	(4) Size of individual bonus payments.—
5	The size of each bonus payment shall be the product
6	of—
7	(A) an amount determined by the Sec-
8	retary; and
9	(B) the difference in energy consumption
10	as determined by comparing the energy used by
11	the qualifying product and the energy used by
12	the average product in the product class.
13	The Secretary shall determine the amount under
14	subparagraph (A) for each product type in consulta-
15	tion with State and utility efficiency program admin-
16	istrators as well as the Administrator, based on esti-
17	mates of the amount of bonus payment that would
18	provide significant incentive to increase the market
19	share of Best-in-Class Products.
20	(5) Eligible bonus recipient.—(A) The
21	Secretary shall ensure that not more than 1 bonus
22	payment is provided to distributors and retailers per
23	unit of eligible models sold.
24	(B) In this section—

1	(i) the term "retailer" means an indi-
2	vidual, organization, or company that sells
3	products directly to end-users; and
4	(ii) the term "distributor" mean an indi-
5	vidual, organization, or company that sells
6	products in multiple lots and not directly to in-
7	dividual end-users.
8	(C) The Secretary may make distributors eligi-
9	ble to receive the best-in-class incentive for sales
10	that are not to the final end-user in addition to re-
11	tailers to the extent that the Secretary determines
12	that for a particular product category distributors
13	are well situated to increase sales of Best-in-Class
14	Products.
15	(e) Bounties for Replacement and Retirement
16	OF EXISTING LOW-EFFICIENCY PRODUCTS.—
17	(1) The Secretary of Energy shall establish a
18	program to make a bounty payment for the recovery
19	and recycling of older operating low-efficiency appli-
20	ances that might otherwise continue in operation.
21	(2) The Secretary shall offer a bounty as an ad-
22	ditional incentive for retailers based on documenta-
23	tion that the sales of a Best-in-Class Product were
24	accompanied by the retirement and recycling of an
25	existing inefficient but still-functioning product by

1	the consumer to whom the Best-in-Class Product
2	was sold.
3	(3) The bounty payment shall be based on the
4	difference between the estimated energy use of the
5	product replaced and the energy use of an average
6	new product in the product class, discounted for the
7	estimated remaining lifetime of the product that was
8	recycled.
9	(4) The Secretary may specify that the avail-
10	ability of a product bonus related to sale of a Best-
11	in-Class Product is linked to the recovery and recy-
12	cling of an older working appliance, and may limit
13	the total payment to less than the sum of the bonus
14	and the bounty payments, if not doing so would
15	mean that the Nation's total energy use would oth-
16	erwise increase.
17	(5) The Secretary shall ensure that no product
18	for which a bounty is paid is sold or returned to ac-
19	tive service, but that it is instead destroyed, and re-
20	cycled to the extent feasible.
21	(6) The Secretary shall establish standards for
22	environmentally responsible methods of recycling, es-
23	pecially for products utilizing refrigerants.
24	(d) Rewards to Manufacturers for Develop-
25	MENT OF SUPEREFFICIENT BEST-IN-CLASS PRODUCTS.—

1	(1) In General.—(A) The Secretary of Energy
2	shall establish a program to reward manufacturers
3	for the development and production of Superefficient
4	Best-in-Class Products.
5	(B) In this section, the term "Superefficient
6	Best-in-Class Product" means a product that—
7	(i) can be mass produced; and
8	(ii) achieves the highest level of efficiency
9	that the Secretary finds could be produced and
10	sold commercially to mass-market consumers.
11	(C) The Secretary may establish a standard for
12	a Superefficient Best-in-Class Product even if no ex-
13	isting product exists, if the Secretary has reasonable
14	grounds to conclude that a mass-producable product
15	could be made to meet that standard.
16	(D) The Secretary may also establish a super-
17	efficient best-in-class level that is met by one or
18	more existing Best-in-Class Product models if those
19	product models have distinct energy efficiency at-
20	tributes and performance characteristics that make
21	them significantly better, in the judgment of the
22	Secretary, than those product models qualifying as
23	best-in-class, but that represent not more than 10
24	percent of the currently qualifying best-in-class mod-
25	els.

1	(2) Reward.—
2	(A) The bonus payment provided to a
3	manufacturer for the development and produc-
4	tion of a Superefficient Best-in-Class Product
5	shall be in addition to any bonus payments
6	made to retailers for best-in-class qualification.
7	(B) The amount of the bonus paid per unit
8	for qualifying Superefficient Best-in-Class
9	Product models as sold to retailers or distribu-
10	tors shall be the product of—
11	(i) an amount determined by the Sec-
12	retary; and
13	(ii) the difference in energy consump-
14	tion as determined by comparing the en-
15	ergy used by the qualifying product and
16	the energy used by the average product in
17	the product class.
18	(C) The Secretary shall determine the
19	amount under subparagraph (B)(i) for each
20	product type by considering the present value to
21	the nation of the energy (and water or other re-
22	sources or inputs) saved over the useful life of
23	the product, and may adjust this value upward
24	or downward after consultation with State and

1	utility efficiency program administrators as well
2	as the Administrator.
3	(D) The adjustment may also be made
4	based on the effect of the bonuses on the sales
5	of products in different classes that may be af-
6	fected by this program.
7	(E) The incremental bonus payments shall
8	be applied to sales of any Superefficient Best-
9	in-Class Product for the first 3 years of its sale.
10	(3) Coordination of incentives.—No prod-
11	uct for which Federal tax credit is received under
12	section 45M of the Internal Revenue Code of 1986
13	shall be eligible to receive bonus payments pursuant
14	to this subsection.
15	(e) Reporting.—Each retailer, distributor, and
16	manufacturer participating in the program under this sec-
17	tion shall meet any reasonable request of the Secretary
18	of Energy for documentation of sales reported for purpose
19	of receiving bonuses or bounties, and shall report to the
20	Secretary, on a confidential basis for program-design pur-
21	poses—
22	(1) for retailers and distributors, the number of
23	units sold within each product type and model-spe-
24	cific wholesale purchase price on a monthly basis:

1	(2) for manufacturers, model-specific energy
2	consumption data; and
3	(3) for manufacturers, on an immediate basis,
4	concerning any product design or function changes
5	that affect the energy consumption of the unit.
6	(f) Auditing Requirements.—The Secretary of
7	Energy shall establish monitoring and verification proto-
8	cols to ensure that energy consumption tests for each
9	model are recorded correctly and that sales of energy-effi-
10	cient models are tabulated correctly by each claimant of
11	bonus or bounty payments under this section. In addition,
12	the Secretary may require reports from retailers on the
13	methods used to increase the sales of qualifying products
14	as a factor in determining the level and allocation of any
15	such payments.
16	(g) DISCLOSURE.—The Secretary of Energy may re-
17	quire that retailers and distributors disclose publicly and
18	to consumers their participation in the program under this
19	section.
20	(h) Cost-Effectiveness Requirement.—
21	(1) Definitions.—In this subsection:
22	(A) Cost-effectiveness.—The term
23	"cost-effectiveness" means a measure of aggre-
24	gate savings in the cost of energy over the life-
25	time of the product as a ratio to the cost to the

1	Secretary of Energy of the rewards for the
2	product.
3	(B) Savings.—The term "savings" means
4	the cumulative megawatt-hours of electricity or
5	million British thermal units of other fuels
6	saved by a product, in comparison to projected
7	energy consumption based on the efficiency per-
8	formance of displaced new product sales. The
9	amount of savings is the product of—
10	(i) the net number of best-in-class or
11	superefficient best-in-class pieces of equip-
12	ment, electronics, and appliances sold by a
13	retailer, manufacturer, or distributor in a
14	calendar year;
15	(ii) the savings during the projected
16	useful life of the pieces of equipment, elec-
17	tronics, and appliances; and
18	(iii) the impact of any documented
19	measures to retire and recycle low-per-
20	forming devices at the time of purchase of
21	highly-efficient substitutes.
22	(2) Requirement.—The Secretary shall make
23	cost-effectiveness a top priority in designing and ad-
24	ministering this section, except that the cost-effec-
25	tiveness of the bonuses to manufacturers, in aggre-

1	gate, may be lower by this measure than that of the
2	bonuses and bounties to retailers and distributors.
3	(i) AUTHORIZATION.—There are authorized to be ap-
4	propriated such sums as may be necessary for each of the
5	fiscal years 2010 through 2014 to the Secretary of Energy
6	for purposes of this section, of which not more than 10
7	percent for any fiscal year may be expended on program
8	administration.
9	SEC. 215. PURPOSE OF ENERGY STAR.
10	Section 324A of the Energy Policy and Conservation
11	Act (42 U.S.C. 6294a) is amended—
12	(1) by redesignating subsections (b) through (d)
13	as subsections (c) through (e), respectively; and
14	(2) by inserting after subsection (a) the fol-
15	lowing new subsection:
16	"(b) Purpose.—The purpose of the Energy Star
17	program for products is to assist consumers in selecting
18	products for purchase that have demonstrated high energy
19	efficiency and that are cost-effective from the consumer's
20	perspective, ensuring that any incremental cost attrib-
21	utable to the energy-efficient features of such products will
22	be more than recovered in the value of energy savings the
23	products will make possible within several years of pur-
24	chase, typically within 3 years but no more than 5 years.".

Subtitle C—Transportation 1 **Efficiency** 2 3 SEC. 221. EMISSIONS STANDARDS. (a) Motor Vehicle Standards.—The President 4 shall use statutory authorities in effect on the day before 5 the enactment of this section to set motor vehicle stand-6 7 ards that— 8 (1) are achievable by the automobile manufac-9 turing companies; 10 (2) to the extent practicable, harmonize stand-11 ards that may be set by the National Highway Traf-12 fic Safety Administration pursuant to the authority 13 in chapter 329 of title 49, United States Code, 14 standards that may be set by the Administrator of 15 the Environmental Protection Agency pursuant to 16 the authority in the Clean Air Act, and standards 17 that have or may be set by the State of California; 18 (3) achieve at least as much emissions reduc-19 tions as would be achieved by implementation of the 20 California law AB 1493 if enforced in the State of 21 California and the other States that have adopted 22 the standard; and 23 (4) do not preempt California's legal authority

to adopt and enforce its own mobile source emissions

24

25

standards.

1	(b) Greenhouse Gas Emission Standards for
2	MOBILE SOURCES.—Title VIII of the Clean Air Act, as
3	added by section 331 of this Act, is amended by inserting
4	after part A the following new part:
5	"PART B—MOBILE SOURCES
6	"SEC. 821. GREENHOUSE GAS EMISSION STANDARDS FOR
7	MOBILE SOURCES.
8	"(a) Motor Vehicles and Engines.—
9	"(1) Pursuant to section 202(a)(1), by Decem-
10	ber 31, 2010, the Administrator shall promulgate
11	standards applicable to emissions of greenhouse
12	gases from new heavy-duty vehicles and engines, ex-
13	cluding such vehicles covered by the Tier II stand-
14	ards (as established by the Administrator as of the
15	date of the enactment of this section). The Adminis-
16	trator may revise these standards from time to time.
17	"(2) Regulations issued under section 202(a)(1)
18	applicable to emissions of greenhouse gases from
19	new heavy-duty vehicles and engines, excluding such
20	vehicles covered by the Tier II standards (as estab-
21	lished by the Administrator as of the date of the en-
22	actment of this section), shall contain standards that
23	achieve the greatest degree of emissions reduction
24	achievable based on the application of technology
25	which the Administrator determines will be available

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

at the time such standards take effect, taking into consideration cost, energy, and safety factors associated with the application of such technology. Any such regulations shall take effect after such period as the Administrator finds necessary to permit the development and application of the requisite technology.

"(b) Nonroad Vehicles and Engines.—

"(1) Pursuant to section 213(a)(4), the Administrator shall promulgate standards applicable to emissions of greenhouse gases from new marine vessels and locomotives, and from new engines used in marine vessels and locomotives, by December 31, 2012. The Administrator shall also promulgate standards applicable to emissions of greenhouse gases for such other classes and categories of nonroad vehicles and engines as the Administrator determines appropriate and in the timeframe the Administrator determines appropriate. The Administrator shall base such determination, among other factors, on the relative contribution of greenhouse gas emissions, and the costs for achieving reductions, from such classes or categories of new nonroad engines and vehicles. The Administrator may revise these standards from time to time.

1	"(2) Standards under section 213(a)(4) applica-
2	ble to emissions of greenhouse gases from new ma-
3	rine vessels and locomotives, and from new engines
4	used in marine vessels and locomotives, shall achieve
5	the greatest degree of emissions reduction achievable
6	based on the application of technology which the Ad-
7	ministrator determines will be available at the time
8	such standards take effect, taking into consideration
9	cost, energy, and safety factors associated with the
10	application of such technology. Any such regulations
11	shall take effect after such period as the Adminis-
12	trator finds necessary to permit the development and
13	application of the requisite technology.
14	"(3) For purposes of this section and standards
15	under section 213(a)(4) applicable to emissions of
16	greenhouse gases, the term 'nonroad engines and ve-
17	hicles' shall include non-internal combustion engines
18	and the vehicles these engines power (such as elec-
19	tric engines and electric vehicles), for those non-in-
20	ternal combustion engines and vehicles which would
21	be in the same category and have the same uses as
22	nonroad engines and vehicles that are powered by in-
23	ternal combustion engines.
24	"(c) AIRCRAFT AND AIRCRAFT ENGINES.—

1 "(1) Pursuant to section 231(a), the Adminis-2 trator shall promulgate standards applicable to emis-3 sions of greenhouse gases from new aircraft and new 4 engines used in aircraft by December 31, 2012. Not-5 withstanding any requirement in section 231(a), the 6 Administrator shall also promulgate standards appli-7 cable to emissions of greenhouse gases from other 8 classes and categories of aircraft and aircraft en-9 gines for such classes and categories as the Adminis-10 trator determines appropriate and in the timeframe 11 the Administrator determines appropriate. The Ad-12 ministrator may revise these standards from time to 13 time. 14 "(2) Standards under section 231(a) applicable 15 to emissions of greenhouse gases from new aircraft and new engines used in aircraft, and any later revi-16 17 sions or additional standards, shall achieve the 18 greatest degree of emissions reduction achievable 19 based on the application of technology which the Ad-20 ministrator determines will be available at the time 21 such standards take effect, taking into consideration 22 cost, energy, and safety factors associated with the 23 application of such technology. Any such standards 24 shall take effect after such period as the Adminis-

- 1 trator finds necessary to permit the development and
- 2 application of the requisite technology.
- 3 "(d) Averaging, Banking, and Trading of Emis-
- 4 SIONS CREDITS.—In establishing standards applicable to
- 5 emissions of greenhouse gases pursuant to this section and
- 6 sections 202(a), 213(a)(4), and 231(a), the Administrator
- 7 may establish provisions for averaging, banking, and trad-
- 8 ing of greenhouse gas emissions credits within or across
- 9 classes or categories of motor vehicles and motor vehicle
- 10 engines, nonroad vehicles and engines (including marine
- 11 vessels), and aircraft and aircraft engines, to the extent
- 12 the Administrator determines appropriate and considering
- 13 the factors appropriate in setting standards under those
- 14 sections. Such provisions may include reasonable and ap-
- 15 propriate provisions concerning generation, banking, trad-
- 16 ing, duration, and use of credits.
- 17 "(e) Reports.—The Administrator shall, from time
- 18 to time, submit a report to Congress that projects the
- 19 amount of greenhouse gas emissions from the transpor-
- 20 tation sector, including transportation fuels, for the years
- 21 2030 and 2050, based on the standards adopted under
- 22 this section.".

1	SEC. 222. GREENHOUSE GAS EMISSIONS REDUCTIONS
2	THROUGH TRANSPORTATION EFFICIENCY.
3	Title VIII of the Clean Air Act, as added by section
4	331 of this Act, is further amended by inserting after part
5	C the following new part:
6	"PART D—PLANNING REQUIREMENTS
7	"SEC. 841. GREENHOUSE GAS EMISSIONS REDUCTIONS
8	THROUGH TRANSPORTATION EFFICIENCY.
9	"(a) In General.—Each State shall—
10	"(1) not later than 3 years after the date of the
11	enactment of this section, submit to the Adminis-
12	trator goals for transportation-related greenhouse
13	gas emissions reductions; and
14	"(2) as part of each transportation plan or
15	transportation improvement plan developed under
16	title 23 or title 49, United States Code, ensure that
17	a plan to achieve such goals, or an updated version
18	of such a plan, is submitted to the Administrator
19	and to the Secretary of Transportation (in this sec-
20	tion referred to as the 'Secretary') by each metro-
21	politan planning organization in the State for an
22	area with a population exceeding 200,000.
23	"(b) Models and Methodologies.—
24	"(1) In General.—The Administrator shall
25	promulgate regulations to establish standardized
26	models and methodologies for use in developing

I	goals, plans, and strategies under this section. Such
2	regulations may approve or improve existing models
3	and methodologies.
4	"(2) Timing.—The Administrator shall—
5	"(A) publish proposed regulations under
6	paragraph (1) not later than 1 year after the
7	date of the enactment of this section; and
8	"(B) promulgate final regulations under
9	paragraph (1) not later than 2 years after such
10	date of enactment.
11	"(c) Greenhouse Gas Reduction Goals.—
12	"(1) Consultation.—Each State shall develop
13	the goals referred to in subsection (a)(1)—
14	"(A) in concurrence with State agencies re-
15	sponsible for air quality and transportation;
16	"(B) in consultation with each metropoli-
17	tan planning organization for an area in the
18	State with a population exceeding 200,000 and
19	applicable local air quality and transportation
20	agencies; and
21	"(C) with public involvement, including
22	public comment periods and meetings.
23	"(2) Period.—The goals referred to in sub-
24	section (a)(1) shall be for 10- and 20-year periods.

1	"(3) Targets; Designated Year.—The goals
2	referred to in subsection (a)(1) shall establish tar-
3	gets to reduce mobile source greenhouse gas emis-
4	sions in the covered area from levels projected under
5	a business-as-usual scenario. The targets shall be de-
6	signed to ensure that the levels of such emissions
7	stabilize and decrease after a designated year. The
8	State shall consider designating 2010 as such des-
9	ignated year.
10	"(4) COVERED AREA.—The goals referred to in
11	subsection (a)(1) shall be established—
12	"(A) on a statewide basis; and
13	"(B) for each metropolitan planning orga-
14	nization in the State for an area with a popu-
15	lation exceeding 200,000.
16	"(5) REVISED GOALS.—Every 4 years, each
17	State shall update and revise, as appropriate, the
18	goals referred to in subsection $(a)(1)$.
19	"(d) Planning.—A plan referred to in subsection
20	(a)(2) shall—
21	"(1) be based upon the models and methodolo-
22	gies established by the Administrator under sub-
23	section (b);
24	"(2) address mobile sources, economic develop-
25	ment, and scenario analysis; and

1	"(3) be developed—
2	"(A) with public involvement, including
3	public comment periods and meetings;
4	"(B) with regional coordination, including
5	with respect to—
6	"(i) metropolitan planning organiza-
7	tions;
8	"(ii) the localities comprising the met-
9	ropolitan planning organization;
10	"(iii) the State in which the metro-
11	politan planning organization is located;
12	and
13	"(iv) air quality and transportation
14	agencies for the State and region involved;
15	and
16	"(C) in consultation with the State and
17	local housing, public health, economic develop-
18	ment, land use, environment, and public trans-
19	portation agencies.
20	"(e) Strategies.—In developing goals under sub-
21	section $(a)(1)$ and a plan under subsection $(a)(2)$, the
22	State or metropolitan planning organization, as applicable,
23	shall consider transportation and land use planning strate-
24	gies to reduce greenhouse gas emissions, including the fol-
25	lowing:

1	"(1) Efforts to increase public transportation,
2	including commuter rail service and ridership, by
3	adding at a minimum—
4	"(A) new public transportation systems,
5	including new commuter rail systems;
6	"(B) employer-based subsidies; and
7	"(C) cleaner locomotive technologies.
8	"(2) Updates to zoning and other land use reg-
9	ulations and plans to support development that—
10	"(A) coordinates transportation and land
11	use planning;
12	"(B) focuses future growth close to exist-
13	ing and planned job centers and public facili-
14	ties;
15	"(C) uses existing infrastructure;
16	"(D) promotes walking, bicycling, and pub-
17	lie transportation use; and
18	"(E) mixes land uses such as housing, re-
19	tail, and schools.
20	"(3) Implementation of a policy (referred to as
21	a 'complete streets policy') that—
22	"(A) ensures adequate accommodation of
23	all users of transportation systems, including
24	pedestrians, bicyclists, public transportation

1	users, motorists, children, the elderly, and indi-
2	viduals with disabilities; and
3	"(B) adequately addresses the safety and
4	convenience of all users of the transportation
5	system.
6	"(4) Construction of bicycle and pedestrian in-
7	frastructure facilities.
8	"(5) Projects to promote telecommuting, flexi-
9	ble work schedules, or satellite work centers.
10	"(6) Pricing measures such as congestion pric-
11	ing.
12	"(7) Intermodal freight system strategies, in-
13	cluding enhanced rail services, short sea shipping,
14	and other strategies.
15	"(8) Parking policies.
16	"(9) Travel demand management projects.
17	"(10) Restriction of the use of certain roads, or
18	lanes, by vehicles other than passenger buses and
19	high-occupancy vehicles.
20	"(11) Reduction of vehicle idling, including
21	idling associated with freight management, construc-
22	tion, transportation, and commuter operations.
23	"(12) Policies to encourage the use of retrofit
24	technologies and early replacement of vehicles, en-

1	gines and equipment to reduce greenhouse gas emis-
2	sions from existing mobile sources.
3	"(13) Other projects that the Administrator
4	finds reduce greenhouse gas emissions from mobile
5	sources.
6	"(f) Public Availability.—The Administrator
7	shall publish, including by posting on the Environmental
8	Protection Agency's website—
9	"(1) the goals and plans submitted under sub-
10	section (a); and
11	"(2) for each plan submitted under subsection
12	(a)(2), an analysis of the anticipated effects of the
13	plan on greenhouse gas emissions and oil consump-
14	tion.
15	"(g) Enforcement.—If the Administrator finds
16	that a State has failed to submit goals under subsection
17	(a)(1), or to ensure the submission of a plan under sub-
18	section (a)(2), for any area in the State (irrespective of
19	whether the area is a nonattainment area), the Adminis-
20	trator may impose a prohibition in accordance with section
21	179(b)(1) applicable to the area. The Administrator may
22	not impose a prohibition under the preceding sentence,
23	and no action may be brought by the Administrator or
24	any other entity alleging a violation of this section, based

1	on the content or adequacy of a goal or plan submitted
2	under subsection $(a)(1)$ or $(a)(2)$.
3	"(h) Competitive Grants.—
4	"(1) Grants.—The Administrator, in consulta-
5	tion with the Secretary of Transportation, may
6	award grants on a competitive basis to metropolitan
7	planning organizations to develop or implement
8	plans submitted under subsection (a)(2) or elements
9	thereof.
10	"(2) Priority.—In making grants under para-
11	graph (1), the Administrator shall give priority to
12	applicants based upon—
13	"(A) the amount of greenhouse gas emis-
14	sions to be reduced on a total or per capita
15	basis, as determined by the Administrator in
16	consultation with the Secretary of Transpor-
17	tation; and
18	"(B) such other factors as the Adminis-
19	trator determines appropriate.
20	"(3) Authorization of appropriations.—
21	To carry out this subsection, there are authorized to
22	be appropriated such sums as may be necessary.
23	"(i) Definitions.—In this section:
24	"(1) The term 'metropolitan planning organiza-
25	tion' means a metropolitan planning organization, as

1	such term is used in section 176 of the Clean Air
2	Act.
3	"(2) The term 'scenario analysis' means an
4	analysis that is conducted by identifying different
5	trends and making projections based on those trends
6	to develop a range of scenarios and estimates of how
7	each scenario could improve access to goods and
8	services, including access to employment, education,
9	and health care (especially for elderly and economi-
10	cally disadvantaged communities), and could affect
11	rates of—
12	"(A) vehicle miles traveled;
13	"(B) use of mobile source fuel by type, in-
14	cluding electricity; and
15	"(C) greenhouse gas emissions from the
16	mobile source sector.
17	"(j) LAND USE AUTHORITY.—Nothing in this section
18	may be construed to—
19	"(1) infringe upon the existing authority of
20	State or local governments to plan or control land
21	use, or
22	"(2) provide or transfer authority over land use
23	to any other entity.".

1	SEC. 223. SMARTWAY TRANSPORTATION EFFICIENCY PRO-
2	GRAM.
3	Part B of title VIII of the Clean Air Act, as added
4	by section 221 of this Act (and amended by section 121
5	of this Act), is further amended by adding after section
6	822 the following section:
7	"SEC. 823. SMARTWAY TRANSPORTATION EFFICIENCY PRO-
8	GRAM.
9	"(a) In General.—There is established within the
10	Environmental Protection Agency a SmartWay Transport
11	Program to quantify, demonstrate and promote the bene-
12	fits of technologies, products, fuels and operational strate-
13	gies that reduce petroleum consumption, air pollution and
14	greenhouse gas emissions from the mobile 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	courage the adoption of SmartWay certified or
9	verified technologies and strategies and publication
10	of the availability of financial incentives such as as-
11	sistance from loan programs and other Federal and
12	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) Certification 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 Ghg Performance
17	Databases.—The Secretary of the Treasury shall, in
18	consultation with the Administrator, define and collect
19	data on the physical and operational characteristics of the
20	Nation's truck population, with special emphasis on data
21	related to energy efficiency and greenhouse gas perform-
22	ance to inform the performance index in subsection $(c)(2)$
23	of this section, and other means of goods transport as nec-
24	essary, at least every 5 years as part of the economic cen-
25	sus required under title 13 of the United States Code.

1	"(e) Establishment of Financing Program.—
2	The Administrator shall establish a SmartWay Financing
3	Program to competitively award funding to eligible entities
4	identified by the Administrator in accordance with the
5	program requirements in subsection (g).
6	"(f) Purpose.—Under the SmartWay Financing
7	Program, eligible entities shall—
8	"(1) use funds awarded by the Administrator to
9	provide flexible loan and lease terms that increase
10	approval rates and/or lower the costs of loans and
11	leases in accordance with guidance developed by the
12	Administrator, and
13	"(2) make these loans and leases available to
14	public and private entities for the purpose of adopt-
15	ing low-greenhouse gas technologies or strategies for
16	the mobile source sector that are designated by the
17	Administrator.
18	"(g) Program Requirements.—The Administrator
19	shall determine program design elements and require-
20	ments, including—
21	"(1) the type of financial mechanism with
22	which to award funding, in the form of grants or
23	contracts;
24	"(2) the designation of eligible entities to re-
25	ceive funding, including State, tribal, and local gov-

1	ernments, regional organizations comprised of gov-
2	ernmental units, nonprofit organizations, or for-prof-
3	it companies;
4	"(3) criteria for evaluating applications from el-
5	igible entities, including anticipated—
6	"(A) cost-effectiveness of loan and/or lease
7	program on a metric-ton-of-greenhouse gas-
8	saved-per-dollar basis,
9	"(B) ability to promote the loan and/or
10	lease program and associated technologies and
11	strategies to target audience; and
12	"(4) reporting requirements for entities that re-
13	ceive awards, including—
14	"(A) actual cost-effectiveness and green-
15	house gas savings from loan and/or lease pro-
16	gram based on a methodology designated by the
17	Administrator;
18	"(B) total number of applications and
19	number of approved applications, and
20	"(C) terms granted to loan and lease re-
21	cipients compared to prevailing market prac-
22	tices.
23	"(h) AUTHORIZATION OF APPROPRIATIONS.—Such
24	sums as necessary are authorized to be appropriated to
25	the Administrator to carry out this section.".

1	SEC. 224. STATE VEHICLE FLEETS.
2	Section 507(o) of the Energy Policy Act of 1992 (42
3	U.S.C. 13257) is amended by adding the following new
4	paragraph at the end thereof:
5	"(3) The Secretary shall revise the rules under
6	this subsection with respect to the types of alter-
7	native fueled vehicles required for compliance with
8	this subsection to ensure those rules are consistent
9	with any guidance issued pursuant to section 303 of
10	this Act.".
11	Subtitle D—Utilities Energy
12	Efficiency
13	SEC. 231. ENERGY EFFICIENCY RESOURCE STANDARD FOR
14	RETAIL ELECTRICITY AND NATURAL GAS DIS-
15	TRIBUTORS.
16	(a) In General.—Title VI of the Public Utility Reg-
	· 0
17	ulatory Policies Act of 1978 (16 U.S.C. 2601 and fol-
	ulatory Policies Act of 1978 (16 U.S.C. 2601 and fol-
18	ulatory Policies Act of 1978 (16 U.S.C. 2601 and following) is amended by adding after section 610 (as added
18 19	ulatory Policies Act of 1978 (16 U.S.C. 2601 and following) is amended by adding after section 610 (as added by section 101 of this Act) the following:
18 19 20	ulatory Policies Act of 1978 (16 U.S.C. 2601 and following) is amended by adding after section 610 (as added by section 101 of this Act) the following: "SEC. 611. FEDERAL ENERGY EFFICIENCY RESOURCE
18 19 20 21	ulatory Policies Act of 1978 (16 U.S.C. 2601 and following) is amended by adding after section 610 (as added by section 101 of this Act) the following: "SEC. 611. FEDERAL ENERGY EFFICIENCY RESOURCE STANDARD FOR RETAIL ELECTRICITY AND
18 19 20 21 22	ulatory Policies Act of 1978 (16 U.S.C. 2601 and following) is amended by adding after section 610 (as added by section 101 of this Act) the following: "SEC. 611. FEDERAL ENERGY EFFICIENCY RESOURCE STANDARD FOR RETAIL ELECTRICITY AND NATURAL GAS DISTRIBUTORS.
18 19 20 21 22 23	ulatory Policies Act of 1978 (16 U.S.C. 2601 and following) is amended by adding after section 610 (as added by section 101 of this Act) the following: "SEC. 611. FEDERAL ENERGY EFFICIENCY RESOURCE STANDARD FOR RETAIL ELECTRICITY AND NATURAL GAS DISTRIBUTORS. "(a) STATEMENT OF FEDERAL POLICY.—The Fed-

1	ciency programs, building energy codes, appliance stand-
2	ards, and related efficiency measures. In light of the cost-
3	effective energy efficiency opportunities that exist across
4	the country in every sector of the economy, retail elec-
5	tricity distributors, retail natural gas distributors, and
6	States should additionally consider energy efficiency as a
7	resource in utility planning and procurement activities and
8	should seek to achieve all energy efficiency that is avail-
9	able at lower cost than energy supply options.
10	"(b) Definitions.—In this section:
11	"(1) AFFILIATE.—The term 'affiliate' when
12	used in relation to a person, means another person
13	that directly or indirectly owns or controls, is owned
14	or controlled by, or is under common ownership con-
15	trol with, such person, as determined under regula-
16	tions promulgated by the Secretary.
17	"(2) Ashrae, ansi, and iesna.—The terms
18	'ASHRAE', 'ANSI', and 'IESNA' mean the Amer-
19	ican Society of Heating, Refrigerating and Air Con-
20	ditioning Engineers, the American National Stand-
21	ards Institute, and the Illuminating Engineering So-
22	ciety of North America, respectively.
23	"(3) Base quantity.—The term 'base quan-
24	tity', with respect to a retail electricity distributor or
25	retail natural gas distributor, means, for each year

1	for which a performance standard is established
2	under subsection (d), the average annual quantity of
3	electricity or natural gas delivered by the retail elec-
4	tricity distributor or retail natural gas distributor to
5	retail customers during the 2 calendar years imme-
6	diately preceding such year. In determining the base
7	quantity of a retail natural gas distributor, natural
8	gas delivered for purposes of electricity generation
9	shall be excluded.
10	"(4) Chp savings.—The term 'Chp savings'
11	means—
12	"(A) CHP system savings from a combined
13	heat and power system that commences oper-
14	ation after the date of enactment of this sec-
15	tion; and
16	"(B) the increase in CHP system savings
17	from upgrading or replacing, after the date of
18	enactment of this section, a combined heat and
19	power system that commenced operation on or
20	before the date of enactment of this section.
21	"(5) CHP SYSTEM SAVINGS.—The term 'CHP
22	system savings' means the electric output, and the
23	electricity saved due to the mechanical output, of a
24	combined heat and power system, adjusted to reflect
25	any increase in fuel consumption by that system as

1	compared to the fuel that would have been required		
2	to produce an equivalent useful thermal energy out-		
3	put in a separate thermal-only system.		
4	"(6) Codes and standards savings.—		
5	"(A) IN GENERAL.—The term 'codes and		
6	standards savings' means a reduction in end-		
7	use electricity or natural gas consumption in a		
8	retail electricity distributor or a retail natural		
9	gas distributor's service territory as a result of		
10	the adoption and implementation, after the date		
11	of enactment of this section, of new or revised		
12	appliance and equipment efficiency standards or		
13	building energy codes.		
14	"(B) Baselines.—In calculating codes		
15	and standards savings—		
16	"(i) the baseline for calculating sav-		
17	ings from building codes shall be the 2006		
18	International Energy Conservation Code		
19	for residential buildings and the ASHRAE/		
20	ANSI/IESNA Standard 90.1–2004 for		
21	commercial buildings, or the relevant State		
22	building code in effect on date of enact-		
23	ment of this section, whichever is more		
24	stringent; and		

1	"(ii) the baseline for calculating sav-
2	ings from appliance standards shall be the
3	average efficiency of new appliances in the
4	relevant category or categories prior to
5	adoption and implementation of the new
6	standard.
7	"(7) Combined heat and power system.—
8	The term 'combined heat and power system' means
9	a system that uses the same energy source both for
10	the generation of electrical or mechanical power and
11	the production of steam or another form of useful
12	thermal energy, provided that—
13	"(A) the system meets such requirements
14	relating to efficiency and other operating char-
15	acteristics as the Secretary may promulgate by
16	regulation; and
17	"(B) the net wholesale sales of electricity
18	by the facility will not exceed 50 percent of
19	total annual electric generation by the facility.
20	"(8) Cost-effective.—The term 'cost-effec-
21	tive', with respect to an energy efficiency measure,
22	means that the measure achieves a net present value
23	of economic benefits over the life of the measure,
24	both directly to the energy consumer and to the
25	economy, that is greater than the net present value

1	of the cost of the measure over the life of the meas-
2	ure, both directly to the energy consumer and to the
3	economy.
4	"(9) Customer facility savings.—The term
5	'customer facility savings' means a reduction in end-
6	use electricity or natural gas consumption (including
7	recycled energy savings) at a facility of an end-use
8	consumer of electricity or natural gas served by a re-
9	tail electricity distributor or natural gas distributor,
10	as compared to—
11	"(A) in the case of a new facility, con-
12	sumption at a reference facility of average effi-
13	ciency;
14	"(B) in the case of an existing facility,
15	consumption at such facility during a base pe-
16	riod (which shall not be less than 1 year); or
17	"(C) in the case of new equipment, regard-
18	less of whether the new equipment replaces ex-
19	isting equipment at the end of the useful life of
20	the existing equipment, consumption by new
21	equipment of average efficiency of the same
22	equipment type, provided that customer savings
23	under this subparagraph shall not be counted
24	towards customer savings under subparagraph
25	(A) or (B).

1	"(10) Electricity savings.—The term 'elec-
2	tricity savings' means reductions in electricity con-
3	sumption, relative to business-as-usual projections,
4	achieved through measures implemented after the
5	date of enactment of this section, limited to—
6	"(A) customer facility savings of elec-
7	tricity, adjusted to reflect any associated in-
8	crease in fuel consumption at the facility;
9	"(B) reductions in distribution system
10	losses of electricity achieved by a retail elec-
11	tricity distributor, as compared to losses attrib-
12	utable to new or replacement distribution sys-
13	tem equipment of average efficiency;
14	"(C) CHP savings; and
15	"(D) codes and standards savings of elec-
16	tricity.
17	"(11) Natural gas savings.—The term 'nat-
18	ural gas savings' means reductions in natural gas
19	consumption, relative to business-as-usual projec-
20	tions, achieved through measures implemented after
21	the date of enactment of this section, limited to—
22	"(A) customer facility savings of natural
23	gas, adjusted to reflect any associated increase
24	in electricity consumption or consumption of
25	other fuels at the facility;

1	"(B) reductions in leakage, operational
2	losses, and consumption of natural gas fuel to
3	operate a gas distribution system, achieved by
4	a retail natural gas distributor, as compared to
5	similar leakage, losses, and consumption during
6	a base period (which shall not be less than 1
7	year); and
8	"(C) codes and standards savings of nat-
9	ural gas.
10	"(12) Power Pool.—The term 'power pool'
11	means an association of 2 or more interconnected
12	electric systems that is recognized by the Commis-
13	sion as having an agreement to coordinate oper-
14	ations and planning for improved reliability and effi-
15	ciencies, including a Regional Transmission Organi-
16	zation or an Independent System Operator.
17	"(13) Recycled energy savings.—The term
18	'recycled energy savings' means a reduction in elec-
19	tricity or natural gas consumption that results from
20	a modification of an industrial or commercial system
21	that commenced operation before the date of enact-
22	ment of this section, in order to recapture electrical,
23	mechanical, or thermal energy that would otherwise
24	be wasted.

1	"(14) Reporting Period.—The term 'report-
2	ing period' means—
3	"(A) calendar year 2012; and
4	"(B) each successive 2-calendar-year pe-
5	riod thereafter.
6	"(15) Retail electricity distributor.—
7	"(A) IN GENERAL.—The term 'retail elec-
8	tricity distributor' means, for any given cal-
9	endar year, an electric utility that owns or oper-
10	ates an electric distribution facility and, using
11	the facility, delivered not less than 1,500,000
12	megawatt-hours of electric energy to electric
13	consumers for purposes other than resale dur-
14	ing the most recent 2-calendar-year period for
15	which data are available.
16	"(B) Inclusions and Limitations.—For
17	purposes of determining whether an electric
18	utility qualifies as a retail electricity distributor
19	under subparagraph (A)—
20	"(i) deliveries by any affiliate of an
21	electric utility to electric consumers for
22	purposes other than resale shall be consid-
23	ered to be deliveries by such electric utility;
24	and

297

1	"(ii) deliveries by any electric utility
2	to a lessee, tenant, or affiliate of such elec-
3	tric utility shall not be treated as deliveries
4	to electric consumers.
5	"(16) Retail natural gas distributor.—
6	"(A) IN GENERAL.—The term 'retail nat-
7	ural gas distributor' means, for any given cal-
8	endar year, a local distribution company, as
9	that term is defined in section 2(17) of the
10	Natural Gas Policy Act of 1978 (15 U.S.C.
11	3301(17)), that delivered to natural gas con-
12	sumers more than 5,000,000,000 cubic feet of
13	natural gas during the most recent 2-calendar-
14	year period for which data are available.
15	"(B) Inclusions and Limitations.—For
16	purposes of determining whether a person
17	qualifies as a retail natural gas distributor
18	under subparagraph (A)—
19	"(i) deliveries of natural gas by any
20	affiliate of a local distribution company to
21	consumers for purposes other than resale
22	shall be considered to be deliveries by such
23	local distribution company; and
24	"(ii) deliveries of natural gas to a les-
25	see, tenant, or affiliate of a local distribu-

1	tion company shall not be treated as deliv-
2	eries to natural gas consumers.
3	"(17) Third-party efficiency provider.—
4	The term 'third-party efficiency provider' means any
5	retailer, building owner, energy service company, fi-
6	nancial institution or other commercial, industrial or
7	non-profit entity that is capable of providing elec-
8	tricity savings or natural gas savings in accordance
9	with the requirements of subsections (e) and (f).
10	"(c) Establishment of Program.—Not later than
11	1 year after the date of enactment of this section, the Sec-
12	retary shall, by regulation, establish a program to imple-
13	ment and enforce the requirements of this section. In es-
14	tablishing such program, the Secretary shall, to the extent
15	practicable, preserve the integrity, and incorporate best
16	practices, of existing State energy efficiency programs.
17	"(d) Performance Standards.—
18	"(1) COMPLIANCE OBLIGATION.—Not later
19	than April 1 of the calendar year immediately fol-
20	lowing each reporting period—
21	"(A) each retail electricity distributor shall
22	submit to the Secretary a report, in accordance
23	with regulations issued by the Secretary, dem-
24	onstrating that it has achieved, by the end of
25	each calendar year in the reporting period, cu-

mulative electricity savings (adjusted to account 1 2 for any attrition of savings measures imple-3 mented in prior years) that are equal to the ap-4 plicable percentage of the base quantity of such 5 retail electricity distributor for such year, as es-6 tablished under paragraph (2), (3), or (4) of 7 this subsection; and 8 "(B) each retail natural gas distributor 9 shall submit to the Secretary a report, in ac-10 cordance with regulations issued by the Sec-11 retary, demonstrating that it has achieved, by 12 the end of each calendar year in the reporting 13 period, cumulative natural gas savings (ad-14 justed to account for any attrition of savings 15 measures implemented in prior years) that are 16 equal to the applicable percentage of the base 17 quantity of such retail natural gas distributor 18 for such year, as established under paragraph 19 (2), (3), or (4) of this subsection. 20 "(2) STANDARDS FOR 2012 THROUGH 2020.— 21 For calendar years 2012 through 2020, the applica-22 ble percentages are as follows:

"Calendar Year	Cumulative Electricity Savings Percentage	Cumulative Natural Gas Savings Percentage
2012	1.00	0.75
2013	2.00	1.50

"Calendar Year	Cumulative Electricity Savings Percentage	Cumulative Natural Gas Savings Percentage
2014	3.25	2.50
2015	4.50	3.50
2016	6.00	4.75
2017	7.50	6.00
2018	10.00	7.25
2019	12.50	8.50
2020	15.00	10.00

"(3) Subsequent Years.—

"(A) Calendar years 2021 through 2030.—Not later than December 31, 2018, the Secretary shall promulgate regulations establishing performance standards (expressed as applicable percentages of base quantity for both cumulative electricity savings and cumulative natural gas savings) for calendar years 2021 through 2030.

"(B) Subsequent extensions.—Except as provided in subparagraph (A), not later than December 31 of the penultimate reporting period for which performance standards have been set under this paragraph, the Secretary shall promulgate regulations establishing performance standards (expressed as applicable percentages of base quantity for both cumulative electricity savings and cumulative natural gas

1	savings) for the 10-calendar-year period fol-
2	lowing the last calendar year for which perform-
3	ance standards previously were set.
4	"(C) REQUIREMENTS.—The Secretary
5	shall set standards under this paragraph to re-
6	flect the highest level of cost-effective energy ef-
7	ficiency potential that is reasonably achievable,
8	taking into account cost-effective energy savings
9	achieved by leading retail electricity distributors
10	and retail natural gas distributors, opportuni-
11	ties for new codes and standard savings, tech-
12	nology improvements, and other indicators of
13	cost-effective energy efficiency potential. In no
14	case shall the applicable percentages for any
15	calendar year be lower than those for calendar
16	year 2020 (including any increase in the stand-
17	ard for calendar year 2020 pursuant to para-
18	graph (4)).
19	"(4) Midcourse review and adjustment of
20	STANDARDS.—Not later than December 31, 2014,
21	and at 10-year intervals thereafter, the Secretary
22	shall review the most recent standards established
23	under paragraph (2) or (3) and shall, by regulation,
24	increase the standards if the Secretary determines
25	that additional cost-effective energy efficiency poten-

1	tial is reasonably achievable, taking into account the
2	factors identified in paragraph (3)(C). If the Sec-
3	retary revises standards pursuant to this paragraph,
4	the regulations shall provide adequate lead time to
5	ensure that compliance with the increased standards
6	is feasible.
7	"(5) Delay of submission for first re-
8	PORTING PERIOD.—Notwithstanding paragraphs (1)
9	and (2), for the 2012 reporting period, the Secretary
10	may accept a request from a retail electricity dis-
11	tributor or a retail natural gas distributor to delay
12	the required submission of documentation of some or
13	all of the required savings for up to 2 years. The re-
14	quest for delay shall include a plan for coming into
15	full compliance by the end of the 2013–2014 report-
16	ing period.
17	"(e) Transfers of Electricity or Natural Gas
18	Savings.—
19	"(1) Bilateral contracts for savings
20	TRANSFERS.—Subject to the limitations of this para-
21	graph, a retail electricity distributor or retail natural
22	gas distributor may use electricity savings or natural
23	gas savings purchased, pursuant to a bilateral con-
24	tract, from another retail electricity distributor or
25	retail natural gas distributor, a State, or a third-

1	party efficiency provider to meet the applicable per-
2	formance standard under subsection (d).
3	"(2) Requirements.—Electricity or natural
4	gas savings purchased and used for compliance pur-
5	suant to this paragraph shall be—
6	"(A) measured and verified in accordance
7	with the procedures specified under subsection
8	(f);
9	"(B) reported in accordance with sub-
10	section (d); and
11	"(C) achieved within the same State as is
12	served by the retail electricity distributor or re-
13	tail natural gas distributor.
14	"(3) Exception.—Notwithstanding paragraph
15	(2)(C), a State regulatory authority may authorize a
16	retail electricity distributor or a retail natural gas
17	distributor regulated by such State regulatory au-
18	thority to purchase savings achieved in a different
19	State, provided that—
20	"(A) such savings are achieved within the
21	same power pool; and
22	"(B) the State regulatory authority that
23	regulates the purchaser oversees the measure-
24	ment and verification of the savings pursuant to

1	the procedures and standards applicable in the
2	purchaser's State.
3	"(4) Regulatory approval.—Nothing in this
4	paragraph shall limit or affect the authority of a
5	State regulatory authority to require a retail elec-
6	tricity distributor or retail natural gas distributor
7	that is regulated by such State regulatory authority
8	to obtain such State regulatory authority's author-
9	ization or approval of a contract for transfer of sav-
10	ings under this paragraph.
11	"(5) Limitations.—In the interest of opti-
12	mizing achievement of cost-effective efficiency poten-
13	tial, the Secretary may prescribe such limitations as
14	the Secretary determines appropriate with respect to
15	the proportion of a retail electricity or natural gas
16	distributor's compliance obligation, under the appli-
17	cable performance standards under subsection (d),
18	that may be met using electricity or natural gas sav-
19	ings that are purchased under this paragraph.
20	"(f) Measurement and Verification of Sav-
21	INGS.—The regulations promulgated pursuant to sub-
22	section (b) shall include—
23	"(1) procedures and standards for defining and
24	measuring electricity savings and natural gas sav-

1	ings that can be counted towards the performance
2	standards set forth in subsection (d), which shall—
3	"(A) specify the types of energy efficiency
4	and energy conservation measures that can be
5	counted;
6	"(B) require that energy consumption esti-
7	mates for customer facilities or portions of fa-
8	cilities in the applicable base and current years
9	be adjusted, as appropriate, to account for
10	changes in weather, level of production, and
11	building area;
12	"(C) account for the useful life of meas-
13	ures;
14	"(D) include deemed savings values for
15	specific, commonly-used measures;
16	"(E) allow for savings from a program to
17	be estimated based on extrapolation from a rep-
18	resentative sample of participating customers;
19	"(F) include procedures for counting CHP
20	savings and recycled energy savings;
21	"(G) establish methods for calculating
22	codes and standards energy savings, including
23	the use of verified compliance rates;
24	"(H) count only measures and savings that
25	are additional to business-as-usual practices;

1	"(I) except in the case of codes and stand-
2	ards savings, ensure that the retail electricity
3	distributor or retail natural gas distributor
4	claiming the savings played a significant role in
5	achieving the savings (including through the ac-
6	tivities of a designated agent of the distributor
7	or through the purchase of transferred savings);
8	"(J) avoid double-counting of savings used
9	for compliance with this section, including
10	transferred savings; and
11	"(K) include savings from programs ad-
12	ministered by the retail electric or natural gas
13	distributor that are funded by State, Federal,
14	or other sources; and
15	"(2) procedures and standards for third-party
16	verification of reported electricity savings or natural
17	gas savings.
18	"(g) Enforcement and Judicial Review.—
19	"(1) REVIEW OF RETAIL DISTRIBUTOR RE-
20	PORTS.—The Secretary shall review each report sub-
21	mitted to the Secretary by a retail electricity dis-
22	tributor or retail natural gas distributor under sub-
23	section (d) to verify that the applicable performance
24	standards under subsection (d) have been met. In
25	determining compliance with the applicable perform-

1	ance standards, the Secretary shall exclude reported
2	electricity savings or natural gas savings that are
3	not adequately demonstrated and documented, in ac-
4	cordance with the regulations issued under sub-
5	sections (d), (e), and (f).
6	"(2) Penalty for failure to document
7	ADEQUATE SAVINGS.—If a retail electricity dis-
8	tributor or a retail natural gas distributor fails to
9	demonstrate compliance with an applicable perform-
10	ance standard under subsection (d), or to pay to the
11	State an applicable alternative compliance payment
12	under subsection (h)(4), the Secretary shall assess
13	against the retail electricity distributor or retail nat-
14	ural gas distributor a civil penalty for each such fail-
15	ure in an amount equal to, as adjusted for inflation
16	in accordance with such regulations as the Secretary
17	may promulgate—
18	"(A) \$50 per megawatt-hour of electricity
19	savings or alternative compliance payment that
20	the retail electricity distributor failed to achieve
21	or make, respectively; or
22	"(B) \$5 per million British thermal units
23	of natural gas savings or alternative compliance
24	payment that the retail natural gas distributor
25	failed to achieve or make, respectively.

1	"(3) Offsetting state penalties.—The
2	Secretary shall reduce the amount of any penalty
3	under paragraph (2) by the amount paid by the rel-
4	evant retail electricity distributor or retail natural
5	gas distributor to a State for failure to comply with
6	the requirements of a State energy efficiency re-
7	source standard during the same compliance period,
8	provided that the State standard is comparable in
9	type to the Federal standard established under this
10	section and is more stringent than the applicable
11	performance standards under subsection (d).
12	"(4) Enforcement procedures.—The Sec-
13	retary shall assess a civil penalty, as provided under
14	paragraph (1), in accordance with the procedures
15	described in section 333(d) of the Energy Policy and
16	Conservation Act of 1954 (42 U.S.C. 6303).
17	"(5) Judicial review.—Any person who will
18	be adversely affected by a final action taken by the
19	Secretary under this section, other than the assess-
20	ment of a civil penalty, may use the procedures for
21	review described in section 336(b) of the Energy
22	Policy and Conservation Act (42 U.S.C. 6306). For
23	purposes of this paragraph, references to a rule in
24	section 336(b) of the Energy Policy and Conserva-
25	tion Act shall be deemed to refer also to all other

1	final actions of the Secretary under this section
2	other than the assessment of a civil penalty.
3	"(h) State Administration.—
4	"(1) In general.—Upon receipt of an applica-
5	tion from the Governor of a State (including, for
6	purposes of this subsection, the Mayor of the Dis-
7	trict of Columbia), the Secretary may delegate to the
8	State the administration of this section within the
9	State's territory if the Secretary determines that the
10	State will implement an energy efficiency program
11	that meets or exceeds the requirements of this sec-
12	tion, including—
13	"(A) achieving electricity savings and nat-
14	ural gas savings at least as great as those re-
15	quired under the applicable performance stand-
16	ards established under subsection (d);
17	"(B) reviewing reports and verifying elec-
18	tricity savings and natural gas savings achieved
19	in the State (including savings transferred from
20	outside the State); and
21	"(C) in the case of failure to document
22	adequate savings, requiring payment of alter-
23	native compliance payments that are at least as
24	high as those required under subsection (g) and

1	using such payments to implement cost-effective
2	efficiency programs.
3	"(2) Secretarial Determination.—The Sec-
4	retary shall make a substantive determination ap-
5	proving or disapproving a State application, after
6	public notice and comment, within 180 days of re-
7	ceipt of a complete application.
8	"(3) Alternative measurement and
9	VERIFICATION PROCEDURES AND STANDARDS.—As
10	part of an application submitted under paragraph
11	(1), a State may request to use alternative measure-
12	ment and verification procedures and standards to
13	those specified in subsection (f), provided the State
14	demonstrates that such alternative procedures and
15	standards provide a level of accuracy of measure-
16	ment and verification at least equivalent to the Fed-
17	eral procedures and standards promulgated under
18	subsection (f).
19	"(4) Use of alternative compliance pay-
20	MENTS.—Alternative compliance payments collected
21	by a State pursuant to this section shall be used by
22	the State to administer its delegated authority under
23	this section and to implement cost-effective energy
24	efficiency programs. Such programs shall—

1	"(A) to the extent feasible, achieve elec-
2	tricity savings and natural gas savings in the
3	State sufficient to make up the deficit associ-
4	ated with the alternative compliance payments;
5	and
6	"(B) be measured and verified in accord-
7	ance with the applicable procedures and stand-
8	ards under subsection (f) or paragraph (3) of
9	this subsection, as the case may be.
10	"(5) Review of State implementation.—
11	"(A) Periodic Review.—Every 2 years,
12	the Secretary shall review State implementation
13	of this section for conformance with the re-
14	quirements of this section in approximately one-
15	half of the States that have received approval
16	under this subsection to administer the pro-
17	gram, such that each State shall be reviewed at
18	least every 4 years. To facilitate such review,
19	the Secretary may require the State to submit
20	a report demonstrating its conformance with
21	the requirements of this section, including—
22	"(i) reports submitted by retail elec-
23	tricity distributors and retail natural gas
24	distributors to the State demonstrating

1	compliance with applicable performance
2	standards;
3	"(ii) the impact of such standards on
4	projected electricity and natural gas de-
5	mand within the State;
6	"(iii) an accounting of the State's use
7	of alternative compliance payments and the
8	resulting electricity savings and natural
9	gas savings achieved; and
10	"(iv) such other information as the
11	Secretary determines appropriate.
12	"(B) REVIEW UPON PETITION.—Notwith-
13	standing subparagraph (A), upon receipt of a
14	public petition containing credible allegation of
15	substantial deficiencies, the Secretary shall
16	promptly review a State's implementation of
17	delegated authority under this section.
18	"(C) Deficiencies.—If deficiencies are
19	found in a review under this paragraph, the
20	Secretary shall notify the State and direct it to
21	correct such deficiencies and to report to the
22	Secretary on progress within 180 days of the
23	receipt of review results. If the deficiencies are
24	substantial, the Secretary shall—

1	"(i) disallow such reported savings as
2	the Secretary determines are not credible
3	due to deficiencies;
4	"(ii) re-review the State not later than
5	2 years after the original review; and
6	"(iii) if substantial deficiencies remain
7	uncorrected after the review provided for
8	under clause (ii), revoke the authority of
9	such State to administer the program es-
10	tablished under this section.
11	"(6) Calls for revision of state applica-
12	TIONS.—As a condition of maintaining its delegated
13	authority to administer this section, the Secretary
14	may require a State to submit a revised application
15	under paragraph (1) if the Secretary has—
16	"(A) promulgated new or revised perform-
17	ance standards under subsection (d);
18	"(B) promulgated new or substantially re-
19	vised measurement and verification procedures
20	and standards under subsection (f); or
21	"(C) otherwise substantially revised the
22	program established under this section.
23	"(i) Information and Reports.—In accordance
24	with section 13 of the Federal Energy Administration Act
25	of 1974 (15 U.S.C. 772), the Secretary may require any

- 1 retail electricity distributor, any retail natural gas dis-
- 2 tributor, any third-party efficiency provider, or such other
- 3 entities as the Secretary deems appropriate, to provide any
- 4 information the Secretary determines appropriate to carry
- 5 out this section.
- 6 "(j) State Law.—Nothing in this section shall di-
- 7 minish or qualify any authority of a State or political sub-
- 8 division of a State to adopt or enforce any law or regula-
- 9 tion respecting electricity savings or natural gas savings,
- 10 including any law or regulation establishing energy effi-
- 11 ciency requirements more stringent than those under this
- 12 section, provided that no such law or regulation may re-
- 13 lieve any person of any requirement otherwise applicable
- 14 under this section.".
- 15 (b) Table of Contents Amendment.—The table
- 16 of contents of the Public Utility Regulatory Policies Act
- 17 of 1978 (16 U.S.C. 2601 and following) is amended by
- 18 adding at the end of the items relating to title VI the fol-
- 19 lowing:

"Sec. 611. Federal energy efficiency resource standard.".

20 Subtitle E—Industrial Energy

- 21 Efficiency Programs
- 22 SEC. 241. INDUSTRIAL PLANT ENERGY EFFICIENCY STAND-
- ARDS.
- The Secretary of Energy shall develop industrial
- 25 plant energy efficiency certification standards as part of

1	the existing Department of Energy program of developing
2	American National Standards Institute (ANSI) accredited
3	standards for industrial benchmarking, and shall seek
4	ANSI accreditation of such standards.
5	SEC. 242. ELECTRIC AND THERMAL ENERGY EFFICIENCY
6	AWARD PROGRAMS.
7	(a) Thermal and Electric Energy Recovery
8	AWARDS.—The Secretary of Energy shall establish a pro-
9	gram to make monetary awards to the owners and opera-
10	tors of new and existing electric energy generation facili-
11	ties or thermal energy production facilities using fossil or
12	nuclear fuel, to encourage them to use innovative means
13	of recovering any thermal energy that is a potentially use-
14	ful byproduct of electric power generation or other proc-
15	esses to—
16	(1) generate additional electric energy; or
17	(2) make sales of thermal energy not used for
18	electric generation, in the form of steam, hot water,
19	chilled water, or desiccant regeneration, or for other
20	commercially valid purposes.
21	(b) Amount of Awards.—
22	(1) Eligibility.—Awards shall be made under
23	subsection (a) only for the use of innovative means
24	that increase the net energy efficiency at the facility

1	concerned in relationship to the current standard
2	technology in use at similar facilities.
3	(2) Amount.—The amount of an award made
4	under subsection (a) shall equal an amount up to
5	the value of 25 percent of the energy projected to be
6	recovered or generated during the first 5 years of
7	operation of the facility using the innovative energy
8	recovery method, or such lesser amount that the
9	Secretary determines to be the minimum amount
10	that can cost-effectively stimulate such innovation.
11	(3) Limitation.—No person may receive an
12	award under this section if a grant under the waste
13	energy incentive grant program under section 373 of
14	the Energy Policy and Conservation Act (42 U.S.C.
15	6343) is made for the same energy savings resulting
16	from the same innovative method.
17	(c) REGULATORY STATUS.—The Secretary of Energy
18	shall—
19	(1) assist State regulatory commissions to iden-
20	tify and make changes in State regulatory programs
21	for electric utilities to provide appropriate regulatory
22	status for thermal energy byproduct businesses of
23	regulated electric utilities to encourage those utilities
24	to enter businesses making the sales referred to in
25	subsection $(a)(2)$; and

1	(2) encourage self-regulated utilities to enter
2	businesses making the sales referred to in subsection
3	(a)(2).
4	(d) ELIGIBILITY FOR SEED LOANS.—Owners and op-
5	erators of electric energy generation and thermal energy
6	production facilities shall be eligible for SEED Fund loans
7	under subtitle D of title I to provide initial capital for en-
8	tering into businesses involving sales referred to in sub-
9	section $(a)(2)$.
10	(e) Authorization of Appropriations.—There
11	are authorized to be appropriated to the Secretary of En-
12	ergy such sums as are necessary for the purposes of this
13	section.
	section. Subtitle F—Improvements in En-
	Subtitle F—Improvements in En-
14	Subtitle F—Improvements in Energy Savings Performance Con-
14 15	Subtitle F—Improvements in Energy Savings Performance Con-
14151617	Subtitle F—Improvements in Energy Savings Performance Contracting
14151617	Subtitle F—Improvements in Energy Savings Performance Contracting SEC. 251. ENERGY SAVINGS PERFORMANCE CONTRACTS.
1415161718	Subtitle F—Improvements in Energy Savings Performance Contracting SEC. 251. ENERGY SAVINGS PERFORMANCE CONTRACTS. (a) COMPETITION REQUIREMENTS FOR TASK OR DE-
141516171819	Subtitle F—Improvements in Energy Savings Performance Contracting SEC. 251. ENERGY SAVINGS PERFORMANCE CONTRACTS. (a) COMPETITION REQUIREMENTS FOR TASK OR DELIVERY ORDERS UNDER ENERGY SAVINGS PERFORMANCE.
14 15 16 17 18 19 20	Subtitle F—Improvements in Energy Savings Performance Contracting SEC. 251. ENERGY SAVINGS PERFORMANCE CONTRACTS. (a) Competition Requirements for Task or Delivery Orders Under Energy Savings Performance Contracts.—
14 15 16 17 18 19 20 21	Subtitle F—Improvements in Energy Savings Performance Contracting SEC. 251. ENERGY SAVINGS PERFORMANCE CONTRACTS. (a) COMPETITION REQUIREMENTS FOR TASK OR DELIVERY ORDERS UNDER ENERGY SAVINGS PERFORMANCE CONTRACTS.— (1) COMPETITION REQUIREMENTS.—Subsection

1	"(3) Competition requirements for task
2	OR DELIVERY ORDERS.—
3	"(A) The head of a Federal agency may
4	issue a task or delivery order for energy savings
5	performance contract services by—
6	"(i) reviewing the qualifications of two
7	or more contractors that have been com-
8	petitively awarded multiple-award indefi-
9	nite-delivery, indefinite-quantity contracts
10	to provide energy savings performance
11	services;
12	"(ii) selecting two or more contractors
13	(from among those reviewed under clause
14	(i)) to conduct discussions concerning the
15	contractors' respective qualifications to im-
16	plement potential energy conservation
17	measures, including requesting references
18	demonstrating experience on similar efforts
19	and the resulting energy savings of such
20	similar efforts;
21	"(iii) selecting and authorizing one or
22	more contractors (from among those se-
23	lected under clause (ii)) to conduct a site
24	survey or investigation and a feasibility de-
25	sign and study for the purpose of allowing

1	each contractor to submit a firmed-fixed
2	price proposal to implement specific energy
3	conservation measures;
4	"(iv) negotiating a task or delivery
5	order for energy savings performance con-
6	tracting services with one of the contrac-
7	tors selected under clause (iii) based on the
8	energy conservation measures identified in
9	the site survey or investigation and feasi-
10	bility design and study; and
11	"(v) issuing a task or delivery order
12	for energy savings performance contracting
13	services to such contractor.
14	"(B) The issuance of a task or delivery
15	order for energy savings performance con-
16	tracting services pursuant to subparagraph (A)
17	is deemed to satisfy the task and delivery order
18	competition requirements in section 2304c(d) of
19	title 10, United States Code. and section
20	303J(d) of the Federal Property and Adminis-
21	trative Services Act of 1949 (41 U.S.C. 253j).
22	"(C) The Secretary may issue guidance as
23	necessary to agencies issuing task or delivery
24	orders pursuant to subparagraph (A).".

1	(2) Effective date.—The amendment made
2	by subsection (a) is inapplicable to task or delivery
3	orders issued before the date of enactment of this
4	section.
5	(b) Inclusion of Contracts for Renewable En-
6	ERGY.—Section 801(a)(2) of the National Energy Con-
7	servation Policy Act (42 U.S.C. 8287) is amended—
8	(1) by redesignating subparagraphs (E), (F),
9	and (G) as subparagraphs (F), (G), and (H), respec-
10	tively; and
11	(2) by inserting after subparagraph (D) the fol-
12	lowing new subparagraph:
13	"(E) Contracts for renewable en-
14	ERGY FROM PUBLIC UTILITY SERVICES.—Not-
15	withstanding section 501(b)(1)(B) of title 40,
16	United States Code, a contract for renewable
17	energy entered into in support of an Energy
18	Savings Performance Contract may be made for
19	a period of not more than 30 years.".
20	(c) Inclusion of Installation of Renewable
21	Energy Systems.—Section 804(2)(B) of the National
22	Energy Conservation Policy Act (42 U.S.C. 8287c(2)(B))
23	is amended to read as follows:
24	"(B) the increased efficient use of an exist-
25	ing energy source by cogeneration or heat re-

1	covery installed on the Federal facility site, and
2	installation of renewable energy systems;".
3	(d) Inclusion of Thermal Renewable En-
4	ERGY.—Section 203 of the Energy Policy Act of 2005 (42
5	U.S.C. 15852) is amended—
6	(1) in subsection (a), by striking "electric"; and
7	(2) in subsection (b)(2), by inserting "or ther-
8	mal" after "electric".
9	(e) Credit for Renewable Energy Produced
10	AND USED ON SITE.—Subsection (c) of section 203 of the
11	Energy Policy Act of 2005 (42 U.S.C. 15852) is amended
12	to read as follows:
13	"(c) Calculation.—Renewable energy produced at
14	a Federal facility, on Federal lands, or on Indian lands,
15	shall be calculated separately from renewable energy con-
16	sumed at a Federal facility, and each may be used to com-
17	ply with the consumption requirement under subsection
18	(a).".
19	(f) Financing Flexibility.—Section 801(a)(2)(F)
20	of the National Energy Conservation Policy Act (42
21	U.S.C. 8287(a)(2)(F)) is amended by striking "In" and
22	inserting "Notwithstanding any other provision of law,

23 in".

Subtitle G—Public Institutions

2	SEC. 261. PUBLIC INSTITUTIONS.
3	Section 399A of the Energy Policy and Conservation
4	Act (42 U.S.C. 6371h-1) is amended—
5	(1) in subsection (a)(5), by striking "or a des-
6	ignee" and inserting "a not-for-profit hospital or
7	not-for-profit inpatient health care facility, or a des-
8	ignated agent";
9	(2) in subsection (c)(1), by striking subpara-
10	graph (C);
11	(3) in subsection $(f)(3)(A)$, by striking
12	" $\$1,000,000$ " and inserting " $\$2,500,000$ "; and
13	(4) in subsection (i)(1), by striking
14	"\$250,000,000 for each of fiscal years 2009 through
15	2013" and inserting "such sums as may be nec-
16	essary for each of fiscal years 2010 through 2015".
17	TITLE III—REDUCING GLOBAL
18	WARMING POLLUTION
19	SEC. 301. SHORT TITLE.
20	This title may be cited as the "Safe Climate Act".
21	Subtitle A—Reducing Global
22	Warming Pollution
23	SEC. 311. REDUCING GLOBAL WARMING POLLUTION.
24	The Clean Air Act (42 U.S.C. and following) is
25	amended by adding at the end the following new title:

"TITLE VII—GLOBAL WARMING 1 POLLUTION REDUCTION PRO-2 **GRAM** 3 4 "PART A—GLOBAL WARMING POLLUTION 5 REDUCTION GOALS AND TARGETS 6 "SEC. 701. FINDINGS AND PURPOSE. 7 "(a) FINDINGS.—The Congress finds as follows: 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 nations. 12 "(2) Reviews of scientific studies, including by 13 the Intergovernmental Panel on Climate Change and 14 the National Academies, demonstrate that global 15 warming is the result of the combined anthropogenic 16 greenhouse gas emissions from numerous sources of 17 all types and sizes. Each increment of emission. 18 when combined with other emissions, causes or con-19 tributes materially to the acceleration and extent of 20 global warming and its adverse effects for the life-21 time of such gas in the atmosphere. Accordingly, 22 controlling emissions in small as well as large 23 amounts is essential to prevent, slow the pace of, re-24 duce the threats from, and mitigate global warming

25

and its adverse effects.

1	"(3) Because they induce global warming,
2	greenhouse gas emissions cause or contribute to in-
3	juries to persons in the United States, including—
4	"(A) adverse health effects such as disease
5	and loss of life;
6	"(B) displacement of human populations;
7	"(C) damage to property and other inter-
8	ests related to ocean levels, acidification, and
9	ice changes;
10	"(D) severe weather and seasonal changes;
11	"(E) disruption, costs, and losses to busi-
12	ness, trade, employment, farms, subsistence,
13	aesthetic enjoyment of the environment, recre-
14	ation, culture, and tourism;
15	"(F) damage to plants, forests, lands, and
16	waters;
17	"(G) harm to wildlife and habitat;
18	"(H) scarcity of water and the decreased
19	abundance of other natural resources;
20	"(I) worsening of tropospheric air pollu-
21	tion;
22	"(J) substantial threats of similar damage;
23	and
24	"(K) other harm.

1	"(4) That many of these effects and risks of fu-
2	ture effects of global warming are widely shared
3	does not minimize the adverse effects individual per-
4	sons have suffered, will suffer, and are at risk of
5	suffering because of global warming.
6	"(5) That some of the adverse and potentially
7	catastrophic effects of global warming are presently
8	at risk of occurring and not a certainty does not ne-
9	gate the harm persons suffer from actions that in-
10	crease the likelihood, extent, and severity of such fu-
11	ture impacts.
12	"(6) Nations of the world look to the United
13	States for leadership in addressing the threat of and
14	harm from global warming. Full implementation of
15	this Act is critical to engage other nations in an
16	international effort to mitigate the threat of and
17	harm from global warming.
18	"(7) Global warming and its adverse effects are
19	now occurring and are likely to continue and in-
20	crease in magnitude, and to do so at a greater and
21	more harmful rate, unless this Act is fully imple-
22	mented and enforced in an expeditious manner.
23	"(b) Purpose.—It is the general purpose of this Act
24	to help prevent, reduce the pace of, mitigate, and remedy

1	global warming and its adverse effects. To fulfill the pur-
2	poses of this Act, it is necessary to—
3	"(1) require the timely fulfillment of all govern-
4	mental acts and duties, both substantive and proce-
5	dural, and the prompt compliance of covered entities
6	with the requirements of this Act;
7	"(2) establish and maintain an effective, trans-
8	parent, and fair market for emissions allowances and
9	preserve the integrity of the cap on emissions and of
10	offset credits;
11	"(3) advance the production and deployment of
12	clean energy and efficiency technologies; and
13	"(4) ensure effective enforcement of this Act by
14	citizens, states, and all levels of government because
15	each violation of this Act is likely to result in an ad-
16	ditional increment of greenhouse gas emission that
17	will slow the pace of implementation of this Act's
18	goals and cause or contribute to global warming and
19	its adverse effects.
20	"SEC. 702. ECONOMY-WIDE REDUCTION GOALS.
21	"The purpose of this title and title VIII of this Act
22	is to reduce steadily the quantity of United States green-
23	house gas emissions such that—
24	"(1) in 2012, the quantity of United States
25	greenhouse gas emissions does not exceed 97 percent

1	of the quantity of United States greenhouse gas
2	emissions in 2005;
3	"(2) in 2020, the quantity of United States
4	greenhouse gas emissions does not exceed 80 percent
5	of the quantity of United States greenhouse gas
6	emissions in 2005;
7	"(3) in 2030, the quantity of United States
8	greenhouse gas emissions does not exceed 58 percent
9	of the quantity of United States greenhouse gas
10	emissions in 2005; and
11	"(4) in 2050, the quantity of United States
12	greenhouse gas emissions does not exceed 17 percent
13	of the quantity of United States greenhouse gas
14	emissions in 2005.
15	"SEC. 703. REDUCTION TARGETS FOR SPECIFIED SOURCES.
16	"(a) In General.—Not later than 2 years after the
17	date of enactment of this title, pursuant to section 721(e),
18	the Administrator shall promulgate regulations to cap and
19	reduce annually the greenhouse gas emissions of capped
20	sources each calendar year beginning in 2012 such that—
21	
<i>L</i> 1	"(1) in 2012, the quantity of greenhouse gas
22	"(1) in 2012, the quantity of greenhouse gas emissions from capped sources does not exceed 97

1	"(2) in 2020, the quantity of greenhouse gas
2	emissions from capped sources does not exceed 80
3	percent of the quantity of greenhouse gas emissions
4	from such sources in 2005;
5	"(3) in 2030, the quantity of greenhouse gas
6	emissions from capped sources does not exceed 58
7	percent of the quantity of greenhouse gas emissions
8	from such sources in 2005; and
9	"(4) in 2050, the quantity of greenhouse gas
10	emissions from capped sources does not exceed 17
11	percent of the quantity of greenhouse gas emissions
12	from such sources in 2005.
13	"(b) Definition.—For purposes of this section, the
14	term 'greenhouse gas emissions from such sources in
15	2005' means emissions for which section 722 would have
16	required emission allowances to be held if the require-
17	ments of this title for the specified year had been in effect
18	in 2005.
19	"SEC. 704. SUPPLEMENTAL POLLUTION REDUCTIONS.
20	"For the purposes of decreasing the likelihood of cat-
21	astrophic climate change, preserving tropical forests,
22	building capacity to generate offset credits, and facili-
23	tating international action on global warming, the Admin-
24	istrator shall set aside the percentage specified in section
25	781 of the quantity of emission allowances established

1	under section 721(a) for each year, to be used to provide
2	incentives to reduce deforestation in developing countries
3	pursuant to part E. In 2020, the activities to reduce defor-
4	estation shall provide greenhouse gas reductions in an
5	amount equal to an additional 10 percentage points of re-
6	ductions from United States greenhouse gas emissions in
7	2005. The Administrator shall transfer these allowances
8	to countries that enter into and implement agreements or
9	arrangements relating to reduced deforestation as de-
10	scribed in section $754(a)(2)$.
11	"SEC. 705. SCIENTIFIC REVIEW.
12	"(a) In General.—Not later than 1 year after the
13	date of enactment of this title, the Administrator shall
14	offer to enter into a contract with the National Academy
15	of Sciences (in this section referred to as the 'Academy')
16	under which the Academy shall, not later than July 1
17	2012, and every 4 years thereafter, submit to Congress
18	and the Administrator a report that includes—
19	"(1) an analysis of the latest scientific informa-
20	tion and data relevant to global climate change;
21	"(2) an analysis of the technological feasibility
22	of achieving additional reductions in greenhouse gas
23	emissions; and
24	"(3) an analysis of the status of worldwide
25	greenhouse gas reduction efforts, including imple-

1	mentation of Safe Climate Act and other policies,
2	both domestic and international, for reducing green-
3	house gas emissions, preventing dangerous atmos-
4	pheric concentrations of greenhouse gases, pre-
5	venting a dangerous increase in global average tem-
6	perature and reducing vulnerability to the impacts of
7	climate change.
8	"(b) Exception.—Paragraphs (2) and (3) of sub-
9	section (a) shall not apply to the first report submitted
10	under subsection (a).
11	"(c) Latest Scientific Information.—The anal-
12	ysis required under subsection (a)(1) shall—
13	"(1) address existing scientific information and
14	reports, including the most recent assessment report
15	of the Intergovernmental Panel on Climate Change,
16	greenhouse gas emissions trends identified by the
17	Energy Information Agency, data from the National
18	Oceanic and Atmospheric Administration, data from
19	the Climate Change Science Program, data from the
20	National Aeronautics and Space Administration,
21	data from the Environmental Protection Agency in-
22	cluding the Agency's Greenhouse Gas Inventory, and
23	the European Union's global temperature data as-
24	sessment; and

1	"(2) include a description of trends and projec-
2	tions for—
3	"(A) global and country-specific annual
4	emissions of greenhouse gases, and cumulative
5	emissions produced between 1850 and the
6	present, including—
7	"(i) global cumulative emissions of an-
8	thropogenic greenhouse gases;
9	"(ii) global annual emissions of an-
10	thropogenic greenhouse gases; and
11	"(iii) by country, annual and cumu-
12	lative anthropogenic emissions of green-
13	house gases for the top 50 emitting na-
14	tions;
15	"(B) significant changes, both globally and
16	by country, in annual nonanthropogenic green-
17	house gas emissions including any accelerated
18	and large scale releases of greenhouse gases
19	from natural sources, such as from melting per-
20	mafrost, large scale natural forest decline, or a
21	decline in greenhouse gas absorption by the
22	oceans;
23	"(C) global atmospheric concentrations of
24	greenhouse gases, expressed in annual con-
25	centration units as well as carbon dioxide

1	equivalents based on 100-year global warming
2	potentials;
3	"(D) major climate forcing factors, such as
4	aerosols;
5	"(E) global average temperature, expressed
6	as seasonal and annual averages in land, ocean,
7	and land-plus-ocean averages; and
8	"(F) sea level rise;
9	"(3) describe increased risks to natural systems
10	and society that would result from an increase in
11	global average temperature 3.6 degrees Fahrenheit
12	(2 degrees Celsius) above the pre-industrial average,
13	as well as any other temperature thresholds the
14	Academy deems appropriate;
15	"(4) assess the impacts of global climate change
16	on—
17	"(A) human populations, including impacts
18	on public health, economic livelihoods, and
19	human infrastructure, and displacement due to
20	flooding;
21	"(B) freshwater systems, including water
22	resources for human consumption and agri-
23	culture and natural and managed ecosystems,
24	flood and drought risks, and relative humidity;

1	"(C) the carbon cycle, including impacts
2	related to the thawing of permafrost and terres-
3	trial and ocean carbon sinks;
4	"(D) species, including impacts on species
5	abundance, phenology, and distribution;
6	"(E) oceans and ocean ecosystems, includ-
7	ing effects on sea level rise, ocean acidity, ocean
8	temperatures, the health of coral reefs, fresh-
9	water influx on ocean circulation, and other in-
10	dicators of ocean ecosystem health;
11	"(F) the cryosphere, including effects on
12	ice sheet mass balance, mountain glacier mass
13	balance, and sea-ice extent and volume;
14	"(G) extreme weather events, including ef-
15	fects on intense precipitation, tropical cyclones,
16	and severe heat waves;
17	"(H) agriculture and forest systems, in-
18	cluding effects on potential growing season, dis-
19	tribution, and yield; and
20	"(I) any other indicators the Academy
21	deems appropriate; and
22	"(5) in assessing risks and impacts, use a risk
23	management framework, including both qualitative
24	and quantitative measures, to assess the observed

1	and projected impacts of current and future climate
2	change, accounting for—
3	"(A) both monetized and non-monetized
4	losses;
5	"(B) potential nonlinear, abrupt, or essen-
6	tially irreversible changes in the climate system;
7	"(C) potential nonlinear increases in the
8	cost of impacts;
9	"(D) potential low-probability, high impact
10	events; and
11	"(E) whether impacts are transitory or es-
12	sentially permanent.
13	"(d) Technological Information.—The analysis
14	required under subsection (a)(2) shall—
15	"(1) address existing technological information
16	and reports, including the most recent reports by the
17	Department of Energy and the International Energy
18	Agency;
19	"(2) assess the current and future projected de-
20	ployment of technologies and practices in the United
21	States that reduce or limit greenhouse gas emis-
22	sions, including—
23	"(A) technologies for capture and seques-
24	tration of greenhouse gases;

1	"(B) technologies to improve energy effi-
2	ciency;
3	"(C) low or zero-greenhouse gas emitting
4	energy technologies;
5	"(D) low or zero-greenhouse gas emitting
6	fuels;
7	"(E) biological sequestration practices and
8	technologies; and
9	"(F) any other technologies the Academy
10	deems relevant; and
11	"(3) assess and compare the emissions reduc-
12	tion potential, commercial viability, market penetra-
13	tion, and deployment of the technologies described in
14	paragraph (2), including—
15	"(A) an assessment of the need for addi-
16	tional research and development, including pub-
17	licly funded research and development;
18	"(B) an assessment of the state of com-
19	mercial deployment, including, where appro-
20	priate, a comparison to the cost and level of de-
21	ployment of conventional fossil fuel-fired energy
22	technologies and devices; and
23	"(C) an assessment of the existence of any
24	substantial technological, legal, or market-based
25	barriers to commercial deployment.

1	"(e) Status of Greenhouse Gas Reduction Ef-
2	FORTS.—The analysis required under subsection (a)(3)
3	shall address—
4	"(1) whether the programs under Safe Climate
5	Act and other Federal statutes are driving sufficient
6	United States greenhouse gas emissions reductions
7	to meet the emissions reduction targets in section
8	702; and
9	"(2) whether United States actions, in concert
10	with international action, are sufficient to avoid—
11	"(A) atmospheric greenhouse gas con-
12	centrations above 450 parts per million carbon
13	dioxide equivalent; and
14	"(B) global average surface temperature
15	3.6 degrees Fahrenheit (2 degrees Celsius)
16	above the pre-industrial average, or such other
17	temperature thresholds as the Academy deems
18	appropriate.
19	"(f) Recommendations.—
20	"(1) Latest scientific information.—
21	Based on the analysis described in subsection $(a)(1)$,
22	the Academy shall identify actions that could be
23	taken to better—

1	"(A) characterize changes in the earth-cli-
2	mate system and impacts of global climate
3	change;
4	"(B) inform decision making and actions
5	related to global climate change;
6	"(C) mitigate risks to natural and social
7	systems; and
8	"(D) design policies to better account for
9	climate risks.
10	"(2) Technological information.—Based
11	on the analysis described in subsection (a)(2), the
12	Academy shall identify—
13	"(A) additional emissions reductions that
14	may be possible as a result of technologies de-
15	scribed in the analysis;
16	"(B) barriers to the deployment of such
17	technologies; and
18	"(C) actions that could be taken to speed
19	deployment of such technologies.
20	"(3) Status of greenhouse gas reduction
21	EFFORTS.—Based on the analysis described in sub-
22	section (a)(3), the Academy shall identify—
23	"(A) the quantity of additional reductions
24	required to meet the emissions reduction tar-
25	gets in section 702; and

1	"(B) the quantity of additional reductions
2	in global greenhouse gas emissions needed to
3	avoid the identified concentration and tempera-
4	ture thresholds.
5	"(g) AUTHORIZATION OF APPROPRIATIONS.—There
6	are authorized to be appropriated to carry out this section
7	such sums as may be necessary.
8	"SEC. 706. PRESIDENTIAL RESPONSE AND RECOMMENDA-
9	TIONS.
10	"Not later than July 1, 2017, and every 4 years
11	thereafter—
12	"(1) the President shall direct relevant Federal
13	agencies to use existing statutory authority to take
14	appropriate actions identified in the report sub-
15	mitted under section 705 by the National Academy
16	of Sciences in the previous year and to address any
17	shortfalls identified in such report; and
18	"(2) in the event that the National Academy of
19	Sciences has concluded, in the most recent report
20	submitted under section 705, that the United States
21	will not achieve the necessary domestic greenhouse
22	gas emissions reductions, or that global actions will
23	not maintain safe global average surface tempera-
24	ture and atmospheric greenhouse gas concentration
25	thresholds, the President shall submit to Congress a

1	plan identifying domestic and international actions
2	that will achieve necessary additional greenhouse gas
3	reductions, including any recommendations for legis-
4	lative action.
5	"PART B—DESIGNATION AND REGISTRATION OF
6	GREENHOUSE GASES
7	"SEC. 711. DESIGNATION OF GREENHOUSE GASES.
8	"(a) Greenhouse Gases.—For purposes of this
9	title, the following are greenhouse gases:
10	"(1) Carbon dioxide.
11	"(2) Methane.
12	"(3) Nitrous oxide.
13	"(4) Sulfur hexafluoride.
14	"(5) Hydrofluorocarbons emitted as a byprod-
15	uct.
16	"(6) A perfluorocarbon.
17	"(7) Nitrogen trifluoride.
18	"(8) Any other anthropogenic gas designated as
19	a greenhouse gas by the Administrator under this
20	section.
21	"(b) Determination on Administrator's Initia-
22	TIVE.—The Administrator shall, by rule—
23	"(1) designate another anthropogenic gas as a
24	greenhouse gas, except as provided in paragraph (3),
25	if the Administrator determines that 1 metric ton of

1	the gas makes the same or greater contribution to
2	global warming over 100 years as 1 metric ton of
3	carbon dioxide;
4	"(2) determine the carbon dioxide equivalent
5	value for each gas with respect to which the Admin-
6	istrator makes an affirmative determination under
7	paragraph (1);
8	"(3) for each gas described in paragraph (1)
9	that is used as a substitute for a class I or class II
10	substance under title VI, determine whether and the
11	extent to which that gas, when used as a product,
12	should be regulated under section 619 and specify
13	appropriate compliance obligations under section
14	619; and
15	"(4) specify the appropriate compliance obliga-
16	tions under this title for each gas designated as a
17	greenhouse gas under paragraph (1).
18	"(c) Petitions to Designate a Greenhouse
19	Gas.—
20	"(1) In general.—Any person may petition
21	the Administrator to designate as a greenhouse gas
22	any anthropogenic gas 1 metric ton of which makes
23	the same or greater contribution to global warming
24	over 100 years as 1 metric ton of carbon dioxide.

1	"(2) Contents of Petition.—The petitioner
2	shall provide sufficient data, as specified by rule by
3	the Administrator, to demonstrate that the gas is
4	likely to be a greenhouse gas and is likely to be pro-
5	duced, imported, used, or emitted in the United
6	States. To the extent practicable, the petitioner shall
7	also identify producers, importers, distributors,
8	users, and emitters of the gas in the United States.
9	"(3) REVIEW AND ACTION BY THE ADMINIS-
10	TRATOR.—Not later than 90 days after receipt of a
11	petition under paragraph (2), the Administrator
12	shall determine whether the petition is complete and
13	notify the petitioner and the public of the decision.
14	"(4) Additional information.—The Admin-
15	istrator may require producers, importers, distribu-
16	tors, users, or emitters of the gas to provide infor-
17	mation on the contribution of the gas to global
18	warming over 100 years compared to carbon dioxide.
19	"(5) Treatment of Petition.—For any sub-
20	stance used as a substitute for a class I or class II
21	substance under title VI, the Administrator may
22	elect to treat a petition under this subsection as a
23	petition to list the substance as a class II, group II
24	substance under section 619, and may require the

1	petition to be amended to address listing criteria
2	promulgated under that section.
3	"(6) Determination.—Not later than 2 years
4	after receipt of a complete petition, the Adminis-
5	trator shall, after notice and an opportunity for com-
6	ment—
7	"(A) issue a determination that 1 metric
8	ton of the gas does not make a contribution to
9	global warming over 100 years that is equal to
10	or greater than that made by 1 metric ton of
11	carbon dioxide and an explanation of the deci-
12	sion, which shall be published in the Federal
13	Register; or
14	"(B) determine that 1 metric ton of the
15	gas makes a contribution to global warming
16	over 100 years that is equal to or greater than
17	that made by 1 metric ton of carbon dioxide,
18	and take the actions described in subsection
19	(b)(1), (2) , (3) , and (4) with respect to such
20	gas.
21	"(7) Grounds for Denial.—The Adminis-
22	trator may not deny a petition under this subsection
23	solely on the basis of inadequate Environmental Pro-
24	tection Agency resources or time for review.
25	"(d) Manufacturing and Emission Notices.—

1	"(1) Notice requirement.—
2	"(A) In General.—Effective 24 months
3	after the date of enactment of this title, no per-
4	son may manufacture or import into the United
5	States a fluorinated gas, or emit a significant
6	quantity, as determined by the Administrator,
7	of any fluorinated gas that is generated as a
8	byproduct during the production or use of an-
9	other fluorinated gas, unless—
10	"(i) the gas is designated as a green-
11	house gas under this section;
12	"(ii) the Administrator has deter-
13	mined that 1 metric ton of such gas does
14	not make a contribution to global warming
15	that is equal to or greater than that made
16	by 1 metric ton of carbon dioxide; or
17	"(iii) the person taking the manufac-
18	ture, importation, or emission action has
19	submitted to the Administrator, on or be-
20	fore the start of such manufacture, impor-
21	tation, or emission, a notice of such per-
22	son's manufacture, importation, or emis-
23	sion of such gas, and the Administrator
24	has not determined that that notice or a
25	substantially similar notice is incomplete.

1	"(B) ALTERNATIVE COMPLIANCE.—For a
2	gas that is a substitute for a class I or class II
3	substance under title VI and either has been
4	listed as acceptable for use under section 612
5	or is currently subject to evaluation under sec-
6	tion 612, the Administrator may accept the no-
7	tice and information provided pursuant to that
8	section as fulfilling the obligation under clause
9	(iii) of subparagraph (B).
10	"(2) REVIEW AND ACTION BY THE ADMINIS-
11	TRATOR.—
12	"(A) Completeness.—Upon receipt of
13	notice under paragraph (1)(A)(iii) or (B), the
14	Administrator shall, not later than 90 days
15	after the date of enactment of this title, deter-
16	mine whether the notice is complete.
17	"(B) Determination.— If the Adminis-
18	trator determines that the notice is complete,
19	the Administrator shall, after notice and an op-
20	portunity for comment, not later than 12
21	months after receipt of the notice—
22	"(i) issue a determination that 1 met-
23	ric ton of the gas does not make a con-
24	tribution to global warming over 100 years
25	that is equal to or greater than that made

1	by 1 metric ton of carbon dioxide and an
2	explanation of the decision, which shall be
3	published in the Federal Register; or
4	"(ii) determine that 1 metric ton of
5	the gas makes a contribution to global
6	warming over 100 years that is equal to or
7	greater than that made by 1 metric ton of
8	carbon dioxide, and take the actions de-
9	scribed in subsection (b)(1), (2), (3), and
10	(4) with respect to such gas.
11	"(e) Regulations.—Not later than one year after
12	the date of enactment of this title, the Administrator shall
13	promulgate regulations to carry out this section. Such reg-
14	ulations shall include—
15	"(1) requirements for the contents of a petition
16	submitted under subsection (c);
17	"(2) requirements for the contents of a notice
18	required under subsection (d); and
19	"(3) methods and standards for evaluating the
20	carbon dioxide equivalent value of a gas.
21	"(f) Gases Regulated Under Title VI.—The
22	Administrator shall not designate a gas as a greenhouse
23	gas under this section to the extent that the gas is regu-
24	lated under title VI.

- 1 "(g) SAVINGS CLAUSE.—Nothing in this section shall
- 2 be interpreted to relieve any person from complying with
- 3 the requirements of section 612.
- 4 "SEC. 712. CARBON DIOXIDE EQUIVALENT VALUE OF
- 5 GREENHOUSE GASES.
- 6 "(a) Initial Value.—Except as provided by the Ad-
- 7 ministrator under this section or section 711, the carbon
- 8 dioxide equivalent value of greenhouse gases for purposes
- 9 of this Act shall be as 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-4310mee	1,640
CF ₄	7,390
C_2F_6	12,200
C ₄ F ₁₀	8,860
C_6F_{14}	9,300

347

"CARBON DIOXIDE EQUIVALENT OF 1 TON OF LISTED GREENHOUSE GASES—Continued

Greenhouse gas (1 metric ton)	Carbon dioxide equivalent (metric tons)
SF ₆	22,800
NF ₃	17,200

I	"(b) PERIODIC REVIEW.—
2	"(1) Not later than February 1, 2017, and (ex-
3	cept as provided in paragraph (3)) not less than
4	every 5 years thereafter, the Administrator shall—
5	"(A) review and, if appropriate, revise the
6	carbon dioxide equivalent values established
7	under this section or section 711(b)(2), based
8	on a determination of the number of metric
9	tons of carbon dioxide that makes the same
10	contribution to global warming over 100 years
11	as 1 metric ton of each greenhouse gas; and
12	"(B) publish in the Federal Register the
13	results of that review and any revisions.
14	"(2) A revised determination published in the
15	Federal Register under paragraph (1)(B) shall take
16	effect for greenhouse gas emissions starting on Jan-
17	uary 1 of the first calendar year starting at least 9
18	months after the date on which the revised deter-
19	mination was published.
20	"(3) The Administrator may decrease the fre-
21	quency of review and revision under paragraph (1)

1	if the Administrator determines that such decrease
2	is appropriate in order to synchronize such review
3	and revision with any similar review process carried
4	out pursuant to the United Nations Framework
5	Convention on Climate Change, done at New York
6	on May 9, 1992, or to an agreement negotiated
7	under that convention, except that in no event shall
8	the Administrator carry out such review and revision
9	any less frequently than every 10 years.
10	"(c) Methodology.—In setting carbon dioxide
11	equivalent values, for purposes of this section or section
12	711, the Administrator shall take into account publica-
13	tions by the Intergovernmental Panel on Climate Change
14	or a successor organization under the auspices of the
15	United Nations Environmental Programme and the World
16	Meteorological Organization.
17	"SEC. 713. GREENHOUSE GAS REGISTRY.
18	"(a) Definitions.—For purposes of this section:
19	"(1) CLIMATE REGISTRY.—The term 'Climate
20	Registry' means the greenhouse gas emissions reg-
21	istry jointly established and managed by more than
22	40 States and Indian tribes in 2007 to collect high-
23	quality greenhouse gas emission data from facilities,
24	corporations, and other organizations to support var-
25	ious greenhouse gas emission reporting and reduc-

1	tion policies for the member States and Indian
2	tribes.
3	"(2) Reporting entity.—The term 'reporting
4	entity' means—
5	"(A) a covered entity;
6	"(B) an entity that—
7	"(i) would be a covered entity if it had
8	emitted in 2008 or any subsequent year
9	more than 25,000 tons of carbon dioxide
10	equivalent; and
11	"(ii) has emitted in 2008 or any sub-
12	sequent year more than 10,000 tons of
13	carbon dioxide equivalent;
14	"(C) any other entity that emits a green-
15	house gas, if the Administrator determines that
16	reporting under this section by such entity will
17	help achieve the purposes of this title or title
18	VIII; or
19	"(D) any vehicle fleet with emissions of
20	more than 25,000 tons of carbon dioxide equiv-
21	alent on an annual basis, if the Administrator
22	determines that the inclusion of such fleet will
23	help achieve the purposes of this title or title
24	VIII.
25	"(b) Regulations.—

1	"(1) In General.—Not later than 6 months
2	after the date of enactment of this title, the Admin-
3	istrator shall issue regulations establishing a Federal
4	greenhouse gas registry. Such regulations shall—
5	"(A) require reporting entities to submit to
6	the Administrator data on—
7	"(i) greenhouse gas emissions in the
8	United States;
9	"(ii) the production and manufacture
10	in the United States, and importation into
11	the United States, of fuels and other prod-
12	ucts the uses of which result in greenhouse
13	gas emissions; and
14	"(iii) the sequestration of greenhouse
15	gases;
16	"(B) require covered entities to submit to
17	the Administrator data sufficient to ensure
18	compliance with the requirements of this title;
19	"(C) require reporting of electricity deliv-
20	ered to industrial sources in energy-intensive in-
21	dustries;
22	"(D) ensure the completeness, consistency,
23	transparency, accuracy, precision, and reliability
24	of such data;

1	"(E) take into account the best practices
2	from the most recent Federal, State, tribal, and
3	international protocols for the measurement, ac-
4	counting, reporting, and verification of green-
5	house gas emissions, including protocols from
6	the Climate Registry and other mandatory
7	State or multistate authorized programs;
8	"(F) take into account the latest scientific
9	research;
10	"(G) require that, for covered entities with
11	respect to greenhouse gases for which they are
12	required to hold emission allowances under sec-
13	tion 722, and, to the extent determined to be
14	appropriate by the Administrator, for covered
15	entities with respect to other greenhouse gases
16	and for other reporting entities, submitted data
17	are based on—
18	"(i) continuous monitoring systems
19	for fuel flow or emissions, such as contin-
20	uous emission monitoring systems;
21	"(ii) alternative systems that are dem-
22	onstrated as providing data with the same
23	precision, reliability, accessibility, and
24	timeliness as data provided by continuous

1	monitoring systems for fuel flow or emis-
2	sions; or
3	"(iii) alternative methodologies that
4	are demonstrated to provide data with pre-
5	cision, reliability, accessibility, and timeli-
6	ness as similar as is technically feasible to
7	that of data generally provided by contin-
8	uous monitoring systems for fuel flow or
9	emissions, if the Administrator determines
10	that, with respect to a reporting entity,
11	there is no continuous monitoring system
12	or alternative system described in clause
13	(i) or (ii) that is technically feasible.
14	"(H) require that the Administrator, in de-
15	termining the extent to which the requirement
16	to use systems or methodologies in accordance
17	with subparagraph (G) is appropriate for re-
18	porting entities other than covered entities or
19	greenhouse gas for which emission allowances
20	are not required to be held, consider the cost of
21	using such systems and methodologies, and of
22	using other systems and methodologies that are
23	available and suitable, for quantifying the emis-
24	sions involved in light of the purposes of this

1	title, including the goal of collecting consistent
2	entity-wide data;
3	"(I) include methods for minimizing double
4	reporting and avoiding irreconcilable double re-
5	porting of greenhouse gas emissions;
6	"(J) establish measurement protocols for
7	carbon capture and sequestration systems, in-
8	cluding those where enhanced hydrocarbon re-
9	covery operations occur, taking into consider-
10	ation the regulations promulgated under section
11	813;
12	"(K) require that reporting entities provide
13	the data required under subparagraph (A) in
14	reports submitted electronically to the Adminis-
15	trator, in such form and containing such infor-
16	mation as may be required by the Adminis-
17	trator;
18	"(L) include requirements for keeping
19	records supporting or related to, and protocols
20	for auditing, submitted data;
21	"(M) establish consistent policies for calcu-
22	lating carbon content and greenhouse gas emis-
23	sions for each type of fossil fuel with respect to
24	which reporting is required;

1	"(N) subsequent to implementation of poli-
2	cies developed under subparagraph (M), provide
3	for immediate dissemination, to States, Indian
4	tribes, and on the Internet, of all data reported
5	under this section as soon as practicable after
6	electronic audit by the Administrator and any
7	resulting correction of data, except that data
8	shall not be disseminated under this subpara-
9	graph if—
10	"(i) its nondissemination is vital to
11	the national security of the United States,
12	as determined by the President; or
13	"(ii) it is confidential business infor-
14	mation that cannot be derived from infor-
15	mation that is otherwise publicly available
16	and that would cause significant calculable
17	competitive harm if published, except
18	that—
19	"(I) data relating to greenhouse
20	gas emissions, including any upstream
21	or verification data from reporting en-
22	tities, shall not be considered to be
23	confidential business information;
24	"(II) data that is confidential
25	business information shall be provided

1	to a State or Indian tribe within
2	whose jurisdiction the reporting entity
3	is located, if the Administrator deter-
4	mines that such State or Indian tribe
5	has in effect protections for confiden-
6	tial business information that are
7	equivalent to protections applicable to
8	the Federal Government;
9	"(O) prescribe methods by which the Ad-
10	ministrator shall, in cases in which satisfactory
11	data are not submitted to the Administrator for
12	any period of time, estimate emission levels—
13	"(i) for covered entities with respect
14	to greenhouse gas emissions for which they
15	are required to hold emission allowances
16	under section 722—
17	"(I) with a conservative estimate
18	of the highest emission levels that
19	may have occurred during the period
20	for which data are missing; or
21	"(II) to the extent the Adminis-
22	trator considers appropriate, with an
23	estimate of emission levels assuming
24	the unit is emitting at a maximum po-
25	tential level during the period, in

1	order to ensure that emissions are not
2	underreported and to create a strong
3	incentive for meeting data monitoring
4	and reporting requirements; and
5	"(ii) for covered entities with respect
6	to greenhouse gas emissions for which they
7	are not required to hold emission allow-
8	ances under section 722 and for other re-
9	porting entities, with a reasonable estimate
10	of the emission levels that may have oc-
11	curred during the period for which data
12	are missing;
13	"(P) require an appropriate certification,
14	by the designated representative for the report-
15	ing entity and as determined by the Adminis-
16	trator, of accurate and complete accounting of
17	greenhouse gas emissions; and
18	"(Q) include requirements for other data
19	necessary for accurate and complete accounting
20	of greenhouse gas emissions, as determined by
21	the Administrator, including data for quality
22	assurance of monitoring systems, monitors and
23	other measurement devices, and other data
24	needed to verify reported emissions.
25	"(2) Timing.—

1	"(A) Calendar years 2007 through
2	2010.—For a base period of calendar years
3	2007 through 2010, each reporting entity shall
4	submit annual data required under this section
5	to the Administrator not later than March 31,
6	2011. The Administrator may waive or modify
7	reporting requirements for calendar years 2007
8	through 2010 for categories of reporting enti-
9	ties if the Administrator determines that the re-
10	porting entities did not keep data or records
11	necessary to meet reporting requirements. The
12	Administrator may, in addition to or in lieu of
13	such requirements, collect information on en-
14	ergy consumption and production.
15	"(B) Subsequent calendar years.—
16	For calendar year 2011 and each subsequent
17	calendar year, each reporting entity shall sub-
18	mit quarterly data required under this section
19	to the Administrator not later than 60 days
20	after the end of the applicable quarter, except
21	when the data is already being reported to the
22	Administrator on an earlier timeframe for an-
23	other program.
24	"(3) Waiver of reporting requirements.—
25	The Administrator may waive reporting require-

1	ments under this section for specific entities if the
2	Administrator determines that sufficient and equally
3	or more reliable verified and timely data are avail-
4	able to the Administrator and the public on the
5	Internet under other mandatory statutory require-
6	ments.
7	"(4) Alternative Threshold.—The Admin-
8	istrator may, by rule, establish applicability thresh-
9	olds for reporting under this section using alter-
10	native metrics and levels, provided that such metrics
11	and levels are easier to administer and cover the
12	same size and type of sources as the threshold de-
13	fined in this section.
14	"(c) Interrelationship With Other Systems.—
15	In developing the regulations issued under subsection (b),
16	the Administrator shall take into account the work done
17	by the Climate Registry and other mandatory State or
18	multistate programs. Such regulations shall include an ex-
19	planation of any major differences in approach between
20	the system established under the regulations and such reg-
21	istries and programs.
22	"PART C—PROGRAM RULES
23	"SEC. 721. EMISSION ALLOWANCES.
24	"(a) In General.—The Administrator shall estab-
25	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.—None of the following con-
9	stitute a property right:
10	"(A) An emission allowance.
11	"(B) A compensatory allowance.
12	"(C) A strategic reserve allowance.
13	"(D) An offset credit.
14	"(2) Termination or Limitation.—Nothing
15	in this Act or any other provision of law shall be
16	construed to limit or alter the authority of the
17	United States, including the Administrator acting
18	pursuant to statutory authority, to terminate or
19	limit allowances or credits.
20	"(3) Other provisions unaffected.—Noth-
21	ing in this Act relating to allowances or credits es-
22	tablished or issued under this title shall affect the
23	application of any other provision of law to a covered
24	entity, or the responsibility for a covered entity to
25	comply with any such provision of law.

1	"(d) Savings Provision.—Nothing in this title 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	prudency review) under such a State law. Nothing in this
7	title shall be construed as modifying the Federal Power
8	Act or as affecting the authority of the Federal Energy
9	Regulatory Commission under that Act. Nothing in this
10	title shall be construed to interfere with or impair any pro-
11	gram for competitive bidding for power supply in a State
12	in which such program is established.
13	"(e) Allowances for Each Calendar Year.—
14	"(1) In general.—Except as provided in para-
15	graph (2), the number of emission allowances estab-
16	lished by the Administrator under subsection (a) for
17	each calendar year shall be as provided in the fol-
18	lowing table:

"Calendar year	Emission allowances (in millions)
2012	4,770
2013	4,666
2014	5,058
2015	4,942
2016	5,391
2017	5,261

"Calendar year	Emission allowances (in millions)
2018	5,132
2019	5,002
2020	4,873
2021	4,739
2022	4,605
2023	4,471
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

"Calendar year	Emission allowances (in millions)
2045	1,660
2046	1,535
2047	1,410
2048	1,285
2049	1,160
2050 and each year thereafter	1,035

"(2) REVISION.— 1 "(A) IN GENERAL.—If, after notice and an 2 3 opportunity for public comment, the Adminis-4 trator determines that— "(i) United States greenhouse gas 5 6 emissions in 2005 were other than 7,206 7 million metric tons carbon dioxide equivalent; 8 9 "(ii) the types of covered entities with 10 compliance obligations under section 722 11 in 2012 were responsible for other than 12 68.2 percent of United States greenhouse 13 gas emissions in 2005; "(iii) the types of covered entities with 14 15 compliance obligations under section 722 16 in 2014 were responsible for other than 17 75.7 percent of United States greenhouse 18 gas emissions in 2005; or

1	"(iv) the types of covered entities with
2	compliance obligations under section 722
3	in 2016 were responsible for other than
4	84.5 percent United States greenhouse gas
5	emissions in 2005,
6	the Administrator may adjust, in accordance
7	with subparagraph (B), the number of emission
8	allowances required to be established pursuant
9	to paragraph (1).
10	"(B) Adjustment formula.—
11	"(i) In General.—If the Adminis-
12	trator adjusts, under subparagraph (A) of
13	this paragraph, the number of emission al-
14	lowances required to be established pursu-
15	ant to paragraph (1), the number of emis-
16	sion allowances the Administrator requires
17	to be established for any given calendar
18	year shall equal the product of—
19	"(I) United States greenhouse
20	gas emissions in 2005, expressed in
21	tons of carbon dioxide equivalent;
22	"(II) the percent of United
23	States greenhouse gas emissions in
24	2005 from the types of covered enti-

364

1	ties with compliance obligations for
2	the given calendar year; and
3	"(III) the percentage set forth
4	for that calendar year in section 703,
5	or determined under clause (iii) of
6	this subparagraph.
7	"(ii) Percentage of emissions
8	FROM COVERED ENTITIES.—For purposes
9	of subparagraph (A) and clause (i)(II) of
10	this subparagraph, the percent of United
11	States greenhouse gas emissions in 2005
12	from the types of covered entities with
13	compliance obligations for the given cal-
14	endar year shall be based on the amount of
15	greenhouse gas emissions for which those
16	covered entities would have been required
17	to hold emission allowances under section
18	722 if this title had been in effect for 2005
19	emissions.
20	"(iii) Targets.—In applying the for-
21	mula under clause (i)(III) of this subpara-
22	graph, for calendar years for which a per-
23	centage is not listed in section 703, the
24	Administrator shall use a uniform annual

1	decline in the amount of emissions between
2	the years that are specified.
3	"(iv) Limitation on adjustment
4	TIMING.—Once a calendar year has ended,
5	the Administrator may not adjust the
6	number of emission allowances required for
7	that calendar year.
8	"(C) Limitation on adjustment au-
9	THORITY.—The Administrator may adjust
10	under this paragraph the number of emission
11	allowances required to be established pursuant
12	to paragraph (1) only once.
13	"(f) Compensatory Allowance.—
14	"(1) In general.—The regulations promul-
15	gated under subsection (g) shall provide for the es-
16	tablishment and distribution of compensatory allow-
17	ances for—
18	"(A) the destruction, in 2012 or later, of
19	fluorinated gases that are greenhouse gases if—
20	"(i) emission allowances were retired
21	for their production; and
22	"(ii) such gases are not required to be
23	destroyed under any other provision of law;
24	"(B) the nonemissive use, in 2012 or later,
25	of petroleum-based or coal-based liquid or gas-

1	eous fuel, petroleum coke, natural gas liquid, or
2	natural gas as a feedstock, if emission allow-
3	ances were retired for the greenhouse gases
4	that would have been emitted from their com-
5	bustion; and
6	"(C) the consumptive use, in 2012 or later,
7	of fluorinated gases in a production process, in-
8	cluding semiconductor research or manufac-
9	turing, if emission allowances were retired for
10	the production of such gas.
11	"(2) Establishment and distribution.—
12	"(A) In General.—The Administrator
13	shall establish and distribute to the entity tak-
14	ing the actions described in subparagraph (A),
15	(B), or (C) of paragraph (1) a quantity of com-
16	pensatory allowances no greater than the num-
17	ber of tons of carbon dioxide equivalent of
18	avoided emissions achieved through such ac-
19	tions.
20	"(B) Source of allowances.—Compen-
21	satory allowances established under this sub-
22	section shall not be allowances established
23	under subsection (a).
24	"(C) Identification numbers.—The
25	Administrator shall assign to each compen-

1	satory allowance established under subpara-
2	graph (A) a unique identification number.
3	"(3) Applicability of sections.—Sections
4	724 and 725(b), and subsection (c) of this section,
5	shall apply to compensatory allowances to the same
6	extent as they apply to emission allowances.
7	"(4) Definitions.—For purposes of this sub-
8	section—
9	"(A) the term 'destruction' means the con-
10	version of a greenhouse gas by thermal, chem-
11	ical, or other means to another gas with little
12	or no global warming potential;
13	"(B) the term 'nonemissive use' means the
14	use of fossil energy in an industrial or manufac-
15	turing process that does not result in green-
16	house gas emissions during such process and
17	which ensures that no greenhouse gases will be
18	emitted from the substance; and
19	"(C) the term 'consumptive use' means a
20	use which has either—
21	"(i) destroyed a fluorinated gas; or
22	"(ii) converted a fluorinated gas into
23	another greenhouse gas with a lower global
24	warming potential.

1	"(g) Regulations.—Not later than 24 months after
2	the date of enactment of this title, the Administrator shall
3	promulgate regulations to carry out the provisions of this
4	title.
5	"SEC. 722. COMPLIANCE OBLIGATION.
6	"(a) In General.—Except as otherwise provided in
7	this section, as of 12:01 a.m. on April 1 (or a later date
8	established by the Administrator under subsection (j)) of
9	each calendar year starting in 2013, the owner or operator
10	of a covered entity shall hold a quantity of emission allow-
11	ances at least as great as the quantity calculated as fol-
12	lows:
13	"(1) Electricity sources.—For a covered
14	entity described in section 700(12)(A), 1 emission
15	allowance for each ton of carbon dioxide equivalent
16	of greenhouse gas that such covered entity emitted
17	in the previous calendar year, excluding emissions
18	resulting from the use of—
19	"(A) petroleum-based or coal-based liquid
20	or gaseous fuel;
21	"(B) natural gas liquid;
22	"(C) renewable biomass;
23	"(D) petroleum coke; or
24	"(E) hydrofluorocarbons, perfluorocarbons,
25	sulfur hexafluoride, nitrogen trifluoride, or any

1	other fluorinated gas that is a greenhouse gas
2	purchased for use at that covered entity.
3	"(2) Fuel producers and importers.—For
4	a covered entity described in section 700(12)(B), 1
5	emission allowance for each ton of carbon dioxide
6	equivalent of greenhouse gas that would be emitted
7	from the combustion of any petroleum-based or coal-
8	based liquid fuel, petroleum coke, or natural gas liq-
9	uid, produced or imported by such covered entity
10	during the previous calendar year for sale or dis-
11	tribution in interstate commerce, assuming no cap-
12	ture and sequestration of any greenhouse gas emis-
13	sions.
14	"(3) Fluorinated gas producers and im-
15	PORTERS.—For a covered entity described in section
16	700(12)(C), 1 emission allowance for each ton of
17	carbon dioxide equivalent of perfluorocarbons, sulfur
18	hexafluoride, nitrogen trifluoride, or any other
19	fluorinated gas that is a greenhouse gas, or any
20	combination thereof, produced or imported by such
21	covered entity during the previous calendar year for
22	sale or distribution in interstate commerce.
23	"(4) Geological sequestration sites.—For
24	a covered entity described in section $700(12)(D)$, 1
25	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	"(5) Industrial stationary sources.—For
4	a covered entity described in section 700(12)(E),
5	(F), or (G), 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 the use
9	of—
10	"(A) petroleum-based or coal-based liquid
11	or gaseous fuel;
12	"(B) natural gas liquid;
13	"(C) renewable biomass;
14	"(D) petroleum coke; or
15	``(E) hydrofluorocarbons, perfluorocarbons,
16	sulfur hexafluoride, nitrogen trifluoride, or any
17	other fluorinated gas that is a greenhouse gas
18	purchased for use at that covered entity.
19	"(6) Industrial fossil fuel-fired combus-
20	TION DEVICES.—For a covered entity described in
21	section $700(12)(H)$, 1 emission allowance for each
22	ton of carbon dioxide equivalent of greenhouse gas
23	that the devices emitted in the previous calendar
24	year, excluding emissions resulting from the use
25	of—

1	"(A) petroleum-based or coal-based liquid
2	or gaseous fuel;
3	"(B) natural gas liquid;
4	"(C) renewable biomass; or
5	"(D) petroleum coke.
6	"(7) Local distribution companies.—For a
7	covered entity described in section $700(12)(I)$, 1
8	emission allowance for each ton of carbon dioxide
9	equivalent of greenhouse gas that will be emitted
10	from the combustion of the natural gas such entity
11	delivered during the previous calendar year to cus-
12	tomers that are not covered entities, assuming no
13	capture and sequestration of that greenhouse gas.
14	"(8) APPLICATION OF MULTIPLE PARA-
15	GRAPHS.—A covered entity to which more than 1 of
16	paragraphs (1) through (7) apply shall hold emission
17	allowances in compliance with all applicable para-
18	graphs, except that not more than 1 emission allow-
19	ance shall be required for the same emission.
20	"(b) Phase-in of Compliance Requirement.—
21	"(1) Industrial stationary sources.—The
22	requirement under subsection (a) shall first apply to
23	a covered entity described in section 700(12)(E),
24	(F), (G), or (H) with respect to emissions occurring
25	during calendar year 2014.

1	"(2) Local distribution companies.—The
2	requirement under subsection (a) shall first apply to
3	a covered entity described in section 700(12)(I) with
4	respect to emissions occurring during calendar year
5	2016.
6	"(c) Alternative Compliance.—A covered entity
7	may satisfy its compliance obligations under subsection (a)
8	for a calendar year in accordance with the following:
9	"(1) Offset credits.—
10	"(A) IN GENERAL.—A covered entity may
11	satisfy a percentage of its compliance obliga-
12	tions by holding 1.25 offset credits in lieu of an
13	emission allowance.
14	"(B) APPLICABLE PERCENTAGE.— The
15	percentage referred to in subparagraph (A) for
16	a given calender year shall be determined by di-
17	viding 2 billion by the sum of 2 billion plus the
18	number of emission allowances established
19	under section 721(a) for the previous year, and
20	multiplying that number by 100. Not more than
21	one half of the applicable percentage under this
22	paragraph may be used for a year by holding
23	domestic offset credits, and not more than one
24	half of the applicable percentage under this

1	paragraph may be used for a year by holding
2	international offset credits.
3	"(C) President's recommendation.—
4	The President may make a recommendation to
5	Congress as to whether the number 2 billion
6	specified in subparagraph (B) should be in-
7	creased or decreased.
8	"(2) International emission allow-
9	ANCES.—A covered entity may satisfy its compliance
10	obligations by holding an international emission al-
11	lowance in lieu of an emission allowance, except as
12	modified under section 728(d).
13	"(3) Compensatory allowances.—A covered
14	entity may satisfy its compliance obligations by hold-
15	ing a compensatory allowance obtained under section
16	721(f) in lieu of an emission allowance.
17	"(d) Retirement of Allowances and Cred-
18	ITS.—As soon as practicable after a deadline established
19	under this title for holding allowances, the Administrator
20	shall retire the quantity of allowances or credits required
21	under this title.
22	"(e) Alternative Metrics.—For categories of cov-
23	ered entities described in subparagraph (B), (C), (F), (G),
24	or (H) of section 700(12), the Administrator may, by rule,
25	establish an applicability threshold for inclusion under

1	those subparagraphs using an alternative metric and level,
2	provided that such metric and level are easier to admin-
3	ister and cover the same size and type of sources as the
4	threshold defined in such subparagraphs.
5	"(f) Threshold Review.—For each category of
6	covered entities described in subparagraph (B), (C), (F),
7	(G), or (H) of section 700(12), the Administrator shall,
8	in 2020 and once every 8 years thereafter, review the car-
9	bon dioxide equivalent emission thresholds that are used
10	to define covered entities. After consideration of—
11	"(1) emissions from covered entities in each
12	such category, and from other entities of the same
13	type that emit less than the threshold amount for
14	the category (including emission sources that com-
15	mence operation after the date of enactment of this
16	title that are not covered entities); and
17	"(2) whether greater greenhouse gas emission
18	reductions can be cost-effectively achieved by low-
19	ering the applicable threshold,
20	the Administrator may by rule lower such threshold to not
21	less than 10,000 tons of carbon dioxide equivalent emis-
22	sions. In determining the cost effectiveness of potential re-
23	ductions from lowering the threshold for covered entities,
24	the Administrator shall consider alternative regulatory

1	greenhouse gas programs, including setting standards
2	under other titles of this Act.
3	"(g) Designated Representatives.—The regula-
4	tions promulgated under section 721(g) shall require that
5	each covered entity, and each entity holding allowances or
6	credits or receiving allowances or credits from the Admin-
7	istrator under this title, select a designated representative.
8	"(h) Education and Outreach.—
9	"(1) IN GENERAL.—The Administrator shall es-
10	tablish and carry out a program of education and
11	outreach to assist covered entities, especially entities
12	having little experience with environmental regu-
13	latory requirements similar or comparable to those
14	under this title, in preparing to meet the compliance
15	obligations of this title. Such program shall include
16	education with respect to using markets to effec-
17	tively achieve such compliance.
18	"(2) Failure to receive information.—A
19	failure to receive information or assistance under
20	this subsection may not be used as a defense against
21	an allegation of any violation of this title.
22	"(i) Adjustment of Obligation Deadline.—The
23	Administrator may, by rule, establish a compliance obliga-
24	tion deadline, for a calendar year, later than the date pro-
25	vided in subsection (a), as necessary to ensure the avail-

- 1 ability of emissions data, but in no event shall the deadline
- 2 be later than June 1.
- 3 "(j) Notice Requirement for Covered Entities
- 4 RECEIVING NATURAL GAS FROM LOCAL DISTRIBUTION
- 5 Companies.—The owner or operator of a covered entity
- 6 that takes delivery of natural gas from a local distribution
- 7 company shall, not later than September 1 of each cal-
- 8 endar year, notify such local distribution company in writ-
- 9 ing that such entity will qualify as a covered entity under
- 10 this title for that calendar year.
- 11 "SEC. 723. PENALTY FOR NONCOMPLIANCE.
- 12 "(a) Enforcement.—A violation of any prohibition
- 13 of, requirement of, or regulation promulgated pursuant to
- 14 this title shall be a violation of this Act. Each emission
- 15 allowance not held as required by this title shall be a sepa-
- 16 rate violation.
- 17 "(b) Excess Emissions Penalty.—
- 18 "(1) In general.—The owner or operator of
- any covered entity that fails for any year to hold, on
- the deadline described in section 722(a) or (i) or
- 21 725(c), 1 or more of the emission allowances due
- 22 pursuant to either of those sections shall be liable
- for payment to the Administrator of an excess emis-
- sions penalty in the amount described 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 number of emission allowances
6	that the owners or operators failed to hold on
7	the deadline; by
8	"(B) twice the fair market value of emis-
9	sion allowances established for emissions occur-
10	ring in the calendar year for which the emission
11	allowances were due.
12	"(3) Timing.—An excess emissions penalty re-
13	quired under this subsection shall be immediately
14	due and payable to the Administrator, without de-
15	mand, in accordance with regulations promulgated
16	by the Administrator, which shall be issued not later
17	than 2 years after the date of enactment of this
18	title.
19	"(4) No effect on liability.—An excess
20	emissions penalty due and payable by the owners or
21	operators of a covered entity under this subsection
22	shall not diminish the liability of the owners or oper-
23	ators for any fine, penalty, or assessment against
24	the owners or operators for the same violation under
25	any other provision of this Act or any other law.

- 1 "(c) Excess Emissions Allowances.—The owners
- 2 or operators of a covered entity that fail for any year to
- 3 hold, on the deadline described in section 722(a) or (i)
- 4 or 725(c), 1 or more of the emission allowances due pursu-
- 5 and to either of those sections shall be liable to offset the
- 6 excess emissions by an equal quantity of emission allow-
- 7 ances during—
- 8 "(1) the following calendar year; or
- 9 "(2) such longer period as the Administrator
- may prescribe.
- 11 "SEC. 724. TRADING.
- 12 "(a) Permitted Transactions.—Except as other-
- 13 wise provided in this title, the lawful holder of an emission
- 14 allowance may, without restriction, sell, exchange, trans-
- 15 fer, hold for compliance in accordance with section 722,
- 16 or request that the Administrator retire the emission al-
- 17 lowance.
- 18 "(b) No Restriction on Transactions.—The
- 19 privilege of purchasing, holding, selling, exchanging, and
- 20 requesting retirement of emission allowances shall not be
- 21 restricted to the owners and operators of covered entities,
- 22 except as otherwise provided in this title.
- 23 "(c) Effectiveness of Allowance Trans-
- 24 FERS.—No transfer of an emission allowance shall be ef-
- 25 fective until a written certification of the transfer, signed

1	by a responsible official of the transferor, is received and
2	recorded by the Administrator in accordance with regula-
3	tions promulgated under section 721(g).
4	"(d) Allowance Tracking System.—The regula-
5	tions promulgated under section 721(g) shall include a
6	system for issuing, recording, holding, and tracking allow-
7	ances and credits that shall specify all necessary proce-
8	dures and requirements for an orderly and competitive
9	functioning of the emission allowance system. Such regula-
10	tions shall provide for appropriate publication of the infor-
11	mation in the system on the Internet.
12	"SEC. 725. BANKING AND BORROWING.
13	"(a) Banking.—An emission allowance may be used
14	to meet the compliance obligation requirements of section
15	722(a) or section 723 for emissions in—
16	"(1) the vintage year for the allowance; or
17	"(2) any calendar year subsequent to the vin-
18	tage year for the allowance.
19	"(b) Expiration.—An allowance or credit estab-
20	lished or issued by the Administrator under this title shall
21	not expire unless—
22	"(1) it is retired by the Administrator as re-
23	quired under this title; or
24	"(2) the Administrator determines by regula-
25	tion that expiration is necessary to ensure the au-

1	thenticity and integrity of allowances or the allow-
2	ance tracking system.
3	"(c) Borrowing Future Vintage Year Allow-
4	ANCES.—
5	"(1) Borrowing without interest.—In ad-
6	dition to the uses described in subsection (a), an
7	emission allowance may be used to meet the compli-
8	ance obligation requirements of section 722(a) or
9	section 723 for emissions in the calendar year imme-
10	diately preceding the vintage year for the allowance.
11	"(2) Borrowing with interest.—
12	"(A) IN GENERAL.—A covered entity may
13	satisfy up to 15 percent of its compliance obli-
14	gations under section 722(a) in a specific cal-
15	endar year by holding emission allowances with
16	a vintage year 1 to 5 years later than that cal-
17	endar year.
18	"(B) Limitations.—An emission allow-
19	ance borrowed pursuant to this paragraph shall
20	be an emission allowance established by the Ad-
21	ministrator for a specific future calendar year
22	under section 721(a) and that is held by the
23	borrower.
24	"(C) Repayment with interest.—For
25	each emission allowance that an owner or oper-

1	ator of a covered entity borrows pursuant to
2	this paragraph, such owner or operator shall, at
3	the time it borrows the allowance, hold for re-
4	tirement by the Administrator a quantity of
5	emission allowances that is equal to the product
6	obtained by multiplying—
7	"(i) 0.08; by
8	"(ii) the number of years between the
9	calendar year in which the allowance is
10	being used to satisfy a compliance obliga-
11	tion and the vintage year of the allowance.
12	"SEC. 726. STRATEGIC RESERVE.
13	"(a) Strategic Reserve Auctions.—
14	"(1) In General.—Once each quarter of each
15	calendar year for which compliance obligation re-
16	quirements under section 722(a) apply, the Adminis-
17	trator shall auction strategic reserve allowances.
18	"(2) Restriction to covered entities.—In
19	each auction conducted under paragraph (1), only
20	covered entities that the Administrator expects will
21	be required under section 722(a) to hold emission al-
22	lowances in the following calendar year shall be eligi-
23	ble to purchase emission allowances.
24	"(b) Pool of Emission Allowances for Stra-
25	TEGIC RESERVE AUCTIONS —

1	"(1) FILLING THE STRATEGIC RESERVE.—
2	"(A) In General.—The Administrator
3	shall, not later than 2 years after the date of
4	enactment of this title, reserve for auction
5	under this section emission allowances estab-
6	lished for the period of calendar years 2012
7	through 2050 under section 721(a), as provided
8	in subparagraph (B).
9	"(B) PERCENTAGE REMOVAL.—The
10	amount referred to in subparagraph (A) shall
11	be—
12	"(i) for each of calendar years 2012
13	through 2019, the quantity of emission al-
14	lowances reserved pursuant to subpara-
15	graph (A) shall be 1 percent of the quan-
16	tity established for that year pursuant to
17	section $721(e)(1)$;
18	"(ii) for each of calendar years 2020
19	through 2029, the quantity of emission al-
20	lowances reserved pursuant to subpara-
21	graph (A) shall be 2 percent of the quan-
22	tity established for that year pursuant to
23	section 721(e)(1); and
24	"(iii) for each of calendar years 2030
25	through 2050, the quantity of emission al-

1	lowances reserved pursuant to subpara-
2	graph (A) shall be 3 percent of the quan-
3	tity established for that year pursuant to
4	section $721(e)(1)$.
5	"(C) Effect on other provisions.—
6	Any provision in this title that refers to a quan-
7	tity or percentage of the emission allowances es-
8	tablished for a calendar year under section
9	721(a) shall be considered to refer to the
10	amount of emission allowances as determined
11	pursuant to section 721(e), less any emission
12	allowances established for that year that are
13	placed in the strategic reserve under this para-
14	graph.
15	"(2) Supplementing the strategic re-
16	SERVE.—The Administrator shall also—
17	"(A) transfer to the strategic reserve each
18	emission allowance that was offered for sale but
19	not sold at an auction conducted under part C;
20	and
21	"(B) transfer emission allowances estab-
22	lished under subsection (g) from auction pro-
23	ceeds, and deposit them into the strategic re-
24	serve, to the extent necessary to maintain the
25	reserve at its original size.

1	"(c) Minimum Strategic Reserve Auction
2	Price.—
3	"(1) In general.—At each strategic reserve
4	auction, the Administrator shall offer emission al-
5	lowances for sale beginning at a minimum price per
6	emission allowance, which shall be known as the
7	'minimum strategic reserve auction price'.
8	"(2) Initial minimum strategic reserve
9	AUCTION PRICES.—The minimum strategic reserve
10	auction price shall be [insert amount twice the
11	EPA-modeled 2012 allowance price EPA provides to
12	the Committee for the strategic reserve auctions
13	held in 2012. For the strategic reserve auctions held
14	in 2013 and 2014, the minimum strategic reserve
15	auction price shall be the strategic reserve auction
16	price for the previous year increased by 5 percent
17	plus the rate of inflation (as measured by the Con-
18	sumer Price Index).
19	"(3) Minimum strategic reserve auction
20	PRICE IN SUBSEQUENT YEARS.—For each strategic
21	reserve auction held in 2015 and each year there-
22	after, the minimum strategic reserve auction price
23	shall be 100 percent above a rolling 36-month aver-
24	age of the daily closing price for that year's allow-

1	ance vintage as reported on registered carbon trad-
2	ing facilities, calculated using constant dollars.
3	"(d) Quantity of Emission Allowances Sold at
4	STRATEGIC RESERVE AUCTION.—
5	"(1) Initial limits.—For each of calendar
6	years 2012 through 2016, not more than 5 percent
7	of the emission allowances established for that cal-
8	endar year under section 721(a) may be sold at the
9	combined strategic reserve auctions during that
10	year.
11	"(2) Limits in subsequent years.—For cal-
12	endar year 2017 and each year thereafter, not more
13	than 10 percent of the emission allowances estab-
14	lished for that calendar year under section 721(a)
15	may be sold at the combined strategic reserve auc-
16	tions during that year.
17	"(3) Allocation of Limitation.—One-fourth
18	of each year's annual strategic reserve auction limit
19	under this subsection shall be made available for
20	auction in each quarter. Any allowances made avail-
21	able for sale in a quarterly auction and not sold
22	shall be rolled over and added to the quantity avail-
23	able for sale in the following quarter, except that al-
24	lowances not sold at auction in the fourth quarter of
25	a year shall not be rolled over to the following cal-

1	endar year's auctions, but shall be returned to the
2	reserve.
3	"(e) Purchase Limit.—
4	"(1) In general.—Except as provided in para-
5	graph (2) or (3), the annual number of emission al-
6	lowances that a covered entity may purchase at the
7	strategic reserve auctions in each calendar year shall
8	not exceed 10 percent of the covered entity's most
9	recent emission allowance compliance obligation
10	under section 722(a).
11	(2) 2012 Limit.—For calendar year 2012, the
12	maximum number of emission allowances that a cov-
13	ered entity may purchase from that year's strategic
14	reserve auctions shall be 10 percent of the covered
15	entity's greenhouse gas emissions that the covered
16	entity reported to the registry established under sec-
17	tion 713 for 2011 and for which emission allowances
18	would be required under section 722(a) if occurring
19	in later calendar years.
20	"(3) New Entrants.—The Administrator
21	shall, by regulation, establish a separate limitation
22	applicable to entities that expect to become a cov-
23	ered entity in the year of the auction, permitting
24	them to purchase emission allowances at the stra-
25	tegic reserve auctions in their first calendar year of

1	operation in an amount of at least 10 percent of
2	their expected compliance obligation under section
3	722(a) for that year.
4	"(f) Delegation or Contract.—Pursuant to regu-
5	lations under this section, the Administrator may, by dele-
6	gation or contract, provide for the conduct of auctions
7	under the Administrator's supervision by other depart-
8	ments or agencies of the Federal Government or by non-
9	governmental agencies, groups, or organizations.
10	"(g) Use of Auction Proceeds.—
11	"(1) Deposit in Strategic reserve fund.—
12	The proceeds from strategic reserve auctions shall be
13	placed in the Strategic Reserve Fund established
14	under section 782(c), and shall be available without
15	further appropriation or fiscal year limitation.
16	"(2) International offset credits for re-
17	DUCED DEFORESTATION.—The Administrator shall
18	use the proceeds from each strategic reserve auction
19	to purchase international offset credits issued for re-
20	duced deforestation activities pursuant to section
21	753(e). The Administrator shall retire those inter-
22	national offset credits and establish a number of
23	emission allowances equal to 80 percent of the num-
24	ber of international offset credits so retired. Emis-
25	sion allowances established under this paragraph

1	shall be in addition to those established under sec-
2	tion 721(a).
3	"(3) Emission allowances.—The Adminis-
4	trator shall deposit emission allowances issued under
5	paragraph (2) in the strategic reserve, except that,
6	with respect to any such emission allowance in ex-
7	cess of the amount necessary to fill the strategic re-
8	serve to its original size, the Administrator shall—
9	"(A) assign a vintage year to the emission
10	allowance, which shall be no earlier than the
11	year in which the allowance is established under
12	paragraph (2); or
13	"(B) to the extent any such allowances
14	cannot be assigned a vintage year because of
15	the limitation in paragraph (4), retire the allow-
16	ances.
17	"(4) Limitation.—In no case may the Admin-
18	istrator assign under paragraph (3)(A) more emis-
19	sion allowances to a vintage year than the number
20	of emission allowances reserved for the strategic re-
21	serve from that vintage year under subsection
22	(b)(1).
23	"(h) Availability of International Offset
24	CREDITS FOR AUCTION.—

1	"(1) In General.—The Administrator shall
2	issue regulations allowing any entity in possession of
3	international offset credits from reduced deforest-
4	ation issued under section 753(e) to request that the
5	Administrator include such offset credits in a stra-
6	tegic reserve auction. The regulations shall provide
7	that—
8	"(A) such international offset credits will
9	be used to fill bid orders only after the supply
10	of strategic reserve allowances available for sale
11	at the auction has been depleted;
12	"(B) international offset credits may be
13	sold at a strategic reserve auction under this
14	subsection only if the Administrator determines
15	that it is highly likely that covered entities will,
16	to cover emissions occurring in the year the
17	auction is held, meet their compliance obligation
18	under section 722 by holding offset credits in
19	an amount equal to or greater than 80 percent
20	of 2 billion tons of carbon dioxide equivalent;
21	"(C) upon sale of such international offset
22	credits, the Administrator shall retire those
23	international offset credits, and establish and
24	provide to the purchasers a number of emission

1	allowances equal to 80 percent of the number of
2	international offset credits so retired; and
3	"(D) for international offset credits sold
4	pursuant to this subsection, the proceeds for
5	the entity that offered the international offset
6	credits for sale shall equal the average daily
7	price for international offset credits sold on reg-
8	istered exchanges during the six months prior
9	to the strategic reserve auction at which they
10	were auctioned, and the remaining funds col-
11	lected upon the sale of the international offset
12	credits shall be deposited in the Treasury.
13	"(2) Proceeds.—For international offset cred-
14	its auctioned pursuant to this subsection, notwith-
15	standing section 3302 of title 31, United States
16	Code, or any other provision of law, within 90 days
17	of receipt, the United States shall transfer the pro-
18	ceeds from the auction to the entity which possessed
19	the international offset credits auctioned. No funds
20	transferred from a purchaser to a seller of inter-
21	national offset credits under this paragraph shall be
22	held by any officer or employee of the United States
23	or treated for any purpose as revenue to the United
24	States or the Administrator.

1	"(3) Pricing.—When the Administrator acts
2	under this subsection as the agent of an entity in
3	possession of international offset credits, the Admin-
4	istrator is not obligated to obtain the highest price
5	possible for the international offset credits, and in-
6	stead shall auction such international offset credits
7	in the same manner and pursuant to the same rules
8	(except as modified in paragraph (1)) as set forth
9	for auctioning strategic reserve allowances. Entities
10	requesting that such international offset credits be
11	offered for sale at a strategic reserve auction may
12	not set a minimum reserve price for their inter-
13	national offset credits.
14	"(i) Initial Regulations.—Not later than 24
15	months after the date of enactment of this title, the Ad-
16	ministrator shall promulgate regulations, in consultation
17	with other appropriate agencies, governing the auction of
18	allowances under this section. Such regulations shall in-
19	clude the following requirements:
20	"(1) Frequency; first auction.—Auctions
21	shall be held four times per year at regular intervals,
22	with the first auction to be held no later than March
23	31, 2012.
24	"(2) Auction format.—Auctions shall follow
25	a single-round, sealed-bid, uniform price format.

1	"(3) Participation; financial assurance.—
2	Auctions shall be open to any covered entity, except
3	that the Administrator may establish financial as-
4	surance requirements to ensure that auction partici-
5	pants can and will perform on their bids.
6	"(4) Disclosure of Beneficial Owner-
7	SHIP.—Each bidder in an auction shall be required
8	to disclose the person or entity sponsoring or bene-
9	fitting from the bidder's participation in the auction
10	if such person or entity is, in whole or in part, other
11	than the bidder.
12	"(5) Purchase limits.—No person may, di-
13	rectly or in concert with another participant, pur-
14	chase more than 20 percent of the allowances of-
15	fered for sale at any quarterly auction.
16	"(6) Publication of Information.—After
17	the auction, the Administrator shall, in a timely
18	fashion, publish the identities of winning bidders,
19	the quantity of allowances obtained by each winning
20	bidder, and the auction clearing price.
21	"(7) OTHER REQUIREMENTS.—The Adminis-
22	trator may include in the regulations such other re-
23	quirements or provisions as the Administrator, in
24	consultation with other appropriate agencies, con-
25	siders necessary to promote effective, efficient,

- 1 transparent, and fair administration of auctions
- 2 under this section.
- 3 "(j) REVISION OF REGULATIONS.—The Adminis-
- 4 trator may, at any time, in consultation with other appro-
- 5 priate agencies, revise the initial regulations promulgated
- 6 under subsection (i). Such revised regulations need not
- 7 meet the requirements identified in subsection (i) if the
- 8 Administrator determines that an alternative auction de-
- 9 sign would be more effective, taking into account factors
- 10 including costs of administration, transparency, fairness,
- 11 and risks of collusion or manipulation. In determining
- 12 whether and how to revise the initial regulations under
- 13 this subsection, the Administrator shall not consider maxi-
- 14 mization of revenues to the Federal Government.
- 15 "SEC. 727. PERMITS.
- 16 "(a) Permit Program.—For stationary sources
- 17 subject to title V of this Act, the provisions of this title
- 18 shall be implemented by permits issued to covered entities
- 19 (and enforced) in accordance with the provisions of title
- 20 V, as modified by this title. Any such permit issued by
- 21 the Administrator, or by a State with an approved permit
- 22 program, shall require a covered entity to hold a number
- 23 of emission allowances at least equal to the total annual
- 24 amount of carbon dioxide equivalents for which emission
- 25 allowances must be held by the covered entity under sec-

1	tion 722. No such permit shall be issued that is incon-
2	sistent with the requirements of this title, and title V as
3	applicable. Nothing in this section regarding compliance
4	plans or in title V shall be construed as affecting emission
5	allowances. Submission of a statement by the owner or
6	operator, or the designated representative of the owners
7	and operators, of a covered entity that the owners and
8	operators will hold emission allowances not less than the
9	total amount of carbon dioxide equivalents for a year for
10	which emission allowances must be held by the covered
11	entity under section 722 shall be deemed to meet the pro-
12	posed and approved planning requirements of title V. Rec-
13	ordation by the Administrator of transfers of emission al-
14	lowances shall amend automatically all applicable pro-
15	posed or approved permit applications, compliance plans,
16	and permits.
17	"(b) Multiple Owners.—No permit shall be issued
18	under this section and no emission allowances shall be dis-
19	bursed under this title to a covered entity or any other
20	person until the designated representative of the owners
21	or operators has filed a certificate of representation with
22	regard to matters under this title, including the holding
23	and distribution of emission allowances and the proceeds
24	of transactions involving emission allowances. Where there
25	are multiple holders of a legal or equitable title to, or a

1	leasehold interest in, such a covered entity or other entity
2	or where a utility or industrial customer purchases power
3	from an independent power producer, the certificate shall
4	state—
5	"(1) that emission allowances and the proceeds
6	of transactions involving emission allowances will be
7	deemed to be held or distributed in proportion to
8	each holder's legal, equitable, leasehold, or contrac-
9	tual reservation or entitlement; or
10	"(2) if such multiple holders have expressly pro-
11	vided for a different distribution of emission allow-
12	ances by contract, that emission allowances and the
13	proceeds of transactions involving emission allow-
14	ances will be deemed to be held or distributed in ac-
15	cordance with the contract.
16	A passive lessor, or a person who has an equitable interest
17	through such lessor, whose rental payments are not based,
18	either directly or indirectly, upon the revenues or income
19	from the covered entity or other shall not be deemed to
20	be a holder of a legal, equitable, leasehold, or contractual
21	interest for the purpose of holding or distributing emission
22	allowances as provided in this subsection, during either the
23	term of such leasehold or thereafter, unless expressly pro-
24	vided for in the leasehold agreement. Except as otherwise
25	provided in this subsection, where all legal or equitable

1	title to or interest in a covered entity, or other entity, is
2	held by a single person, the certification shall state that
3	all emission allowances received by the entity are deemed
4	to be held for that person.
5	"(c) Prohibition.—It shall be unlawful for any per-
6	son to operate any covered entity except in compliance
7	with the terms and requirements of a permit issued by
8	the Administrator or a State with an approved permit pro-
9	gram. For purposes of this subsection, compliance, as pro-
10	vided in section 504(f), with a permit issued under title
11	V which complies with this title for covered entities shall
12	be deemed compliance with this subsection as well as sec-
13	tion 502(a).
14	"SEC. 728. INTERNATIONAL EMISSION ALLOWANCES.
15	"(a) Qualifying Programs.—The Administrator,
16	in consultation with the Secretary of State, may by rule
17	designate an international climate change program as a
18	qualifying international program if—
19	"(1) the program is run by a national or supra-
20	national foreign government, and imposes a manda-
21	tory absolute tonnage limit on greenhouse gas emis-
22	sions from 1 or more foreign countries, or from 1 or
23	more economic sectors in such a country or coun-
24	tries; and

1	"(2) the program is at least as stringent as the
2	program established by this title, including provi-
3	sions to ensure comparable monitoring, compliance,
4	enforcement, quality of offsets, and restrictions on
5	the use of offsets.
6	"(b) DISQUALIFIED ALLOWANCES.—An international
7	emission allowance may not be held under section 722 if
8	it is in the nature of an offset instrument or allowance
9	awarded based on the achievement of greenhouse gas
10	emission reductions or avoidance, or greenhouse gas se-
11	questration, that are not subject to the mandatory abso-
12	lute tonnage limits referred to in subsection $(a)(1)$.
13	"(c) Retirement.—
14	"(1) Entity certification.—The owner or
15	operator of an entity that holds an international
16	emission allowance under section 722 shall certify to
17	the Administrator that such international emission
18	allowance has not previously been used to comply
19	with any foreign, international, or domestic green-
20	house gas regulatory program.
21	"(2) Retirement.—
22	"(A) Foreign and international reg-
23	ULATORY ENTITIES.—The Administrator, in
24	consultation with the Secretary of State, shall
25	seek, by whatever means appropriate, including

1	agreements and technical cooperation on allow-
2	ance tracking, to ensure that any relevant for-
3	eign, international, and domestic regulatory en-
4	tities—
5	"(i) are notified of the use, for pur-
6	poses of compliance with this title, of any
7	international emission allowance; and
8	"(ii) provide for the disqualification of
9	such international emission allowance for
10	any subsequent use under the relevant for-
11	eign, international, or domestic greenhouse
12	gas regulatory program, regardless of
13	whether such use is a sale, exchange, or
14	submission to satisfy a compliance obliga-
15	tion.
16	"(B) Disqualification from further
17	USE.—The Administrator shall ensure that,
18	once an international emission allowance has
19	been retired or otherwise used for purposes of
20	compliance with this title, such allowance shall
21	be disqualified from any further use under this
22	title.
23	"(d) Use Limitations.—The Administrator may, by
24	rule, modify the percentage of a covered entity's compli-

- 1 ance obligation that may be met with international emis-
- 2 sion allowances under section 722(c)(2).
- 3 "PART D—OFFSETS
- 4 "SEC. 731. OFFSETS INTEGRITY ADVISORY BOARD.
- 5 "(a) ESTABLISHMENT.—Not later than 30 days after
- 6 the date of enactment of this title, the Administrator shall
- 7 establish an independent Offsets Integrity Advisory
- 8 Board. The Advisory Board shall make recommendations
- 9 to the Administrator for use in promulgating and revising
- 10 regulations under this part and part E, and for ensuring
- 11 the overall environmental integrity of the programs estab-
- 12 lished pursuant to those regulations.
- 13 "(b) Membership.—The Advisory Board shall be
- 14 comprised of nine members with relevant expertise. At
- 15 least six members of the Advisory Board shall be sci-
- 16 entists, and at least one member shall be a member of
- 17 the National Academy of Sciences. The Administrator
- 18 shall appoint Advisory Board members, including a chair
- 19 and vice-chair of the Advisory Board. Terms shall be 3
- 20 years in length, except for initial terms, which may be up
- 21 to 5 years in length to allow staggering. Members may
- 22 be reappointed only once for an additional 3-year term,
- 23 and such second term may follow directly after a first
- 24 term.

1	"(c) Activities.—The Advisory Board established
2	pursuant to subsection (a) shall—
3	"(1) provide recommendations, not later than
4	90 days after the Advisory Board's establishment
5	and periodically thereafter, to the Administrator re-
6	garding offset project types that should be consid-
7	ered for eligibility under section 733, taking into
8	consideration relevant scientific and other issues, in-
9	cluding—
10	"(A) the potential for accurate quantifica-
11	tion of greenhouse gas reduction, avoidance, or
12	sequestration for an offset project type;
13	"(B) the potential level of scientific and
14	measurement uncertainty associated with an
15	offset project type; and
16	"(C) any beneficial or adverse environ-
17	mental, public health, welfare, social, economic,
18	or energy effects associated with an offset
19	project type;
20	"(2) provide recommendations to the Adminis-
21	trator regarding offset methodologies that should be
22	considered under regulations promulgated pursuant
23	to section 734(a) and (b), including methodologies to
24	address the issues of additionality, activity baselines,
25	measurement, leakage, uncertainty, and permanence;

1	"(3) advise the Administrator, and other rel-
2	evant Federal agencies, regarding scientific, tech-
3	nical, and methodological issues specific to the
4	issuance of international offset credits under section
5	743;
6	"(4) advise the Administrator, and other rel-
7	evant Federal agencies, regarding scientific, tech-
8	nical, and methodological issues associated with the
9	implementation of part E;
10	"(5) advise the Administrator of areas in which
11	further knowledge is required to appraise the ade-
12	quacy of existing, revised, or proposed methodologies
13	for use under this part and part E, and describe the
14	research efforts necessary to provide the required in-
15	formation; and
16	"(6) advise the Administrator on other ways to
17	improve or safeguard the environmental integrity of
18	programs established under this part and part E.
19	"(d) Scientific Review of Offset and Defor-
20	ESTATION REDUCTION PROGRAMS.—Not later than Janu-
21	ary 1, 2017, and at five-year intervals thereafter, the Ad-
22	visory Board shall submit to the Administrator and make
23	available to the public an analysis of relevant scientific and
24	technical information related to this part and part E. The
25	Advisory Board shall review approved and potential offset

- 1 methodologies, scientific studies, offset project monitoring,
- 2 offset project verification reports, and audits, and evaluate
- 3 the net emissions effects of implemented offset projects.
- 4 The Advisory Board shall recommend changes to offset
- 5 methodologies, protocols, or project types, or to the overall
- 6 offset program under this part, to ensure that offset cred-
- 7 its issued by the Administrator do not compromise the in-
- 8 tegrity of the emissions cap established under section 702,
- 9 and to avoid or minimize any adverse effects to human
- 10 health or the environment.

11 "SEC. 732. ESTABLISHMENT OF OFFSETS PROGRAM.

- 12 "(a) Regulations.—Not later than 2 years after
- 13 the date of enactment of this title, the Administrator, in
- 14 consultation with appropriate Federal agencies and taking
- 15 into consideration the recommendations of the Advisory
- 16 Board, shall promulgate regulations establishing a pro-
- 17 gram for the issuance of offset credits in accordance with
- 18 the requirements of this part.
- 19 "(b) Requirements.—The regulations described in
- 20 subsection (a) shall—
- 21 "(1) authorize the issuance of offset credits
- 22 with respect to qualifying offset projects that result
- in reductions or avoidance of greenhouse gas emis-
- sions, or sequestration of greenhouse gases;

1	"(2) ensure that such offset credits represent
2	verifiable and additional greenhouse gas emission re-
3	ductions or avoidance, or increases in sequestration;
4	"(3) ensure that offset credits issued for se-
5	questration offset projects are only issued for green-
6	house gas reductions that are permanent; and
7	"(4) provide for the implementation of the re-
8	quirements of this part.
9	"(c) Coordination to Minimize Negative Ef-
10	FECTS.—In promulgating and implementing regulations
11	under this part, the Administrator shall act (including by
12	rejecting projects, if necessary) to avoid or minimize, to
13	the maximum extent practicable, adverse effects on human
14	health or the environment resulting from the implementa-
15	tion of offset projects under this part.
16	"(d) Offset Registry.—The Administrator shall
17	establish an Offset Registry for qualifying offset projects
18	and offset credits issued with respect thereto under this
19	part.
20	"(e) Fees.—The Administrator may assess fees pay-
21	able by offset project representatives in an amount nec-
22	essary to cover the administrative costs to the Environ-
23	mental Protection Agency of processing and approving off-
24	set projects and issuing offset credits under this part.

1 "SEC. 733. ELIGIBLE PROJECT TYPES.

2	"(a) List of Eligible Project Types.—
3	"(1) In general.—As part of the regulations
4	promulgated under section 732(a), the Adminis-
5	trator shall establish, and may periodically revise, a
6	list of types of projects eligible for offset credits
7	under this part.
8	"(2) Advisory board recommendations.—
9	In determining the eligibility of project types, the
10	Administrator shall take into consideration the rec-
11	ommendations of the Advisory Board. If a list estab-
12	lished under this section differs from the rec-
13	ommendations of the Advisory Board, the Adminis-
14	trator shall provide a justification for the discrep-
15	ancy.
16	"(3) Initial Determination.—The Adminis-
17	trator shall establish the initial eligibility list under
18	paragraph (1) not later than 2 years after the date
19	of enactment of this title. In determining the initial
20	list, the Administrator shall give priority to consider-
21	ation of offset project types that are recommended
22	by the Advisory Board.
23	"(b) Modification of List.—The Administrator—
24	"(1) may at any time, by rule, add a project
25	type to the list established under subsection (a) if
26	the Administrator, in consultation with appropriate

1	Federal agencies and taking into consideration the
2	recommendations of the Advisory Board, determines
3	that the project type can generate additional reduc-
4	tions or avoidance of greenhouse gas emissions, or
5	sequestration of greenhouse gases, subject to the re-
6	quirements of this part;
7	"(2) may at any time, by rule, remove a project
8	type from the list established under subsection (a),
9	in consultation with appropriate Federal agencies
10	and taking into consideration the recommendations
11	of the Advisory Board; and
12	"(3) shall consider adding to or removing from
13	the list established under subsection (a), at a min-
14	imum, types proposed to the Administrator—
15	"(A) by petition pursuant to subsection
16	(e); or
17	"(B) by the Advisory Board.
18	"(c) Petition Process.—Any person may petition
19	the Administrator to modify the list established under sub-
20	section (a) by adding or removing a project type. Any such
21	petition shall include a showing by the petitioner that
22	there is adequate data to establish that the project type
23	will meet the requirements of this part. Not later than
24	12 months after receipt of such a petition, the Adminis-
25	trator shall either grant or deny the petition and publish

1	a written explanation of the reasons for the Administra-
2	tor's decision. The Administrator may not deny a petition
3	on the basis of inadequate Environmental Protection
4	Agency resources or time for review.
5	"SEC. 734. REQUIREMENTS FOR OFFSET PROJECTS.
6	"(a) Methodologies.—
7	"(1) In general.—As part of the regulations
8	promulgated under section 732(a), the Adminis-
9	trator shall establish, for each type of offset project
10	listed as eligible under section 733(a), the following:
11	"(A) Additionality.—A standardized
12	methodology for determining the additionality
13	of greenhouse gas emission reductions or avoid-
14	ance, or greenhouse gas sequestration, achieved
15	by an offset project of that type. Such method-
16	ology shall ensure, at a minimum, that any
17	greenhouse gas emission reduction or avoidance,
18	or any greenhouse gas sequestration, is consid-
19	ered additional only to the extent that it results
20	from activities that—
21	"(i) are not required by or undertaken
22	to comply with any law, including any reg-
23	ulation;

1	"(ii) were not commenced prior to
2	January 1, 2009, except as provided in
3	section 740(a); and
4	"(iii) exceed the activity baseline es-
5	tablished under subparagraph (B).
6	"(B) ACTIVITY BASELINES.—A standard-
7	ized methodology for establishing activity base-
8	lines for offset projects of that type. The Ad-
9	ministrator shall set activity baselines to reflect
10	a conservative estimate of business-as-usual
11	performance or practices for the relevant type
12	of activity such that the baseline provides an
13	adequate margin of safety to ensure the envi-
14	ronmental integrity of offsets calculated in ref-
15	erence to such baseline.
16	"(C) Measurement.—A standardized
17	methodology for determining the extent to
18	which greenhouse gas emission reductions or
19	avoidance, or greenhouse gas sequestration,
20	achieved by an offset project of that type exceed
21	a relevant activity baseline, including protocols
22	for monitoring.
23	"(D) Leakage.—A standardized method-
24	ology for accounting for and mitigating poten-

1	tial leakage, if any, from an offset project of
2	that type.
3	"(E) Uncertainty.—A standardized
4	methodology for use in determining and dis-
5	counting for uncertainty with respect to the
6	greenhouse gas emission reduction or avoidance,
7	or greenhouse gas sequestration from, an offset
8	project of that type.
9	"(2) Variances.—The Administrator may es-
10	tablish procedures for an offset project representa-
11	tive to request approval for the use of methodologies
12	that differ from those established by the Adminis-
13	trator pursuant to subparagraphs (A) through (E)
14	of paragraph (1). The Administrator may grant such
15	a variance request if, in the Administrator's judg-
16	ment, use of the requested methodologies will ensure
17	that the requirements of this part will be satisfied.
18	"(b) Accounting for Reversals.—
19	"(1) IN GENERAL.—The Administrator shall es-
20	tablish policies to account for and address reversals
21	in sequestration projects, including—
22	"(A) a requirement to report any reversal
23	with respect to an offset project for which offset
24	credits have been issued under this part;

1	"(B) policies to assign liability and respon-
2	sibility for mitigating and fully compensating
3	for reversals; and
4	"(C) any other provisions the Adminis-
5	trator determines necessary to account for and
6	address reversals.
7	"(2) Mechanisms.—The Administrator shall
8	prescribe mechanisms to ensure that any sequestra-
9	tion with respect to which an offset credit is issued
10	under this part results in a permanent net increase
11	in sequestration, and that full account is taken of
12	any actual or potential reversal of such sequestra-
13	tion, with an adequate margin of safety. The Admin-
14	istrator shall prescribe at least one of the following
15	mechanisms to meet the requirements of this para-
16	graph:
17	"(A) An offsets reserve, pursuant to para-
18	graph (3).
19	"(B) Insurance that provides for full com-
20	pensation for the amount of emissions released
21	due to reversal.
22	"(C) Another mechanism that the Admin-
23	istrator determines satisfies the requirements of
24	this part.
25	"(3) Offsets reserve.—

1	"(A) In general.—An offsets reserve re-
2	ferred to in paragraph (2)(A) is a program
3	under which, before issuance of offset credits
4	under this part, the Administrator shall sub-
5	tract and reserve from the quantity to be issued
6	a quantity of offset credits based on the risk of
7	reversal. The Administrator shall—
8	"(i) hold these reserved offset credits
9	in the offsets reserve; and
10	"(ii) register the holding of the re-
11	served offset credits in the Offset Registry
12	established under section 732(d).
13	"(B) Project reversal.—
14	"(i) In general.—If a reversal has
15	occurred with respect an offset project for
16	which offset credits are reserved under this
17	paragraph, the Administrator shall remove
18	offset credits from the offsets reserve and
19	cancel them to fully account for the tons of
20	carbon dioxide equivalent that are no
21	longer sequestered.
22	"(ii) Intentional reversals.—If
23	the Administrator determines that a rever-
24	sal was intentional, the offset project rep-
25	resentative for the relevant offset project

1	shall place into the offset reserve a quan-
2	tity of offset credits, or combination of off-
3	set credits and emission allowances, equal
4	in number to the number of reserve offset
5	credits that were canceled due to the rever-
6	sal pursuant to clause (i).
7	"(iii) Unintentional reversals.—
8	If the Administrator determines that a re-
9	versal was unintentional, the offset project
10	representative for the relevant offset
11	project shall place into the offset reserve a
12	quantity of offset credits, or combination
13	of offset credits and emission allowances,
14	equal in number to the number of offset
15	credits that were reserved for that quali-
16	fying project, or the number of reserve off-
17	set credits that were canceled due to the
18	reversal pursuant to clause (i), whichever
19	is less.
20	"(C) Use of reserved offset cred-
21	ITS.—Offset credits placed into the offsets re-
22	serve under this paragraph may not be used to
23	satisfy compliance obligations under section
24	722.
25	"(c) Crediting Periods.—

1	"(1) In general.—For each offset project
2	type, the Administrator shall specify a crediting pe-
3	riod in accordance with this subsection.
4	"(2) Duration.—The crediting period shall be
5	no less than 5 and no greater than 10 years for any
6	project type other than those involving sequestra-
7	tion.
8	"(3) Eligibility.—An offset project shall be
9	eligible to generate offset credits under this part
10	only during the project's crediting period. During
11	such crediting period, the project shall remain eligi-
12	ble to generate offset credits, subject to the meth-
13	odologies and project type eligibility list that applied
14	as of the date of project approval under section 735,
15	except as provided in paragraph (4) of this sub-
16	section.
17	"(4) Petition for New Crediting Period.—
18	An offset project representative may petition for a
19	new crediting period to commence after termination
20	of a crediting period, subject to the methodologies
21	and project type eligibility list in effect at the time
22	when such petition is submitted. A petition may not
23	be submitted under this paragraph more than 18
24	months before the end of the pending crediting pe-
25	riod.

- 1 "(d) Environmental Integrity.—In establishing
- 2 the requirements under this section, the Administrator
- 3 shall apply conservative assumptions or methods to maxi-
- 4 mize the certainty that the environmental integrity of the
- 5 cap established under section 703 is not compromised.
- 6 "(e) Pre-Existing Methodologies.—In promul-
- 7 gating requirements under this section, the Administrator
- 8 shall give due consideration to methodologies for offset
- 9 projects existing as of the date of enactment of this title.
- 10 "(f) Added Project Types.—The Administrator
- 11 shall establish methodologies described in subsection (a)
- 12 for any project type that is added to the list pursuant to
- 13 section 733.
- 14 "SEC. 735. APPROVAL OF OFFSET PROJECTS.
- 15 "(a) Approval Petition.—An offset project rep-
- 16 resentative shall submit an offset project approval petition
- 17 providing such information as the Administrator requires
- 18 to determine whether the offset project is eligible for
- 19 issuance of offset credits under rules promulgated pursu-
- 20 ant to this part.
- 21 "(b) Timing.—An approval petition shall be sub-
- 22 mitted to the Administrator under subsection (a) no later
- 23 than the time at which an offset project's first verification
- 24 report is submitted.

1	"(c) Approval Petition Requirements.—The
2	Administrator shall specify the required components of an
3	offset project approval petition required under subsection
4	(a), which shall include—
5	"(1) designation of an offset project representa-
6	tive; and
7	"(2) any other information that the Adminis-
8	trator considers to be necessary to achieve the pur-
9	poses of this part.
10	"(d) Approval and Notification.—Not later than
11	90 days after receiving a complete approval petition under
12	subsection (a), the Administrator shall approve or reject
13	the petition in writing and, if the petition is denied, pro-
14	vide the reasons for denial. A petition may be resubmitted
15	for approval at any time following denial. After an offset
16	project is approved, the offset project representative shall
17	not be required to resubmit an approval petition during
18	the offset project's crediting period, except as provided in
19	section $734(c)(4)$.
20	"(e) Appeal.—The Administrator shall establish
21	procedures for appeal and review of determinations made
22	under subsection (d).
23	"(f) Voluntary Preapproval Review.—The Ad-
24	ministrator shall establish a voluntary preapproval review
25	procedure, to allow an offset project representative to re-

- 1 quest the Administrator to conduct a preliminary eligi-
- 2 bility review for an offset project. Findings of such reviews
- 3 shall not be binding upon the Administrator. The vol-
- 4 untary preapproval review procedure—
- 5 "(1) shall require the offset project representa-
- 6 tive to submit such basic project information as the
- Administrator requires to provide a meaningful re-
- 8 view; and
- 9 "(2) shall require a response from the Adminis-
- trator not later than 6 weeks after receiving a re-
- 11 quest for review under this subsection.
- 12 "SEC. 736. VERIFICATION OF OFFSET PROJECTS.
- 13 "(a) In General.—An offset project representative
- 14 shall submit a report, prepared by a third-party verifier
- 15 accredited under subsection (d), providing such informa-
- 16 tion as the Administrator requires to determine the quan-
- 17 tity of greenhouse gas emission reductions or avoidance,
- 18 or sequestration of greenhouse gas, resulting from the off-
- 19 set project.
- 20 "(b) Schedule.—The Administrator shall prescribe
- 21 a schedule for the submission of verification reports under
- 22 subsection (a).
- 23 "(c) Verification Report Requirements.—The
- 24 Administrator shall specify the required components of a

1	verification report required under subsection (a), which
2	shall include—
3	"(1) the name and contact information for the
4	offset project representative;
5	"(2) the quantity of greenhouse gas reduced,
6	avoided, or sequestered;
7	"(3) the methodologies applicable to the project
8	pursuant to section 734;
9	"(4) a certification establishing that the conflict
10	of interest requirements in the regulations promul-
11	gated under subsection $(d)(1)$ have been complied
12	with; and
13	"(5) any other information that the Adminis-
14	trator considers to be necessary to achieve the pur-
15	poses of this part.
16	"(d) Verifier Accreditation.—
17	"(1) In general.—As part of the regulations
18	promulgated under section 732(a), the Adminis-
19	trator shall establish a process and requirements for
20	accreditation of third-party verifiers to ensure that
21	such verifiers are professionally qualified and have
22	no conflicts of interest.
23	"(2) Standards.—The Administrator may ac-
24	credit, or accept for purposes of accreditation under
25	this subsection, verifiers accredited under the Amer-

1	ican National Standards Institute (ANSI) accredita-
2	tion program in accordance with ISO 14065. The
3	Administrator shall accredit, or accept for accredita-
4	tion, verifiers under this paragraph only if the Ad-
5	ministrator finds that the American National Stand-
6	ards Institute accreditation program provides suffi-
7	cient assurance that the requirements of this part
8	will be met.
9	"(3) Public Accessibility.—Each verifier
10	meeting the requirements for accreditation in ac-
11	cordance with this subsection shall be listed in a
12	publicly accessible database, which shall be main-
13	tained and updated by the Administrator.
14	"SEC. 737. ISSUANCE OF OFFSET CREDITS.
15	"(a) Determination and Notification.—Not
16	later than 90 days after receiving a verification report
17	under section 736, the Administrator shall make a deter-
18	mination of the quantity of greenhouse gas emissions re-
19	duced or avoided, or greenhouse gases sequestered, result-
20	ing from an offset project approved under section 735, and
21	shall notify the offset project representative in writing of
22	such determination.
23	"(b) Issuance of Offset Credits.—The Adminis-
24	trator shall issue one offset credit to an offset project rep-
25	resentative for each ton of carbon dioxide equivalent that

- 1 the Administrator has determined has been reduced,
- 2 avoided, or sequestered during the period covered by a
- 3 verification report submitted in accordance with section
- 4 736, only if—
- 5 "(1) the Administrator has approved the offset
- 6 project pursuant to section 735; and
- 7 "(2) the relevant emissions reduction, avoid-
- 8 ance, or sequestration has already occurred, during
- 9 the offset project's crediting period.
- 10 "(c) Appeal.—The Administrator shall establish
- 11 procedures for appeal and review of determinations made
- 12 under subsection (a).
- 13 "(d) Timing.—Offset credits meeting the criteria es-
- 14 tablished in subsection (b) shall be issued not later than
- 15 2 weeks following the verification determination made by
- 16 the Administrator under subsection (a).
- 17 "(e) Registration.—The Administrator shall as-
- 18 sign a unique serial number to and register each offset
- 19 credit to be issued.
- 20 "SEC. 738. AUDITS.
- 21 "(a) IN GENERAL.—The Administrator shall, on an
- 22 ongoing basis, conduct random audits of offset projects,
- 23 offset credits, and practices of third-party verifiers. In
- 24 each year, the Administrator shall conduct audits, at min-

1	imum, for a representative sample of project types and
2	geographic areas.
3	"(b) Delegation.—The Administrator may delegate
4	to a State or tribal government the responsibility for con-
5	ducting audits under this section if the Administrator
6	finds that the program proposed by the State or tribal
7	government provides assurances equivalent to those pro-
8	vided by the auditing program of the Administrator, and
9	that the integrity of the offset program under this part
10	will be maintained. Nothing in this subsection shall pre-
11	vent the Administrator from conducting any audit the Ad-
12	ministrator considers necessary and appropriate.
13	"SEC. 739. PROGRAM REVIEW AND REVISION.
14	"At least once every 5 years, the Administrator shall
15	review and, based on new information and taking into con-
16	sideration the recommendations of the Advisory Board,
17	update and revise—
18	"(1) the methodologies established under sec-
19	tion 734(a);
20	"(2) the reversal policies and mechanisms es-
21	tablished under section 734(b);
22	"(3) measures to improve the accountability of
23	the offsets program; and

1	"(4) 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), the Administrator shall issue an offset
8	credit for each ton of carbon dioxide equivalent emissions
9	reduced or avoided, or sequestered—
10	"(1) under an offset project that was started
11	after January 1, 2001; and
12	"(2) for which a credit was issued under any
13	regulatory or voluntary greenhouse gas emission off-
14	set program that the Administrator determines—
15	"(A) was established by State or tribal law
16	or regulation prior to January 1, 2009;
17	"(B) has developed offset project type
18	standards, methodologies, and protocols
19	through a public consultation process;
20	"(C) has publicly published standards,
21	methodologies, and protocols that require that
22	credited emission reductions or sequestration
23	are permanent, additional, verifiable, and en-
24	forceable;

1	"(D) requires that all emission reductions
2	or sequestration be verified by a State regu-
3	latory agency or an accredited third-party inde-
4	pendent verification body;
5	"(E) requires that all credits issued are
6	registered in a publicly accessible registry, with
7	individual serial numbers assigned for each ton
8	of carbon dioxide equivalent emission reductions
9	or sequestration; and
10	"(F) ensures that no credits are issued for
11	activities for which the entity administering the
12	program, or a program administrator or rep-
13	resentative, has funded, solicited, or served as a
14	fund administrator for the development of, the
15	project or activity that caused the emission re-
16	duction or sequestration.
17	"(b) Ineligible Credits.—Subsection (a) shall not
18	apply to offset credits that have expired or have been re-
19	tired or canceled, or used for compliance under a program
20	established pursuant to a State law.
21	"(c) Limitation.—Notwithstanding subsection
22	(a)(1), offset credits shall be issued under this part—
23	"(1) only for reductions or avoidance of green-
24	house gas emissions, or sequestration of greenhouse
25	gases, that occur after January 1, 2009; and

1	"(2) only until the date that is 3 years after the
2	date of enactment of this title, or the date that regu-
3	lations promulgated under section 732(a) take ef-
4	fect, whichever occurs sooner.
5	"(d) Retirement of Credits.—The Administrator
6	shall seek to ensure that offset credits described in sub-
7	section (a)(2) are retired for purposes of use under a pro-
8	gram described in subsection (b).
9	"SEC. 741. ENVIRONMENTAL CONSIDERATIONS.
10	"If the Administrator lists forestry projects as eligible
11	offset project types under section 733, the Administrator,
12	in consultation with appropriate Federal agencies, shall
13	promulgate regulations for the selection and use of tree
14	species in forestry offset projects—
15	"(1) to ensure that native species are given pri-
16	mary consideration in such projects;
17	"(2) to enhance biological diversity in such
18	projects;
19	"(3) to prohibit the use of federally designated
20	or State-designated noxious weeds;
21	"(4) to prohibit the use of a species listed by
22	a regional or State invasive plant authority within
23	the applicable region or State; and
24	"(5) in accordance with widely accepted, envi-
25	ronmentally sustainable forestry practices.

1	"SEC. 742. OWNERSHIP AND TRANSFER OF OFFSET CRED-
2	ITS.
3	"(a) Ownership.—Initial ownership of an offset
4	credit shall lie with the entity represented by the offset
5	project representative, unless otherwise specified in a le-
6	gally binding contract or agreement.
7	"(b) Transferability.—An offset credit issued
8	under this part may be sold, traded, or transferred, unless
9	the offset credit has expired or been retired or used for
10	compliance.
11	"SEC. 743. INTERNATIONAL OFFSET CREDITS.
12	"(a) In General.—The Administrator, in consulta-
13	tion with the Secretary of State, may issue, in accordance
14	with this section, international offset credits based on ac-
15	tivities that reduce or avoid greenhouse gas emissions, or
16	increase sequestration of greenhouse gases, in a developing
17	country.
18	"(b) Establishment.—
19	"(1) REGULATIONS.—Not later than 2 years
20	after the date of enactment of this title, the Admin-
21	istrator, in consultation with the Secretary of State
22	and taking into consideration the recommendations
23	of the Advisory Board, shall promulgate regulations
24	for implementing this section. The issuance of inter-
25	national offset credits under this section shall be
26	subject to the requirements of this part.

1	"(2) Requirements for international
2	OFFSET CREDITS.—The Administrator may issue
3	international offset credits only if—
4	"(A) the United States is a party to a bi-
5	lateral or multilateral agreement or arrange-
6	ment that includes the country in which the
7	project or measure achieving the relevant green-
8	house gas emission reduction or avoidance, or
9	greenhouse gas sequestration, has occurred;
10	"(B) such country is a developing country;
11	and
12	"(C) such agreement or arrangement—
13	"(i) ensures that all of the require-
14	ments of this part apply to the issuance of
15	international offset credits under this sec-
16	tion; and
17	"(ii) provides for the appropriate dis-
18	position of international offset credits
19	issued.
20	"(c) Sector-Based Credits.—
21	"(1) In general.— In order to minimize the
22	potential for leakage and to encourage countries to
23	take nationally appropriate mitigation actions to re-
24	duce or avoid greenhouse gas emissions, or sequester

1	greenhouse gases, the Administrator, in consultation
2	with the Secretary of State, shall—
3	"(A) identify under paragraph (2) sectors
4	of specific countries with respect to which the
5	issuance of international offset credits on a sec-
6	toral basis is appropriate; and
7	"(B) issue international offset credits for
8	such sectors only on a sectoral basis.
9	"(2) Identification of sectors.—
10	"(A) GENERAL RULE.—The Adminis-
11	trator, in consultation with the Secretary of
12	State, shall identify sectors of specific countries
13	with respect to which the issuance of inter-
14	national offset credits on a sectoral basis is ap-
15	propriate. In general, a sectoral basis shall be
16	appropriate for activities—
17	"(i) in countries that have compara-
18	tively high greenhouse gas emissions, or
19	comparatively greater levels of economic
20	development; and
21	"(ii) that, if located in the United
22	States, would be within a sector subject to
23	the compliance obligation under section
24	722.

1	"(B) Factors.—In determining the sec-
2	tors and countries for which international offset
3	credits should be awarded only on a sectoral
4	basis, the Administrator, in consultation with
5	the Secretary of State, shall consider the fol-
6	lowing factors:
7	"(i) The country's gross domestic
8	product.
9	"(ii) The country's total greenhouse
10	gas emissions.
11	"(iii) Whether the comparable sector
12	of the United States economy is covered by
13	the compliance obligation under section
14	722.
15	"(iv) The heterogeneity or homo-
16	geneity of sources within the relevant sec-
17	tor.
18	"(v) Whether the relevant sector pro-
19	vides products or services that are sold in
20	internationally competitive markets.
21	"(vi) The risk of leakage if inter-
22	national offset credits were issued on a
23	project-level basis, as distinct from a sec-
24	tor-level basis, for activities within the rel-
25	evant sector.

1	"(vii) The capability of accurately
2	measuring, monitoring, reporting, and
3	verifying the performance of sources across
4	the relevant sector.
5	"(viii) Whether the relevant country
6	has requested that 1 or more of the sectors
7	in its economy be eligible for sector-based
8	credits under this subsection.
9	"(ix) Such other factors as the Ad-
10	ministrator, in consultation with the Sec-
11	retary of State, determines are appropriate
12	to—
13	"(I) ensure the integrity of the
14	United States greenhouse gas emis-
15	sions cap established under section
16	703; and
17	"(II) encourage countries to take
18	nationally appropriate mitigation ac-
19	tions to reduce or avoid greenhouse
20	gas emissions, or sequester green-
21	house gases.
22	"(3) Sectoral basis.—
23	"(A) DEFINITION.—In this subsection, the
24	term 'sectoral basis' means the issuance inter-
25	national offset credits only for the quantity of

1	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 of the economy rel-
5	ative to a baseline level of performance estab-
6	lished 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 be established at levels of greenhouse
10	gas emissions lower than would occur under a
11	business-as-usual scenario, and additionality
12	and performance shall be determined on the
13	basis of such baseline.
14	"(4) Modification of requirements.—In
15	promulgating regulations under subsection $(b)(1)$
16	with respect to the issuance of international offset
17	credits under this subsection, the Administrator may
18	modify or omit a requirement of this part (excluding
19	the requirements of this section) if the Adminis-
20	trator determines that the application of that re-
21	quirement to this subsection is not feasible. In modi-
22	fying or omitting such a requirement on the basis of
23	infeasibility, the Administrator shall ensure, with an
24	adequate margin of safety, the integrity of inter-

national offset credits issued under this section and

25

1	of the greenhouse gas emissions cap established pur-
2	suant to section 703.
3	"(d) Credits Issued by an International
4	Вору.—
5	"(1) In General.—The Administrator, in con-
6	sultation with the Secretary of State, may issue
7	international offset credits in exchange for instru-
8	ments in the nature of offset credits that are issued
9	by an international body established pursuant to the
10	United Nations Framework Convention on Climate
11	Change, to a protocol to such Convention, or to a
12	treaty that succeeds such Convention. The Adminis-
13	trator may issue such credits only if, in addition to
14	the requirements of subsection (b), the Adminis-
15	trator has determined that the international body
16	that issued the instruments has implemented sub-
17	stantive and procedural requirements for the rel-
18	evant project type that provide equal or greater as-
19	surance of the integrity of such instruments as is
20	provided by the requirements of this part.
21	"(2) Retirement.—The Administrator, in
22	consultation with the Secretary of State, shall seek,
23	by whatever means appropriate, including agree-
24	ments, arrangements, or technical cooperation with

1	the international issuing body described in para-
2	graph (1), to ensure that such body—
3	"(A) is notified of the Administrator's
4	issuance, under this subsection, of an inter-
5	national offset credit in exchange for an instru-
6	ment issued by such international body; and
7	"(B) provides, to the extent feasible, for
8	the disqualification of the instrument issued by
9	such international body for subsequent use
10	under any relevant foreign or international
11	greenhouse gas regulatory program, regardless
12	of whether such use is a sale, exchange, or sub-
13	mission to satisfy a compliance obligation.
14	"(3) Modification of requirements.—In
15	promulgating regulations under subsection $(b)(1)$
16	with respect to the issuance of international offset
17	credits under this subsection, the Administrator may
18	modify or omit a requirement of this part (excluding
19	the requirements of this section) if the Adminis-
20	trator determines that the application of that re-
21	quirement to this subsection is not feasible. In modi-
22	fying or omitting such a requirement on the basis of
23	infeasibility, the Administrator shall ensure, with an
24	adequate margin of safety, the integrity of inter-
25	national offset credits issued under this section and

1	of the greenhouse gas emissions cap established pur-
2	suant to section 703.
3	"(e) Offsets From Reduced Deforestation.—
4	"(1) REQUIREMENTS.—The Administrator, in
5	accordance with an agreement or arrangement de-
6	scribed in subsection (b)(2)(A), shall issue inter-
7	national offset credits for greenhouse gas emission
8	reductions achieved through activities to reduce de-
9	forestation only if, in addition to the requirements of
10	subsection (b)—
11	"(A) the activity occurs in a country listed
12	by the Administrator pursuant to paragraph
13	(2);
14	"(B) the quantity of the international off-
15	set credits is determined by comparing the na-
16	tional emissions from deforestation relative to a
17	national deforestation baseline for that country
18	established, in accordance with an agreement or
19	arrangement described in subsection (b)(2)(A),
20	pursuant to paragraph (3);
21	"(C) the reduction in emissions from de-
22	forestation has occurred before the issuance of
23	the international offset credit and, taking into
24	consideration relevant international standards,
25	has been demonstrated using ground-based in-

1	ventories, remote sensing technology, and other
2	methodologies to ensure that all relevant carbon
3	stocks are accounted;
4	"(D) the Administrator has made appro-
5	priate adjustments to account for circumstances
6	specific to the country, such as discounting for
7	any additional uncertainty; and
8	"(E) the activity is designed, carried out,
9	and managed—
10	"(i) in accordance with widely accept-
11	ed, environmentally sustainable forestry
12	practices; and
13	"(ii) to promote native species and
14	conservation or restoration of native for-
15	ests, if practicable, and to avoid the intro-
16	duction of invasive nonnative species.
17	"(2) Eligible countries.—The Adminis-
18	trator, in consultation with the Secretary of State
19	and in accordance with an agreement or arrange-
20	ment described in subsection (b)(2)(A), shall estab-
21	lish, and periodically review and update, a list of the
22	developing countries that have the capacity to par-
23	ticipate in international deforestation reduction ac-
24	tivities at a national level, including—

1	"(A) the technical capacity to monitor and
2	measure forest carbon fluxes for all significant
3	sources of greenhouse gas emissions from defor-
4	estation with an acceptable level of uncertainty;
5	and
6	"(B) the institutional capacity to reduce
7	emissions from deforestation, including strong
8	forest governance and mechanisms to deliver
9	deforestation resources for local actions.
10	"(3) Protection of interests.—With re-
11	spect to an agreement or arrangement described in
12	subsection (b)(2)(A) with a country that addresses
13	offset credits under this subsection, the Adminis-
14	trator shall seek to ensure the establishment and en-
15	forcement by such country of legal regimes, stand-
16	ards and safeguards that—
17	"(A) give due regard to the rights and in-
18	terests of local communities, indigenous peoples,
19	and vulnerable social groups;
20	"(B) promote consultations with local com-
21	munities and indigenous peoples in affected
22	areas, as partners and primary stakeholders,
23	prior to and during the design, planning, imple-
24	mentation, and monitoring and evaluation of
25	activities; and

1	"(C) encourage sharing of profits from in-
2	centives for emissions reductions with local
3	communities and indigenous peoples.
4	"(4) National deforestation baseline.—A
5	national deforestation baseline shall—
6	"(A) be national in scope;
7	"(B) be consistent with nationally appro-
8	priate mitigation commitments or actions, tak-
9	ing into consideration the average annual his-
10	torical deforestation rates of the country during
11	a period of at least 5 years and other factors
12	to ensure additionality;
13	"(C) establish a trajectory that would re-
14	sult in zero gross deforestation by not later
15	than 20 years after the national deforestation
16	baseline has been established;
17	"(D) be adjusted over time to take account
18	of changing national circumstances;
19	"(E) be designed to account for all signifi-
20	cant sources of greenhouse gas emissions from
21	deforestation in the country; and
22	"(F) be consistent with the national defor-
23	estation baseline, if any, established for such
24	country under section $754(d)(1)$.

1	"(5) Deforestation.—In implementing this
2	subsection, the Administrator, taking into consider-
3	ation the recommendations of the Advisory Board,
4	may include forest degradation, or soil carbon losses
5	associated with forested wetlands or peatlands, with-
6	in the meaning of deforestation.
7	"(6) Modification of requirements.—In
8	promulgating regulations under subsection $(b)(1)$
9	with respect to the issuance of international offset
10	credits under this subsection, the Administrator may
11	modify or omit a requirement of this part (excluding
12	the requirements of this section) if the Adminis-
13	trator determines that the application of that re-
14	quirement to this subsection is not feasible. In modi-
15	fying or omitting such a requirement on the basis of
16	infeasibility, the Administrator shall ensure, with an
17	adequate margin of safety, the integrity of inter-
18	national offset credits issued under this section and
19	of the greenhouse gas emissions cap established pur-
20	suant to section 703.
21	"(f) Avoiding Double Counting.—The Adminis-
22	trator, in consultation with the Secretary of State, shall
23	seek, by whatever means appropriate, including agree-
24	ments, arrangements, or technical cooperation, to ensure
25	that activities on the basis of which international offset

1	credits are issued under this section are not used for com-
2	pliance with an obligation to reduce or avoid greenhouse
3	gas emissions, or increase greenhouse gas sequestration,
4	under a foreign or international regulatory system. In ad-
5	dition, no international offset credits shall be issued for
6	emissions reductions from activities with respect to which
7	emission allowances were allocated under part E.
8	"PART E—SUPPLEMENTAL EMISSIONS
9	REDUCTIONS FROM REDUCED DEFORESTATION
10	"SEC. 751. DEFINITIONS.
11	"In this part:
12	"(1) International deforestation reduc-
13	TION ACTIVITIES.—The term 'international deforest-
14	ation reduction activities' means activities in devel-
15	oping countries authorized by this part.
16	"(2) Leakage prevention activities.—The
17	term 'leakage prevention activities' means activities
18	in developing countries that are directed at pre-
19	serving existing forest carbon stocks, including for-
20	ested wetlands and peatlands, that might, absent
21	such activities, be lost through leakage.
22	"(3) National deforestation reduction
23	ACTIVITIES.—The term 'national deforestation re-
24	duction activities' means activities in developing
25	countries that reduce a quantity of greenhouse gas

1	emissions from deforestation that is calculated by
2	measuring actual emissions against a national defor-
3	estation baseline established pursuant to section
4	754(d)(1) and (2) .
5	"(4) Subnational deforestation reduc-
6	TION ACTIVITIES.—The term 'subnational deforest-
7	ation reduction activities' means activities in devel-
8	oping countries that reduce a quantity of greenhouse
9	gas emissions from deforestation that are calculated
10	by measuring actual emissions using an appropriate
11	baseline established by the Administrator.
12	"(5) Supplemental emissions reduc-
13	TIONS.—The term 'supplemental emissions reduc-
14	tions' means greenhouse gas emissions reductions
15	achieved from reduced or avoided deforestation
16	under this part.
17	"SEC. 752. FINDINGS.
18	"Congress finds that—
19	"(1) land use change, primarily deforestation, is
20	one of the largest sources of greenhouse gas emis-
21	sions in developing countries, amounting to roughly
22	20 percent of overall emissions globally;
23	"(2) recent scientific analysis shows that it will
24	be substantially more difficult to limit the increase
25	in global temperatures to less than 2 degrees centi-

1	grade above preindustrial levels without reducing
2	and ultimately halting net emissions from deforest-
3	ation;
4	"(3) reducing emissions from deforestation is
5	highly cost-effective, compared to many other
6	sources of emissions reductions;
7	"(4) as part of a global effort to mitigate cli-
8	mate change, it is in the national interest of the
9	United States to assist developing countries to re-
10	duce and ultimately halt emissions from deforest-
11	ation; and
12	"(5) in addition to contributing significantly to
13	worldwide efforts to address global warming, this as-
14	sistance will generate significant environmental and
15	social cobenefits, including protection of biodiversity,
16	ecosystem services, and forest-related livelihoods.
17	"SEC. 753. SUPPLEMENTAL EMISSIONS REDUCTIONS
18	THROUGH REDUCED DEFORESTATION.
19	"(a) Regulations.—Not later than 2 years after
20	the date of enactment of this title, the Administrator, in
21	consultation with the Secretary of State and the Secretary
22	of Agriculture, shall promulgate regulations establishing
23	a program to use emission allowances set aside for this
24	purpose under section 781 to achieve the reduction of

1	greenhouse gas emissions from deforestation in developing
2	countries in accordance with the requirements of this part.
3	"(b) Objectives.—The objectives of the program es-
4	tablished under this section shall be to—
5	"(1) achieve supplemental emissions reductions
6	of at least 720,000,000 tons of carbon dioxide equiv-
7	alent in 2020, a cumulative amount of at least
8	6,000,000,000 tons of carbon dioxide equivalent by
9	December 31, 2025, and additional supplemental
10	emissions reductions in subsequent years;
11	"(2) build capacity to reduce deforestation in
12	countries experiencing deforestation, including pre-
13	paring developing countries to participate in inter-
14	national markets for international offset credits for
15	reduced emissions from deforestation; and
16	"(3) preserve existing forest carbon stocks in
17	countries where such forest carbon may be vulner-
18	able to international leakage, particularly in devel-
19	oping countries with largely intact native forests.
20	"SEC. 754. REQUIREMENTS FOR INTERNATIONAL DEFOR-
21	ESTATION REDUCTION PROGRAM.
22	"(a) Eligible Countries.—The Administrator
23	may support activities under this section only with respect
24	to a developing country that—

1	"(1) the Administrator determines is experi-
2	encing deforestation or degradation or has standing
3	forest carbon stocks that may be at risk of deforest-
4	ation or degradation; and
5	"(2) has entered into a bilateral or multilateral
6	agreement or arrangement with the United States
7	establishing the conditions of its participation in the
8	program established under this section, which shall
9	include an agreement to meet the standards estab-
10	lished under subsection (d) for the activities to
11	which those standards apply.
12	"(b) Activities.—Subject to the requirements of
13	this part, the Administrator may support activities to
14	achieve the objectives identified in section 753(b), includ-
15	ing—
16	"(1) national deforestation reduction activities;
17	"(2) subnational deforestation reduction activi-
18	ties, including pilot activities that reduce greenhouse
19	gas emissions but are subject to significant uncer-
20	tainty;
21	"(3) leakage prevention activities;
22	"(4) development of measurement, monitoring,
23	and verification capacities to enable a country to
24	quantify supplemental emissions reductions and to

1	participate in international markets for offset credits
2	from reduced or avoided deforestation;
3	"(5) development of governance structures to
4	reduce deforestation and illegal logging;
5	"(6) enforcement of requirements for reduced
6	deforestation or forest conservation;
7	"(7) efforts to combat illegal logging and in-
8	crease enforcement cooperation; and
9	"(8) providing incentives for policy reforms to
10	achieve the objectives identified in section 753(b).
11	"(c) Mechanisms.—
12	"(1) In General.—The Administrator may
13	support activities to achieve each of the objectives
14	identified in section 753(b) by—
15	"(A) developing and implementing pro-
16	grams and projects that achieve such objectives;
17	and
18	"(B) distributing emission allowances to a
19	country that is eligible under subsection (a), to
20	any private or public group (including public
21	international organizations), or to an inter-
22	national fund established by an international
23	agreement to which the United States is a
24	party, to carry out activities to achieve such ob-
25	jectives.

1	"(2) Implementation through inter-
2	NATIONAL ORGANIZATIONS.—If assistance is distrib-
3	uted through an international organization, the Ad-
4	ministrator shall ensure the establishment and im-
5	plementation of adequate mechanisms to apply and
6	enforce the eligibility requirements and other re-
7	quirements of this section.
8	"(d) Standards.—The Administrator shall promul-
9	gate standards to ensure that supplemental emissions re-
10	ductions achieved through supported activities are addi-
11	tional, measurable, verifiable, permanent, monitored, and
12	account for leakage and uncertainty. In addition, such
13	standards shall—
14	"(1) require the establishment of a national de-
15	forestation baseline for each country with national
16	deforestation reduction activities that is used to ac-
17	count for reductions achieved from such activities;
18	"(2) provide that a national deforestation base-
19	line established under paragraph (1) shall—
20	"(A) be national in scope;
21	"(B) be consistent with nationally appro-
22	priate mitigation commitments or actions, tak-
23	ing into consideration the average annual his-
24	torical deforestation rates of the country during

1	a period of at least 5 years and other factors
2	to ensure additionality;
3	"(C) establish a trajectory that would re-
4	sult in zero gross deforestation by not later
5	than 20 years from the date the baseline is es-
6	tablished;
7	"(D) be adjusted over time to take account
8	of changing national circumstances;
9	"(E) be designed to account for all signifi-
10	cant sources of greenhouse gas emissions from
11	deforestation in the country; and
12	"(F) be consistent with the national defor-
13	estation baseline, if any, established for such
14	country under section 754(d)(1);
15	"(3) with respect to support provided pursuant
16	to subsection $(b)(1)$ or (2) , require supplemental
17	emissions reductions to be achieved and verified
18	prior to compensation through the provision of emis-
19	sion allowances;
20	"(4) with respect to accounting for subnational
21	deforestation reduction activities that lack the stand-
22	ardized or precise measurement and monitoring
23	techniques needed for a full accounting of changes
24	in emissions or baselines, or are subject to other
25	sources of uncertainty, apply a conservative discount

1	factor to reflect the uncertainty regarding the levels
2	of reductions achieved;
3	"(5) ensure that international deforestation re-
4	duction activities shall be designed, carried out, and
5	managed—
6	"(A) in accordance with widely accepted,
7	environmentally sustainable forestry practices;
8	and
9	"(B) to promote native species and con-
10	servation or restoration of native forests, if
11	practicable, and to avoid the introduction of
12	invasive nonnative species; and
13	"(6) with respect to support for all activities
14	under this part, seek to ensure the establishment
15	and enforcement by the recipient country of legal re-
16	gimes, standards, and safeguards that—
17	"(A) give due regard to the rights and in-
18	terests of local communities, indigenous peoples,
19	and vulnerable social groups;
20	"(B) promote consultations with local com-
21	munities and indigenous peoples in affected
22	areas, as partners and primary stakeholders,
23	prior to and during the design, planning, imple-
24	mentation, monitoring, and evaluation of activi-
25	ties under this part; and

1	"(C) encourage sharing of profits from in-
2	centives for emissions reductions or leakage
3	prevention with local communities and indige-
4	nous peoples.
5	"(e) Expansion of Scope.—The Administrator
6	may decide, taking into account any advice from the Advi-
7	sory Board, to expand, where appropriate, the scope of
8	international deforestation reduction activities to in-
9	clude—
10	"(1) reduced emissions from forest degradation;
11	or
12	"(2) reduced soil carbon-derived emissions asso-
13	ciated with deforestation and degradation of forested
14	wetlands and peatlands.
15	"(f) Accounting.—The Administrator shall estab-
16	lish a publicly accessible registry of the supplemental emis-
17	sions reductions achieved through support provided under
18	this part each year, after appropriately discounting for un-
19	certainty and other relevant factors as required by the
20	standards established under subsection (d).
21	"(g) Transition to National Reductions.—Be-
22	ginning 5 years after the date that a country entered into
23	the agreement required under subsection (a)(2), the Ad-
24	ministrator shall provide no further compensation through
25	emission allowances to that country under this section for

1	any subnational deforestation reduction activities, except
2	that the Administrator may extend this period by an addi-
3	tional 5 years if the Administrator determines that—
4	"(1) the country is making substantial progress
5	towards adopting and implementing a program to
6	achieve reductions in deforestation measured against
7	a national baseline;
8	"(2) the greenhouse gas emissions reductions
9	achieved are not resulting in significant leakage; and
10	"(3) the greenhouse gas emissions reductions
11	achieved are being appropriately discounted to ac-
12	count for any leakage that is occurring.
13	The limitation under this subsection shall not apply to
14	support for activities to further the objectives listed in sec-
15	tion $753(b)(2)$ or (3) .
16	"SEC. 755. REPORTS AND REVIEWS.
17	"(a) Reports.—Not later than January 1, 2014,
18	and annually thereafter, the Administrator shall submit
19	to the Committee on Energy and Commerce and the Com-
20	mittee on Foreign Affairs of the House of Representatives,
21	and the Committee on Environment and Public Works and
22	the Committee on Foreign Relations of the Senate, and
23	make available to the public, a report on the support pro-
24	vided under this part during the prior fiscal year. The re-
25	port shall include—

1	"(1) a statement of the quantity of supple-
2	mental emissions reductions for which compensation
3	was provided under this part during the prior fiscal
4	year, as registered by the Administrator under sec-
5	tion 754(f); and
6	"(2) a description of the international deforest-
7	ation reduction activities, capacity-building activities,
8	and leakage protection activities supported under
9	this part, including a statement of the quantity of
10	emission allowances provided to each recipient for
11	each activity during the prior fiscal year, and a de-
12	scription of what was accomplished through each of
13	the activities.
14	"(b) Reviews.—Not later than 4 years after the date
15	of enactment of this title and every 5 years thereafter,
16	the Administrator, in consultation with the Secretary of
17	State and taking into consideration any evaluation by or
18	recommendations from the Advisory Board established
19	under section 731, shall conduct a review of the activities
20	undertaken pursuant to this part and make any appro-
21	priate changes in the program established under this part
22	based on the findings of the review. The review shall in-
23	clude the effects of the activities on—
24	"(1) total documented carbon stocks of each
25	country that directly or indirectly received support

1	under this part compared with such country's na-
2	tional deforestation baseline;
3	"(2) the number of countries with the capacity
4	to generate for sale in the international market for
5	instruments in the nature of offset credits from for-
6	est-related activities, and the amount of such activi-
7	ties;
8	"(3) forest governance in each country that di-
9	rectly or indirectly received support under this part;
10	"(4) indigenous and forest-dependent peoples
11	residing in areas affected by such activities;
12	"(5) biodiversity and ecosystem services within
13	forested areas associated with the activities;
14	"(6) international leakage; and
15	"(7) any program or mechanism established
16	under the United Nations Framework Convention on
17	Climate Change related to greenhouse gas emissions
18	from deforestation.
19	"SEC. 756. LEGAL EFFECT OF PART.
20	"Nothing in this part supersedes, limits, or otherwise
21	affects any restriction imposed by Federal law (including
22	regulations) on any interaction between an entity located
23	in the United States and an entity located in a foreign
24	country.

1	"PART F—CARBON MARKET ASSURANCE
2	"SEC. 761. OVERSIGHT AND ASSURANCE OF CARBON MAR-
3	KETS.
4	"(a) Definitions.—In this section:
5	"(1) Commission.—The term 'Commission'
6	means the Federal Energy Regulatory Commission.
7	"(2) REGULATED ALLOWANCE.—The term 'reg-
8	ulated allowance' means any emission allowance,
9	compensatory allowance, or offset credit established
10	or issued under this title.
11	"(3) Regulated allowance derivative.—
12	The term 'regulated allowance derivative' means an
13	instrument that is or includes an instrument—
14	"(A) which—
15	"(i) is of the character of, or is com-
16	monly known to the trade as, a 'put op-
17	tion', 'call option', 'privilege', 'indemnity',
18	'advance guaranty', 'decline guaranty', or
19	'swap agreement'; or
20	"(ii) is a contract of sale for future
21	delivery; and
22	"(B) the value of which, in whole or in
23	part, is expressly linked to the price of a regu-
24	lated allowance or another regulated allowance
25	derivative.

1	"(4) REGULATED INSTRUMENT.—The term
2	'regulated instrument' means a regulated allowance
3	or a regulated allowance derivative.
4	"(b) REGULATED ALLOWANCE MARKET.—
5	"(1) Authority.—The Commission, in con-
6	sultation and coordination with the Administrator,
7	shall promulgate regulations for the establishment,
8	operation, and oversight of markets for regulated al-
9	lowances not later than 18 months after the date of
10	the enactment of this section, and from time to time
11	thereafter as may be appropriate.
12	"(2) Regulations.—The regulations promul-
13	gated pursuant to paragraph (1) shall—
14	"(A) provide for effective and comprehen-
15	sive market oversight;
16	"(B) prohibit fraud, market manipulation,
17	and excess speculation, and provide measures to
18	limit unreasonable fluctuation in the prices of
19	regulated allowances;
20	"(C) facilitate compliance with this title by
21	covered entities;
22	"(D) ensure market transparency and rec-
23	ordkeeping necessary to provide for efficient
24	price discovery; prevention of fraud, market ma-

1	nipulation, and excess speculation; and compli-
2	ance with this Act;
3	"(E) ensure that position limitations for
4	individual market participants are established
5	with respect to each class of regulated allow-
6	ances;
7	"(F) ensure that margin requirements are
8	established for each class of regulated allow-
9	ances;
10	"(G) provide for the formation and oper-
11	ation of a national market system that allows
12	for best execution in the trading of regulated al-
13	lowances;
14	"(H) limit or eliminate counterparty risks,
15	market power concentration risks, and other
16	risks associated with over-the-counter trading;
17	and
18	"(I) establish standards for qualification as
19	and operation of registered trading facilities for
20	regulated allowances;
21	"(J) establish standards for qualification
22	as and operation of registered clearing organi-
23	zations for trading facilities for regulated allow-
24	ances; and

1	"(K) include such other requirements as
2	necessary to preserve market integrity and fa-
3	cilitate compliance with this title and the regu-
4	lations promulgated under this title.
5	"(3) Default rule.—
6	"(A) An individual market participant, di-
7	rectly or in concert with another participant,
8	shall not control more than 10 percent of any
9	class of regulated allowance.
10	"(B) To the extent that regulations pro-
11	mulgated under this subsection provide dif-
12	ferent rules with respect to the matters de-
13	scribed in subparagraph (A), the regulations
14	shall supersede subparagraph (A).
15	"(4) Enforcement.—
16	"(A) IN GENERAL.—If the Commission de-
17	termines, after notice and an opportunity for a
18	hearing on the record, that any person (other
19	than a trading facility for regulated allowances,
20	or clearing organization, registered with the
21	Commission) has violated any rule or order
22	issued by the Commission under this sub-
23	section, the Commission may issue an order—
24	"(i) prohibiting the person from trad-
25	ing on a trading facility for regulated al-

1	lowances registered with the Commission,
2	and requiring all such facilities to refuse
3	the person all privileges for such period as
4	may be specified in the order;
5	"(ii) if the person is registered with
6	the Commission in any capacity, sus-
7	pending, for a period of not more than 6
8	months, or revoking, the registration of the
9	person;
10	"(iii) assessing the person, in accord
11	with the gravity of the violation, a civil
12	penalty of not more than the greater of
13	\$1,000,000 or triple the monetary gain to
14	the person for each such violation; and
15	"(iv) requiring restitution to cus-
16	tomers of damages proximately caused by
17	the violation.
18	"(B) Authority to suspend or revoke
19	REGISTRATION.—The Commission may suspend
20	for a period of not more than 6 months, or re-
21	voke, the registration of a trading facility for
22	regulated allowances or of a clearing organiza-
23	tion registered by the Commission if, after no-
24	tice and opportunity for a hearing on the
25	record, the Commission finds that—

1	"(i) the entity violated any rule or
2	order issued by the Commission under this
3	subsection; or
4	"(ii) a director, officer, employee, or
5	agent of the entity has violated any rule or
6	order issued by the Commission under this
7	subsection.
8	"(C) CEASE AND DESIST ORDERS.—If the
9	Commission finds, after notice and an oppor-
10	tunity for a hearing on the record, that a per-
11	son has violated any rule or order issued by the
12	Commission under this subsection, the Commis-
13	sion may issue an order directing the person to
14	cease and desist from the violation.
15	"(D) ACTIONS TO COLLECT CIVIL PEN-
16	ALTIES.—If any person fails to pay a civil pen-
17	alty assessed under this subsection after an
18	order assessing the penalty has become final
19	and unappealable, the Commission shall bring
20	an action to recover the amount of the penalty
21	in any appropriate United States district court.
22	In any such action, the validity or appropriate-
23	ness of the final assessment order or judgment
24	shall not be subject to review. The Commission
25	shall be represented by the Attorney General or

1	the Solicitor General, as appropriate, in any ac-
2	tion under this subparagraph.
3	"(c) Delegation of Authority to the Presi-
4	DENT.—
5	"(1) Delegation.—The President, taking into
6	consideration the recommendations of the inter-
7	agency working group established in subsection (d),
8	shall delegate to members of the working group and
9	the heads of other appropriate Federal agencies the
10	authority to promulgate regulations for the estab-
11	lishment, operation, and oversight of all markets for
12	regulated allowance derivatives.
13	"(2) Regulations.—The regulations promul-
14	gated pursuant to paragraph (1) shall—
15	"(A) provide for effective and comprehen-
16	sive market oversight;
17	"(B) prohibit fraud, market manipulation,
18	and excess speculation, and provide measures to
19	limit unreasonable fluctuation in the prices of
20	regulated allowance derivatives;
21	"(C) facilitate compliance with this title by
22	covered entities;
23	"(D) ensure market transparency and rec-
24	ordkeeping necessary to provide for efficient
25	price discovery; prevention of fraud, market ma-

1	nipulation, and excess speculation; and compli-
2	ance with this Act;
3	"(E) ensure that position limitations for
4	individual market participants are established
5	with respect to each regulated allowance deriva-
6	tive;
7	"(F) ensure that margin requirements are
8	established for each regulated allowance deriva-
9	tive;
10	"(G) provide for the formation and oper-
11	ation of a national market system that allows
12	for best execution in the trading of regulated al-
13	lowance derivatives;
14	"(H) to the extent the regulations deviate
15	from the rule set forth in paragraph (4)(B),
16	limit or eliminate counterparty risks, market
17	power concentration risks, and other risks asso-
18	ciated with over-the-counter trading; and
19	"(I) include such other requirements as
20	necessary to preserve market integrity and fa-
21	cilitate compliance with this title and the regu-
22	lations promulgated under this title.
23	"(3) Deadline.—The agencies authorized to
24	promulgate regulations for the establishment, oper-
25	ation, and oversight of markets for regulated allow-

1	ance derivatives pursuant to paragraph (1) shall
2	promulgate such regulations not later than 18
3	months after the date of enactment of this section,
4	and from time to time thereafter as may be appro-
5	priate.
6	"(4) Default rules.—
7	"(A) An individual market participant, di-
8	rectly or in concert with another participant,
9	shall not control more than 10 percent of the
10	open interest in any regulated allowance deriva-
11	tive.
12	"(B) All contracts for the purchase or sale
13	of any regulated allowance derivative shall be
14	executed on or through a designated contract
15	market provided for in section 5 of the Com-
16	modity Exchange Act (7 U.S.C. 7).
17	"(C) To the extent that regulations pro-
18	mulgated under this subsection provide dif-
19	ferent rules with respect to the matters de-
20	scribed in subparagraph (A) or (B), the regula-
21	tions shall supersede subparagraph (A) or (B),
22	as the case may be.
23	"(d) Working Group.—
24	"(1) Establishment.—Not later than 30 days
25	after the date of the enactment of this section, the

1 President shall establish an interagency working 2 group on carbon market oversight, which shall in-3 clude the Administrator and representatives of other 4 relevant agencies, to make recommendations to the 5 President regarding proposed regulations for the es-6 tablishment, operation, and oversight of markets for 7 regulated allowance derivatives. 8 "(2) Report.—Not later than 180 days after 9 the date of the enactment of this section, and bienni-10 ally thereafter, the interagency working group shall 11 submit a written report to the President and Con-12 gress that includes its recommendations to the 13 President regarding proposed regulations for the es-14 tablishment, operation, and oversight of markets for 15 regulated allowance derivatives and any 16 ommendations to Congress for statutory changes 17 needed to ensure the establishment, operation, and 18 oversight of transparent, fair, stable, and efficient 19 markets for regulated allowance derivatives. 20 "(e) Enforcement of Regulations.—Each Fed-21 eral agency that promulgates under subsection (c) a regu-22 lation of conduct with respect to a regulated allowance de-23 rivative shall have the same authority to enforce compliance with the regulation as the Commodity Futures Trading Commission has to enforce compliance with any regu-

1	lation of similar conduct with respect to a contract, agree-
2	ment, or transaction over which the Commodity Futures
3	Trading Commission has jurisdiction.
4	"(f) Prohibition on Price or Market Manipula-
5	TION, FRAUD, AND FALSE OR MISLEADING STATEMENTS
6	OR REPORTS.—(1) It shall be a felony punishable by a
7	fine of not more than \$25,000,000 (or \$5,000,000 in the
8	case of a person who is an individual) or imprisonment
9	for not more than 20 years, or both, together with the
10	costs of prosecution for any person, directly or indirectly—
11	"(A) in connection with a transaction involving
12	a regulated instrument, to knowingly—
13	"(i) use any manipulative or deceptive de-
14	vice or contrivance in violation of regulations
15	promulgated pursuant to this section;
16	"(ii) corner or attempt to corner the regu-
17	lated instrument; or
18	"(iii) cheat or defraud, or attempt to cheat
19	or defraud, any other person;
20	"(B) to deliver or cause to be delivered a know-
21	ingly false, misleading, or inaccurate report con-
22	cerning information or conditions that affect or tend
23	to affect the price of a regulated instrument;
24	"(C) to knowingly make, or cause to be made,
25	in an application, report, or document required to be

1	filed under any regulation promulgated pursuant to
2	this section, a statement which is false or misleading
3	with respect to a material fact, or to omit any mate-
4	rial fact required to be stated therein or necessary
5	to make the statements therein not misleading; or
6	"(D) to knowingly falsify, conceal, or cover up
7	by any trick, scheme, or artifice a material fact,
8	make any false, fictitious, or fraudulent statements
9	or representations, or make or use any false writing
10	or document that contains a false, fictitious, or
11	fraudulent statement or entry, to an entity on or
12	through which transactions in regulated instruments
13	occur, or are settled or cleared, acting in furtherance
14	of its official duties under this section or regulations
15	promulgated under this section.
16	"(2) If a person is found guilty of a felony established
17	in paragraph (1), the person may be prohibited from hold-
18	ing or trading regulated instruments for a period of not
19	more than 5 years pursuant to the regulations promul-
20	gated under this section, except that, if the person is a
21	covered entity, the person shall be allowed to hold suffi-
22	cient regulated allowances to meet its compliance obliga-
23	tions.".

1 SEC. 312. DEFINITIONS.

- 2 Title VII of the Clean Air Act, as added by section
- 3 311 of this Act, is amended by inserting before part A
- 4 the following new section:
- 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 project.
- "(2) Additionality.—The term 'additionality'
 means the extent to which reductions or avoidance
 of greenhouse gas emissions, or sequestration of
 greenhouse gases, are additional.
- 19 "(3) ADVISORY BOARD.—The term 'Advisory 20 Board' means the Offsets Integrity Advisory Board 21 established under section 731.
- "(4) AFFILIATED.—The term 'affiliated', when used in relation to a local distribution company, means owned or controlled by, or under common ownership or control with, another local distribution company, as determined by the Administrator.

1	"(5) BIOLOGICAL SEQUESTRATION; BIO-
2	LOGICALLY SEQUESTERED.—The terms 'biological
3	sequestration' and 'biologically sequestered' mean
4	the removal of greenhouse gases from the atmos-
5	phere by terrestrial biological means, such as by
6	growing plants, and the storage of those greenhouse
7	gases in plants or soils.
8	"(6) Capped Emissions.—The term 'capped
9	emissions' means greenhouse gas emissions for
10	which an emission allowance must be held pursuant
11	to section 722, including emissions from the combus-
12	tion or oxidation of natural gas, petroleum-based or
13	coal-based liquid or gaseous fuel, petroleum coke, or
14	natural gas liquid for which an allowance must be
15	held pursuant to section 722(a)(2) or (7).
16	"(7) CAPPED SECTOR.—The term 'capped sec-
17	tor' means a sector of economic activity that directly
18	emits capped emissions, including the industrial sec-
19	tor, the electricity generation sector, the transpor-
20	tation sector, the residential and commercial sectors
21	(to the extent they burn oil or natural gas), but not
22	including the agricultural or forestry sectors.
23	"(8) Capped source.—The term 'capped
24	source' means a source that directly emits capped
25	emissions.

1	"(9) CARBON STOCK.—The term 'carbon stock'
2	means the quantity of carbon contained in a biologi-
3	cal reservoir or system which has the capacity to ac-
4	cumulate or release carbon.
5	"(10) Certified Geologic sequestration
6	SITE.—The term 'certified geologic sequestration
7	site' means a geologic sequestration site that has
8	been certified under section 813.
9	"(11) Compensatory allowance.—The term
10	'compensatory allowance' means an allowance issued
11	under section 721(f).
12	"(12) COVERED ENTITY.—The term 'covered
13	entity' means each of the following:
14	"(A) Any electricity source.
15	"(B) Any stationary source that produces,
16	and any entity that imports, for sale or dis-
17	tribution in interstate commerce in 2008 or any
18	subsequent year, petroleum-based or coal-based
19	liquid fuel, petroleum coke, or natural gas liq-
20	uid, the combustion of which would emit more
21	than 25,000 tons of carbon dioxide equivalent,
22	as determined by the Administrator.
23	"(C) Any stationary source that produces,
24	and any entity that imports, for sale or dis-
25	tribution in interstate commerce in 2008 or any

1	subsequent year more than 25,000 tons of car-
2	bon dioxide equivalent of—
3	"(i) fossil fuel-based carbon dioxide;
4	"(ii) nitrous oxide;
5	"(iii) perfluorocarbons;
6	"(iv) sulfur hexafluoride;
7	"(v) nitrogen trifluoride;
8	"(vi) any other fluorinated gas that is
9	a greenhouse gas, as designated by the Ad-
10	ministrator under section 711(b) or (c); or
11	"(vii) any combination of greenhouse
12	gases described in clauses (i) through (vi).
13	"(D) Any geologic sequestration site,
14	whether certified under section 813 or not.
15	"(E) Any stationary source in the fol-
16	lowing industrial sectors:
17	"(i) Adipie acid production.
18	"(ii) Primary aluminum production.
19	"(iii) Ammonia manufacturing.
20	"(iv) Cement production, excluding
21	grinding-only operations.
22	"(v) Hydrochlorofluorocarbon produc-
23	tion.
24	"(vi) Lime manufacturing.
25	"(vii) Nitric acid production.

1	"(viii) Petroleum refining.
2	"(ix) Phosphoric acid production.
3	"(x) Silicon carbide production.
4	"(xi) Soda ash production.
5	"(xii) Titanium dioxide production.
6	"(xiii) Coal-based liquid or gaseous
7	fuel production.
8	"(F) Any stationary source in the chemical
9	or petrochemical sector that, in 2008 or any
10	subsequent year—
11	"(i) manufactures acrylonitrile, carbon
12	black, ethylene, ethylene dichloride, ethyl-
13	ene oxide, or methanol; or
14	"(ii) manufactures a chemical or pe-
15	trochemical product not manufactured as
16	of the date of enactment of this title, if
17	manufacturing that product results in an-
18	nual process emissions of 25,000 or more
19	tons of carbon dioxide equivalent.
20	"(G) Any stationary source that—
21	"(i) is in one of the following indus-
22	trial sectors: ethanol production; ferroalloy
23	production; food processing; glass produc-
24	tion; hydrogen production; iron and steel
25	production; lead production; pulp and

1	paper manufacturing; and zinc production;
2	and
3	"(ii) has emitted 25,000 or more tons
4	of carbon dioxide equivalent in 2008 or
5	any subsequent year.
6	"(H) Any fossil fuel-fired combustion de-
7	vice (such as a boiler) or grouping of such de-
8	vices that—
9	"(i) is all or part of an industrial
10	source not specified in subparagraph (E),
11	(F), or (G); and
12	"(ii) has emitted 25,000 or more tons
13	of carbon dioxide equivalent in 2008 or
14	any subsequent year.
15	"(I) Any local distribution company that
16	(or any group of 2 or more affiliated local dis-
17	tribution companies that, in the aggregate) in
18	2008 or any subsequent year, delivers
19	460,000,000 cubic feet or more of natural gas
20	to customers that are not covered entities.
21	"(13) Crediting Period.—The term 'crediting
22	period' means the period with respect to which an
23	offset project is eligible to earn offset credits under
24	part D, as determined under section 733(a)(3).

1	"(14) Designated Representative.—The
2	term 'designated representative' means, with respect
3	to a covered entity, a reporting entity, or any other
4	entity receiving or holding allowances or credits
5	under this title, an individual authorized, through a
6	certificate of representation submitted to the Admin-
7	istrator by the owners and operators, to represent
8	the owners and operators in all matters pertaining
9	to this title (including the holding, transfer, or dis-
10	position of allowances or credits), and to make all
11	submissions to the Administrator under this title.
12	"(15) Developing country.—The term 'de-
13	veloping country' means a country eligible to receive
14	financial assistance from the International Bank for
15	Reconstruction and Development (commonly known
16	as the World Bank).
17	"(16) Domestic offset credit.—The term
18	'domestic offset credit' means an offset credit issued
19	under part D, other than an international offset
20	credit.
21	"(17) Electricity source.—The term 'elec-
22	tricity source' means a stationary source that in-
23	cludes one or more utility units.
24	"(18) Emission.—The term 'emission' means
25	the release of a greenhouse gas into the ambient air.

1	Such term does not include gases that are captured
2	and geologically sequestered, except to the extent
3	that they are later released into the atmosphere, in
4	which case they shall be subject to section 722(a)(4).
5	"(19) Emission allowance.—The term 'emis-
6	sion allowance' means a limited authorization to
7	emit 1 ton of carbon dioxide equivalent of a green-
8	house gas in accordance with this title.
9	"(20) Fair market value.—The term 'fair
10	market value' means the average daily closing price
11	on registered exchanges, during a specified time pe-
12	riod, of an emission allowance.
13	"(21) FEDERAL LAND.—The term 'Federal
14	land' means land that is owned by the United
15	States, other than land held in trust for an Indian
16	or Indian tribe.
17	"(22) Fossil fuel.—The term 'fossil fuel'
18	means natural gas, petroleum, coal, or any form of
19	solid, liquid, or gaseous fuel derived from such mate-
20	rial, including consumer products that are derived
21	from such materials and are combusted.
22	"(23) Fossil fuel-fired.—The term 'fossil
23	fuel-fired' means powered by combustion of fossil
24	fuel, alone or in combination with any other fuel, re-
25	gardless of the percentage of fossil fuel consumed.

1	"(24) Geologic sequestration; geologi-
2	CALLY SEQUESTERED.—The terms 'geologic seques-
3	tration' and 'geologically sequestered' mean the iso-
4	lation of greenhouse gases in geologic formations at
5	certified geologic sequestration sites.
6	"(25) Greenhouse gas.—The term 'green-
7	house gas' means any gas described in section
8	711(a) or designated under section 711(b), (c), or
9	(d), except to the extent that it is regulated under
10	title VI.
11	"(26) HOLD.—The term 'hold' means to have
12	in the appropriate account in the allowance tracking
13	system, or submit to the Administrator for recording
14	in such account.
15	"(27) Industrial source.—The term 'indus-
16	trial source' means any stationary source that—
17	"(A) is not an electricity source; and
18	"(B) is in—
19	"(i) the manufacturing sector (as de-
20	fined in North American Industrial Classi-
21	fication System codes 31, 32, and 33); or
22	"(ii) the natural gas processing or
23	natural gas pipeline transportation sector
24	(as defined in North American Industrial

1	Classification System codes 211112 or
2	486210).
3	"(28) International Emission allow-
4	ANCE.—The term 'international emission allowance'
5	means a tradable authorization to emit 1 ton of car-
6	bon dioxide equivalent of greenhouse gas that is
7	issued by a national or supranational foreign govern-
8	ment pursuant to a qualifying international program
9	designated by the Administrator pursuant to section
10	728(a).
11	"(29) International forest carbon activi-
12	TIES.—The term 'international forest carbon activi-
13	ties' means national or subnational activities in
14	countries other than the United States that are di-
15	rected at—
16	"(A) reducing greenhouse gas emissions
17	from deforestation or forest degradation; or
18	"(B) increasing sequestration of carbon
19	through—
20	"(i) afforestation or reforestation of
21	acreage not forested as of January 1,
22	2009;
23	"(ii) restoration of degraded land or
24	forest; or
25	"(iii) improved forest management.

1	"(30) International offset credit.—The
2	term 'international offset credit' means an offset
3	credit issued by the Administrator under section
4	743.
5	"(31) Leakage.—The term 'leakage' means a
6	significant increase in greenhouse gas emissions, or
7	significant decrease in sequestration, which is caused
8	by an offset project and occurs outside the bound-
9	aries of the offset project.
10	"(32) Local distribution company.—The
11	term 'local distribution company' has the meaning
12	given that term in section $2(17)$ of the Natural Gas
13	Policy Act of 1978 (15 U.S.C. 3301(17)).
14	"(33) National deforestation baseline.—
15	The term 'national deforestation baseline' means a
16	baseline developed pursuant to section 754(c).
17	"(34) Natural gas liquid.—The term 'nat-
18	ural gas liquid' includes ethane, propane, butane,
19	and isobutene.
20	"(35) Offset credit.—The term 'offset cred-
21	it' means a credit issued under part D.
22	"(36) Offset Project.—The term offset
23	project' means a project or activity that reduces or
24	avoids greenhouse gas emissions, or sequesters

1	greenhouse gases, and for which offset credits are
2	issued under part D.
3	"(37) Offset project representative.—
4	The term 'offset project representative' means the
5	individual or entity designated as the offset project
6	representative in a verification report for an offset
7	project submitted under section 735(c).
8	"(38) Petroleum.—The term 'petroleum' in-
9	cludes crude oil, tar sands, oil shale, and heavy oils.
10	"(39) Renewable biomass.—The term 're-
11	newable biomass' means each of the following:
12	"(A) Crops, erop byproducts, or crop resi-
13	dues harvested from actively managed or fallow
14	agricultural land that was cleared prior to the
15	date of enactment of this title and is nonfor-
16	ested.
17	"(B) Planted trees, brush, slash, and all
18	residues from an actively managed tree planta-
19	tion located on land that was cleared prior to
20	the date of enactment of this title and is not
21	Federal land.
22	"(C) Pre-commercial-sized thinnings, slash,
23	brush, and residue from milled trees, from for-
24	ested land that is not—
25	"(i) old-growth or mature forest;

1	"(ii) identified under a State Natural
2	Heritage Program as rare, imperiled, or
3	critically imperiled; or
4	"(iii) Federal land.
5	"(D) Algae.
6	"(E) Nonhazardous plant matter derived
7	from waste such as separated yard waste, land-
8	scape right-of-way trimmings, or food waste
9	(but not municipal solid waste, recyclable waste
10	paper, painted, treated or pressurized wood, or
11	wood contaminated with plastic or metals).
12	"(F) Animal waste or animal byproducts,
13	including products of animal waste digesters.
14	"(G) Vegetative matter removed from
15	within 200 yards of any manmade structure or
16	campground.
17	"(40) Retire.—The term 'retire', with respect
18	to an allowance or credit established or issued under
19	this title, means to disqualify such allowance or
20	credit for any subsequent use under this title, re-
21	gardless of whether the use is a sale, exchange, or
22	submission of the allowance or credit to satisfy a
23	compliance obligation.

1	"(41) Reversal.—The term 'reversal' means
2	an intentional or unintentional loss of sequestered
3	greenhouse gases to the atmosphere.
4	"(42) Sequestered and sequestration.—
5	The terms 'sequestered' and 'sequestration' mean
6	the separation, isolation, or removal of greenhouse
7	gases from the atmosphere, as determined by the
8	Administrator. The terms do not include nonterres-
9	trial sequestration.
10	"(43) Stationary source.—The term 'sta-
11	tionary source' means any integrated operation com-
12	prising any plant, building, structure, or stationary
13	equipment, including support buildings and equip-
14	ment, that is located within one or more contiguous
15	or adjacent properties, is under common control of
16	the same person or persons, and emits or may emit
17	a greenhouse gas.
18	"(44) STRATEGIC RESERVE ALLOWANCE.—The
19	term 'strategic reserve allowance' means an emission
20	allowance reserved for, transferred to, or deposited
21	in the strategic reserve, or established, under section
22	726.
23	"(45) Ton of carbon dioxide equiva-
24	LENT.—The term 'ton of carbon dioxide equivalent'
25	has the meaning specified in section 712(a) or deter-

1	mined by the Administrator under section 711 or
2	712.
3	"(46) Uncapped emissions.—The term 'un-
4	capped emissions' means emissions of greenhouse
5	gases emitted after December 31, 2011, for which
6	an emission allowance is not required to be held by
7	either the source of the emission or by a covered en-
8	tity under section 722.
9	"(47) United states greenhouse gas emis-
10	SIONS.—The term 'United States greenhouse gas
11	emissions' means the total quantity of annual green-
12	house gas emissions from the United States, as cal-
13	culated by the Administrator and reported to the
14	United Nations Framework Convention on Climate
15	Change Secretariat.
16	"(48) Utility Unit.—The term 'utility unit'
17	means a fossil fuel-fired combustion device that, at
18	any time after the date of enactment of this title,
19	serves a generator that produces electricity for sale,
20	except that a fossil fuel-fired combustion device that
21	cogenerates steam and electricity is not a utility unit
22	for purposes of this title unless the device is con-
23	structed for the purpose of supplying, or, after No-
24	vember 15, 1990, supplies, more than one-third of

1	its potential electric output capacity and more than
2	25 megawatts of electrical output for sale.
3	"(49) Vintage year.—The term 'vintage year'
4	means the calendar year for which an emission al-
5	lowance is established under section 721(a), except
6	that the vintage year for a strategic reserve allow-
7	ance shall be the year in which such allowance is
8	purchased at auction.".
9	Subtitle B—Disposition of
10	Allowances
11	SEC. 321. DISPOSITION OF ALLOWANCES FOR GLOBAL
12	WARMING POLLUTION REDUCTION PRO-
13	GRAM.
14	Title VII of the Clean Air Act, as added by section
15	311 of this Act, is amended by adding at the end the fol-
16	lowing part:
17	"PART H—DISPOSITION OF ALLOWANCES
18	"SEC. 781. ALLOCATION OF ALLOWANCES FOR SUPPLE-
19	MENTAL REDUCTIONS.
20	"(a) In General.—The Administrator shall allocate
21	emission allowances to be distributed in accordance with
22	part E in the following amounts:
23	"(1) For vintage years 2012 through 2025, 5
24	percent of the emission allowances established for
25	each year under section 721(a).

1	"(2) For vintage years 2026 through 2030, 3
2	percent of the emission allowances established for
3	each year under section 721(a).
4	"(3) For vintage years 2031 through 2050, 2
5	percent of the emission allowances established for
6	each year under section 721(a).
7	"(b) Adjustment.—The Administrator shall modify
8	the percentages set forth in subsection (a) as necessary
9	to ensure the achievement of the annual supplemental
10	emission reduction objective for 2020 and the cumulative
11	reduction target through 2025 set forth in 753(b).
12	"(c) Carryover.—If the Administrator has not dis-
13	tributed all of the allowances allocated pursuant to this
14	section for a given vintage year by the end of that year,
15	the Administrator shall—
16	"(1) auction those emission allowances under
17	section 791 not later than March 31 of the year fol-
18	lowing that vintage year; and
19	"(2) increase the allocation for the vintage year
20	after the vintage year for which emission allowances
21	were undisbursed by the amount of undisbursed
22	emission allowances.

1	"SEC. 782. DISBURSEMENT OF ALLOWANCES AND PRO-
2	CEEDS FROM AUCTIONS OF ALLOWANCES.
3	"(a) Allocation of Emission Allowances.—The
4	Administrator shall allocate emission allowances estab-
5	lished under section 721(a) in the following amounts:
	[to be supplied]
6	"(b) Auction of Emission Allowances.—The Ad-
7	ministrator shall auction emission allowances established
8	under section 721(a) in the following amounts:
	[to be supplied]
9	"(c) Funds Established.—There is established in
10	the Treasury of the United States the following funds:
11	"(1) The Strategic Reserve Fund.
12	"(2) [Other funds to be supplied].
12	(2) Lottler runds to be supplied.
13	"SEC. 783-789. [SECTIONS RESERVED].
13	"SEC. 783-789. [SECTIONS RESERVED].
13 14	"SEC. 783-789. [SECTIONS RESERVED]. "SEC. 790. EXCHANGE FOR STATE-ISSUED ALLOWANCES.
131415	"SEC. 783-789. [SECTIONS RESERVED]. "SEC. 790. EXCHANGE FOR STATE-ISSUED ALLOWANCES. "(a) IN GENERAL.—Not later than one year after the
13 14 15 16	"SEC. 783-789. [SECTIONS RESERVED]. "SEC. 790. EXCHANGE FOR STATE-ISSUED ALLOWANCES. "(a) In General.—Not later than one year after the date of enactment of this title, the Administrator shall
13 14 15 16 17	"SEC. 783-789. [SECTIONS RESERVED]. "SEC. 790. EXCHANGE FOR STATE-ISSUED ALLOWANCES. "(a) IN GENERAL.—Not later than one year after the date of enactment of this title, the Administrator shall issue regulations allowing any person in the United States
13 14 15 16 17 18	"SEC. 783-789. [SECTIONS RESERVED]. "SEC. 790. EXCHANGE FOR STATE-ISSUED ALLOWANCES. "(a) IN GENERAL.—Not later than one year after the date of enactment of this title, the Administrator shall issue regulations allowing any person in the United States to exchange greenhouse gas emission allowances issued be-
13 14 15 16 17 18 19	"SEC. 783-789. [SECTIONS RESERVED]. "SEC. 790. EXCHANGE FOR STATE-ISSUED ALLOWANCES. "(a) IN GENERAL.—Not later than one year after the date of enactment of this title, the Administrator shall issue regulations allowing any person in the United States to exchange greenhouse gas emission allowances issued before December 31, 2011, by the State of California or for
13 14 15 16 17 18 19 20	"SEC. 783-789. [SECTIONS RESERVED]. "SEC. 790. EXCHANGE FOR STATE-ISSUED ALLOWANCES. "(a) IN GENERAL.—Not later than one year after the date of enactment of this title, the Administrator shall issue regulations allowing any person in the United States to exchange greenhouse gas emission allowances issued before December 31, 2011, by the State of California or for the Regional Greenhouse Gas Initiative (in this section re-
13 14 15 16 17 18 19 20 21	"SEC. 783-789. [SECTIONS RESERVED]. "SEC. 790. EXCHANGE FOR STATE-ISSUED ALLOWANCES. "(a) IN GENERAL.—Not later than one year after the date of enactment of this title, the Administrator shall issue regulations allowing any person in the United States to exchange greenhouse gas emission allowances issued before December 31, 2011, by the State of California or for the Regional Greenhouse Gas Initiative (in this section referred to as 'State allowances') for emission allowances es-

1	"(1) provide that a person exchanging State al-
2	lowances under this section receive emission allow-
3	ances established under section 721(a) in the
4	amount that is sufficient to compensate for the cost
5	of obtaining and holding such State allowances;
6	"(2) establish a deadline by which persons must
7	exchange the State allowances; and
8	"(3) provide that the Federal emission allow-
9	ances disbursed pursuant to this section shall be de-
10	ducted from the allowances to be auctioned pursuant
11	to section 782(b).
12	"(c) Cost of Obtaining State Allowance.—For
13	purposes of this section, the cost of obtaining a State al-
14	lowance shall be the average auction price for emission al-
15	lowances issued in the year in which the State allowance
16	was issued under the program under which the State al-
17	lowance was issued.
18	"SEC. 791. AUCTION PROCEDURES.
19	"(a) In General.—To the extent that auctions of
20	emission allowances by the Administrator are authorized
21	by this part, such auctions shall be carried out pursuant
22	to this section and the regulations established hereunder.
23	"(b) Initial Regulations.—Not later than 12
24	months after the date of enactment of this title, the Ad-
25	ministrator, in consultation with other agencies, as appro-

1	priate, shall promulgate regulations governing the auction
2	of allowances under this section. Such regulations shall in-
3	clude the following requirements:
4	"(1) Frequency; first auction.—Auctions
5	shall be held four times per year at regular intervals,
6	with the first auction to be held no later than March
7	31, 2011.
8	"(2) Auction schedule; current and fu-
9	TURE VINTAGES.—The Administrator shall, at each
10	quarterly auction under this section, offer for sale
11	both a portion of the allowances with the same vin-
12	tage year as the year in which the auction is being
13	conducted and a portion of the allowances with vin-
14	tage years from future years. The preceding sen-
15	tence shall not apply to auctions held before 2012,
16	during which period, by necessity, the Administrator
17	shall auction only allowances with a vintage year
18	that is later than the year in which the auction is
19	held. Beginning with the first auction and at each
20	quarterly auction held thereafter, the Administrator
21	may offer for sale allowances with vintage years of
22	up to four years in advance of the year in which the
23	auction is being conducted.
24	"(3) Auction format.—Auctions shall follow
25	a single-round, sealed-bid, uniform price format.

1	"(4) Participation; financial assurance.—
2	Auctions shall be open to any person, except that
3	the Administrator may establish financial assurance
4	requirements to ensure that auction participants can
5	and will perform on their bids.
6	"(5) Disclosure of Beneficial Owner-
7	SHIP.—Each bidder in the auction shall be required
8	to disclose the person or entity sponsoring or bene-
9	fitting from the bidder's participation in the auction
10	if such person or entity is, in whole or in part, other
11	than the bidder.
12	"(6) Purchase limits.—No person may, di-
13	rectly or in concert with another participant, pur-
14	chase more than 5 percent of the allowances offered
15	for sale at any quarterly auction.
16	"(7) Publication of Information.—After
17	the auction, the Administrator shall, in a timely
18	fashion, publish the identities of winning bidders,
19	the quantity of allowances obtained by each winning
20	bidder, and the auction clearing price.
21	"(8) OTHER REQUIREMENTS.—The Adminis-
22	trator may include in the regulations such other re-
23	quirements or provisions as the Administrator, in
24	consultation with other agencies, as appropriate,
25	considers appropriate to promote effective, efficient.

- 1 transparent, or fair administration of auctions under
- this section.
- 3 "(c) REVISION OF REGULATIONS.—The Adminis-
- 4 trator may, in consultation with other agencies, as appro-
- 5 priate, at any time, revise the initial regulations promul-
- 6 gated under subsection (b) based on the Administrator's
- 7 experience in administering allowance auctions. Such re-
- 8 vised regulations need not meet the requirements identi-
- 9 fied in subsection (b) if the Administrator determines that
- 10 an alternative auction design would be more effective, tak-
- 11 ing into account factors including costs of administration,
- 12 transparency, fairness, and risks of collusion or manipula-
- 13 tion. In determining whether and how to revise the initial
- 14 regulations under this subsection, the Administrator shall
- 15 not consider maximization of revenues to the Federal Gov-
- 16 ernment.
- 17 "(d) Delegation or Contract.—Pursuant to reg-
- 18 ulations under this section, the Administrator may by del-
- 19 egation or contract provide for the conduct of auctions
- 20 under the Administrator's supervision by other depart-
- 21 ments or agencies of the Federal Government or by non-
- 22 governmental agencies, groups, or organizations.

1	"SEC. 792. AUCTIONING ALLOWANCES FOR OTHER ENTI-
2	TIES.
3	"(a) Consignment.—Any entity in possession of
4	emission allowances under this title may request that the
5	Administrator auction, pursuant to section 791, the allow-
6	ances on consignment.
7	"(b) Allowances for Reduced Deforest-
8	ATION.—For emission allowances distributed to a foreign
9	country or other entity pursuant to section 754(c)(2), the
10	Administrator shall act as such foreign country's or other
11	entity's agent, sell the emission allowances at auction ac-
12	cording to the procedures established under section 791,
13	and provide the proceeds directly to the foreign country
14	or other entity.
15	"(c) Pricing.—When the Administrator acts under
16	this section as the agent of an entity in possession of emis-
17	sion allowances, the Administrator is not obligated to ob-
18	tain the highest price possible for the emission allowances,
19	and instead shall auction consignment allowances in the
20	same manner and pursuant to the same rules as auctions
21	of other allowances under section 791. The Administrator
22	may permit emission allowance owners to condition the
23	sale of their allowances pursuant to this section on a min-
24	imum reserve price.
25	"(d) Proceeds.—For emission allowances auctioned
26	pursuant to this section, notwithstanding section 3302 of

- 1 title 31, United States Code, or any other provision of law,
- 2 within 90 days of receipt, the United States shall transfer
- 3 the proceeds from the auction to the entity which pos-
- 4 sessed the emission allowances auctioned. No funds trans-
- 5 ferred from a purchaser to a seller of emission allowances
- 6 under this subsection shall be held by any officer or em-
- 7 ployee of the United States or treated for any purpose as
- 8 revenue to the United States or the Administrator.
- 9 "(e) Regulations.—The Administrator shall issue
- 10 regulations within 24 months after the date of enactment
- 11 of this title to implement this section.".

12 Subtitle C—Additional Greenhouse

13 Gas Standards

- 14 SEC. 331. GREENHOUSE GAS STANDARDS.
- 15 The Clean Air Act (42 U.S.C. 7401 and following),
- 16 as amended by subtitles A and B of this title, is further
- 17 amended by adding the following new title at the end
- 18 thereof:

19 **"TITLE VIII—ADDITIONAL**

20 GREENHOUSE GAS STANDARDS

- 21 "SEC. 801. DEFINITIONS.
- 22 "For purposes of this title, terms that are defined
- 23 in title VII, except for the term 'stationary source', shall
- 24 have the meaning given those terms in title VII.

1 "PART A—STATIONARY SOURCE STANDARDS

2	"SEC. 811. STANDARDS OF PERFORMANCE.
3	"(a) Uncapped Stationary Sources.—
4	"(1) List of source categories .—(A)
5	Within 12 months after the date of enactment of
6	this title, the Administrator shall publish under sec-
7	tion 111(b)(1)(A) a list of categories of stationary
8	sources consisting of sources that individually had
9	uncapped greenhouse gas emissions greater than
10	10,000 tons of carbon dioxide equivalent and that,
11	in the aggregate, were responsible for emitting at
12	least 20 percent of the uncapped greenhouse gas
13	emissions.
14	"(B) The Administrator shall include on the list
15	under this paragraph each source category that is
16	responsible for at least 10 percent of the uncapped
17	methane emissions. Notwithstanding any other pro-
18	vision, the list required by this section shall not in-
19	clude sources of enteric fermentation. The list under
20	this paragraph shall include industrial sources, the
21	emissions from which, when added to the capped
22	emissions from industrial sources, constitute at least
23	95 percent of the greenhouse gas emissions of the
24	industrial sector.
25	"(C) For purposes of this subsection, emissions
26	shall be calculated using tons of carbon dioxide

1	equivalents. In promulgating the list required by this
2	paragraph and the schedule required under by para-
3	graph (2)(C), the Administrator shall use the most
4	current emissions data available at the time of publi-
5	cation.
6	"(2) Standards and schedule.— (A) For
7	each category listed as provided in paragraph (1),
8	the Administrator shall promulgate standards of
9	performance under section 111 for the uncapped
10	emissions of greenhouse gases from stationary
11	sources in that category and shall promulgate cor-
12	responding regulations under section 111(d).
13	"(B) The Administrator shall promulgate
14	standards as required by this subsection for sta-
15	tionary sources in categories listed as provided in
16	paragraph (1) as expeditiously as practicable, assur-
17	ing that—
18	"(i) standards for listed source categories
19	that, combined, emitted 80 percent or more of
20	the greenhouse gas emissions of the listed
21	source categories shall be promulgated not later
22	than 3 years after the date of the enactment of
23	this title and shall include standards for natural
24	gas extraction; and
25	"(ii) for all other listed source categories—

1	"(I) standards for not less than an
2	additional 25 percent of the listed cat-
3	egories shall be promulgated not later than
4	5 years after the date of enactment of this
5	title;
6	"(II) standards for not less than an
7	additional 25 percent of the listed cat-
8	egories shall be promulgated not later than
9	7 years after the date of enactment of this
10	title; and
11	"(III) standards for all the listed cat-
12	egories shall be promulgated not later than
13	10 years after the date of enactment of
14	this title.
15	"(C) Not later than 24 months after the date
16	of enactment of this title and after notice and oppor-
17	tunity for comment, the Administrator shall publish
18	a schedule establishing a date for the promulgation
19	of standards for each category of sources listed pur-
20	suant to paragraph (1). The date for each category
21	shall be consistent with the requirements of subpara-
22	graph (B). The determination of priorities for the
23	promulgation of standards pursuant to this para-
24	graph is not a rulemaking and shall not be subject
25	to judicial review, except that failure to promulgate

1	any standard pursuant to the schedule established
2	by this paragraph shall be subject to review under
3	section $304(a)(2)$.
4	"(D) Notwithstanding section 307, no action of
5	the Administrator listing a source category under
6	paragraph (1) shall be a final agency action subject
7	to judicial review, except that any such action may
8	be reviewed under section 307 when the Adminis-
9	trator issues performance standards for such cat-
10	egory.
11	"(b) Capped Sources.—No standard of perform-
12	ance shall be established under section 111 for capped
13	greenhouse gas emissions from a capped source. In pro-
14	mulgating a standard of performance under section 111
15	for the emission from capped sources of any air pollutant
16	that is not a greenhouse gas, the Administrator shall treat
17	the emission of any greenhouse gas by those entities as
18	a nonair quality public health and environmental impact
19	within the meaning of section 111(a)(1).
20	"(c) Performance Standards.— For purposes of
21	setting a performance standard for source categories listed
22	pursuant to subsection (a)—
23	"(1) The Administrator shall take into account
24	the goal of reducing total United States greenhouse
25	gas emissions as set forth in section 702.

1	"(2) The Administrator may promulgate a de-
2	sign, equipment, work practice, or operational stand-
3	ard, or any combination thereof, under section 111
4	in lieu of a standard of performance under that sec-
5	tion without regard to any determination of feasi-
6	bility that would otherwise be required under section
7	111(h).
8	"(3) Notwithstanding any other provision, in
9	setting the level of each standard required by this
10	section, the Administrator shall take into account
11	projections of allowance prices, such that the mar-
12	ginal cost of compliance (expressed as dollars per
13	ton of carbon dioxide equivalent reduced) imposed by
14	the standard would not, in the judgement of the Ad-
15	ministrator, be expected to exceed the Administra-
16	tor's projected allowance prices over the time period
17	spanning from the date of initial compliance to the
18	date that the next revisions of the standard would
19	come into effect pursuant to the schedule under sec-
20	tion $111(b)(1)(B)$.
21	"(d) Definitions.—In this section:
22	"(1) The terms 'uncapped greenhouse gas emis-
23	sions' and 'uncapped methane emissions' mean those
24	greenhouse gas or methane emissions, respectively,
25	for which no covered entity would have been re-

- 1 quired to hold an allowance under section 722 if the
- 2 requirements of this title had been in effect for the
- 3 same year as the emissions data upon which the list
- 4 is based.

5 "PART C—EXEMPTIONS FROM OTHER PROGRAMS

- 6 "SEC. 831. CRITERIA POLLUTANTS.
- 7 "No greenhouse gas may be listed under section
- 8 108(a) on the basis of its effect on climate change.
- 9 "SEC. 832. HAZARDOUS AIR POLLUTANTS.
- 10 "No greenhouse gas may be added to the list of haz-
- 11 ardous air pollutants under section 112 unless such green-
- 12 house gas meets the listing criteria of section 112(b) inde-
- 13 pendent of its effects on climate change.
- 14 "SEC. 833. NEW SOURCE REVIEW.
- 15 "The provisions of part C of title I shall not apply
- 16 to a greenhouse gas solely on the basis of its effect on
- 17 climate change or regulation under title VII or this title.
- 18 "SEC. 834. TITLE V PERMITS.
- 19 "Notwithstanding any provision of title III or V, in
- 20 determining whether a stationary source is required to
- 21 apply for, or operate pursuant to, a permit under title V,
- 22 the Administrator shall not consider the source's green-
- 23 house gas emissions.".

1 SEC. 332. HFC REGULATION.

- 2 (a) IN GENERAL.—Title VI of the Clean Air Act (42
- 3 U.S.C. 7671 and following) (relating to stratospheric
- 4 ozone protection) is amended by adding the following new
- 5 section to the end thereof:

6 "SEC. 619. HYDROFLUOROCARBONS (HFCS).

- 7 "(a) Treatment as Class II, Group II Sub-
- 8 STANCES.—Except as otherwise provided in this section,
- 9 hydrofluorocarbons shall be treated as class II substances
- 10 for purposes of applying the provisions of this title. The
- 11 Administrator shall establish two groups of class II sub-
- 12 stances. Class II, group I, substances shall include all
- 13 hydrochlorofluorocarbons (HCFCs) listed pursuant to sec-
- 14 tion 602(b). Class II, group II substances shall include
- 15 each of the following:
- 16 "(1) Hydrofluorocarbon-23 (HFC-23).
- 17 "(2) Hydrofluorocarbon-32 (HFC-32).
- 18 "(3) Hydrofluorocarbon-41 (HFC-41).
- 19 "(4) Hydrofluorocarbon-125 (HFC-125).
- 20 "(5) Hydrofluorocarbon-134 (HFC-134).
- 21 "(6) Hydrofluorocarbon-134a (HFC-134a).
- 22 "(7) Hydrofluorocarbon-143 (HFC-143).
- "(8) Hydrofluorocarbon-143a (HFC-143a).
- 24 "(9) Hydrofluorocarbon-152 (HFC-152).
- 25 "(10) Hydrofluorocarbon-152a (HFC-152a).
- 26 "(11) Hydrofluorocarbon-227ea (HFC-227ea).

1	"(12) Hydrofluorocarbon-236cb (HFC-236cb).
2	"(13) Hydrofluorocarbon-236ea (HFC-236ea).
3	"(14) Hydrofluorocarbon-236fa (HFC-236fa).
4	"(15) Hydrofluorocarbon-245ca (HFC-245ca).
5	"(16) Hydrofluorocarbon-245fa (HFC-245fa).
6	"(17) Hydrofluorocarbon-365mfc (HFC-
7	365mfe).
8	"(18) Hydrofluorocarbon-43-10mee (HFC-43-
9	10mee).
10	"(19) Hydrofluoroolefin-1234yf (HFO-1234yf).
11	"(20) Hydrofluoroolefin-1234ze (HFO-1234ze).
12	Not later than 6 months after the date of enactment of
13	this title, the Administrator shall publish an initial list of
14	class II, group II substances, which shall include the sub-
15	stances listed in this subsection. The Administrator may
16	add to the list of class II, group II substances any other
17	greenhouse gas listed by the Administrator pursuant to
18	section 711 if that substance is used as a substitute for
19	a class I or II substance. Within 24 months after the date
20	of enactment of this section, the Administrator shall
21	amend the regulations under this title (including the regu-
22	lations referred to in sections 603, 608, 609, 610, 611,
23	612, and 613) to apply to class II, group II substances.
24	"(b) Consumption and Production of Class II,
25	GROUP II SUBSTANCES.—

1	"(1) Production and consumption phase
2	DOWN.—In the case of class II, group II substances,
3	in lieu of applying section 605 and the regulations
4	thereunder, the Administrator shall promulgate reg-
5	ulations phasing down the consumption and produc-
6	tion of class II, group II substances in the United
7	States and the importation of products containing
8	any class II, group II substance in accordance with
9	this subsection within 18 months after the date of
10	enactment of this section. The Administrator shall
11	ensure that the production of class II, group II sub-
12	stances is phased down in accordance with the same
13	schedule (subject to the same exceptions and other
14	provisions) as is applicable to the phase-down of con-
15	sumption of class II, group II substances under this
16	title. Effective January 1, 2012, it shall be unlawful
17	for any person to produce any class II, group II sub-
18	stance, import any class II, group II substance, or
19	import any product containing any class Π , group Π
20	substance without holding one consumption allow-
21	ance or one destruction offset credit for each carbon
22	dioxide equivalent ton of the class Π , group Π sub-
23	stance. To maintain the integrity of the class II,
24	group II cap, the Administrator may, through rule-
25	making, limit the percentage of each person's com-

3

4

5

6

7

8

9

pliance obligation that may be met through the use
of destruction offset credits or banked allowances.

"(2) Schedule.—Pursuant to the regulations promulgated pursuant to paragraph (1), the number of class II, group II consumption allowances established by the Administrator for each calendar year beginning in 2012 shall be the following percentage of the baseline, as established by the Administrator pursuant to paragraph (3):

"Calendar Year	Percent of Baseline
2012	96
2013	93
2014	90
2015	87
2016	84
2017	81
2018	78
2019	75
2020	72
2021	69
2022	66
2023	63
2024	60
2025	57
2026	54
2027	51
2028	48

"Calendar Year	Percent of Baseline
2029	45
2030	42
2031	39
2032	36
2033	33
2034	30
2035	27
2036	24
2037	21
2038	18
after 2038	15

"(3) Baseline.—(A) Within 12 months after the date of enactment of this section, the Administrator shall promulgate regulations to establish the baseline for purposes of paragraph (2). The baseline shall be the sum of the annual average consumption of all class II substances in calendar years 2004, 2005, and 2006 and annual average quantity of all class II substances contained in imported products in calendar years 2004, 2005, and 2006, expressed in tons of carbon dioxide equivalents.

"(B) Notwithstanding subparagraph (A), if the Administrator determines that the baseline is higher than 380 million metric tons of carbon dioxide equivalents, then the Administrator shall establish

1	the baseline at 380 million metric tons of carbon di-
2	oxide equivalents.
3	"(C) Notwithstanding subparagraph (A), if the
4	Administrator determines that the baseline is lower
5	than 280 million metric tons of carbon dioxide
6	equivalents, then the Administrator shall establish
7	the baseline at 280 million metric tons of carbon di-
8	oxide equivalents.
9	"(4) Distribution of Allowances.—
10	"(A) In general.—Pursuant to the regu-
11	lations promulgated under paragraph (1), for
12	each calendar year beginning in 2012, the Ad-
13	ministrator shall distribute allowances in ac-
14	cordance with this paragraph.
15	"(B) ESTABLISHMENT OF POOLS.—The
16	Administrator shall establish two allowance
17	pools. 80 percent of the consumption allowances
18	available for a calendar year shall be placed in
19	the producer-importer pool and 20 percent of
20	the consumption allowances available for a cal-
21	endar year shall be placed in the secondary
22	pool.
23	"(C) Producer-importer pool.—
24	"(i) Auction.—(I) For each calendar
25	year, the Administrator shall offer for sale

1 at auction the following percentage of the 2 consumption allowances in the producer-3 importer pool:

"Calendar Year	Percent Available for Auction
2012	20
2013	30
2014	40
2015	50
2016	60
2017	70
2018	80
2019	90
after 2019	100

"(II) Any producer of a class II, group II substance or importer of a class II, group II substance may participate in the auction. No other persons may participate in the auction.

"(ii) Non-Auction sale.—(I) For each calendar year, as soon as practicable after auction, the Administrator shall offer for sale the remaining consumption allowances in the producer-importer pool at a price equal to the clearing price of that year's auction.

4

5

6

7

8

9

10

11

12

13

14

15

1	$``(\Pi)$ The Administrator shall offer to
2	sell the remaining consumption allowances
3	to producers of class II, group II sub-
4	stances and importers of class II, group II
5	substances in proportion to their relative
6	class II substance production and/or im-
7	portation during calendar years 2004,
8	2005, and 2006.
9	"(III) Any consumption allowances
10	made available for non-auction sale to a
11	specific producer or importer of class II,
12	group II substances but not purchased by
13	the specific producer or importer shall be
14	made available for sale to any producer or
15	importer of class II, group II substances
16	during calendar years 2004, 2005, and
17	2006. If demand for such consumption al-
18	lowances exceeds supply of such consump-
19	tion allowances, the Administrator shall
20	develop and utilize criteria for the distribu-
21	tion of such consumption allowances that
22	may include pro rata shares, historic pro-
23	duction and importation, economic or tech-
24	nical hardship, or other factors deemed rel-
25	evant by the Administrator.

1	"(D) Secondary Pool.—(i) For each cal-
2	endar year, as soon as practicable after the auc-
3	tion required in subparagraph (C), the Adminis-
4	trator shall offer for sale the consumption al-
5	lowances in the secondary pool at a price equal
6	to the clearing price of that year's auction.
7	"(ii) The Administrator shall accept appli-
8	cations for purchase of secondary pool con-
9	sumption allowances from—
10	"(I) importers of products containing
11	class II, group II substances;
12	$"(\Pi)$ persons who purchased any class
13	II, group II substance directly from a pro-
14	ducer or importer of class II, group II sub-
15	stances for use in a manufactured product,
16	a manufacturing process, or a reclamation
17	process;
18	"(III) persons who did not produce or
19	import any class II, group II substance
20	during calendar years 2004, 2005, or 2006
21	but who the Administrator determines have
22	a genuine interest in producing or import-
23	ing any class II, group II substance;

1	"(IV) a producer or importer of any
2	class II, group II substance during cal-
3	endar years 2004, 2005, or 2006.
4	"(iii) If the supply of consumption allow-
5	ances in the secondary pool equals or exceeds
6	the demand for consumption allowances in the
7	secondary pool as presented in the applications
8	for purchase, the Administrator shall sell the
9	consumption allowances in the secondary pool
10	to the applicants in the amounts requested in
11	the applications for purchase. Any consumption
12	allowances in the secondary pool not purchased
13	in a calendar year may be rolled over and added
14	to the quantity available in the pool in the fol-
15	lowing year.
16	"(iv) If the demand for consumption allow-
17	ances in the secondary pool as presented in the
18	applications for purchase exceeds the supply of
19	consumption allowances in the secondary pool,
20	the Administrator shall distribute the consump-
21	tion allowances as follows:
22	"(I) The Administrator shall first sell
23	the consumption allowances in the sec-
24	ondary pool to any importers of products
25	containing class II, group II substances in

1	the amounts requested in their applications
2	for purchase. If the demand for such con-
3	sumption allowances exceeds supply of
4	such consumption allowances, the Adminis-
5	trator shall develop and utilize criteria for
6	the distribution of such consumption allow-
7	ances among importers of products con-
8	taining class II, group II substances that
9	may include pro rata shares, historic im-
10	portation, economic or technical hardship,
11	or other factors deemed relevant by the
12	Administrator.
13	"(II) The Administrator shall next
14	sell any remaining consumption allowances
15	to persons identified in subclauses (II) and
16	(III) of clause (ii) in the amounts re-
17	quested in their applications for purchase.
18	If the demand for such consumption allow-
19	ances exceeds remaining supply of such
20	consumption allowances, the Administrator
21	shall develop and utilize criteria for the
22	distribution of such consumption allow-
23	ances among subclauses (II) and (III) ap-
24	plicants that may include pro rata shares,
25	historic use, economic or technical hard-

1	ship, or other factors deemed relevant by
2	the Administrator.
3	"(III) The Administrator shall then
4	sell any remaining consumption allowances
5	to producers or importers of any class II,
6	group II substance during calendar years
7	2004, 2005, or 2006 in the amounts re-
8	quested in their applications for purchase.
9	If demand for such consumption allow-
10	ances exceeds remaining supply of such
11	consumption allowances, the Administrator
12	shall develop and utilize criteria for the
13	distribution of such consumption allow-
14	ances that may include pro rata shares,
15	historic production and importation, eco-
16	nomic or technical hardship, or other fac-
17	tors deemed relevant by the Administrator.
18	"(E) DISCRETION TO WITHHOLD ALLOW-
19	ANCES.—Nothing in this paragraph prevents
20	the Administrator from exercising his discretion
21	to withhold and retire consumption allowances
22	that would otherwise be available for auction or
23	non-auction sale.
24	"(5) Banking .—A consumption allowance or
25	destruction offset credit may be used to meet the

1	compliance obligation requirements of paragraph (1)
2	in—
3	"(A) the vintage year for the allowance or
4	destruction offset credit; or
5	"(B) any calendar year subsequent to the
6	vintage year for the allowance or destruction
7	offset credit.
8	"(6) Auctions.—
9	"(A) Initial regulations.—Not later
10	than 18 months after the date of enactment of
11	this section, the Administrator shall promulgate
12	regulations governing the auction of allowances
13	under this section. Such regulations shall in-
14	clude the following requirements:
15	"(i) Frequency; first auction.—
16	Auctions shall be held one time per year at
17	regular intervals, with the first auction to
18	be held no later than October 31, 2011.
19	"(ii) Auction Format.—Auctions
20	shall follow a single-round, sealed-bid, uni-
21	form price format.
22	"(iii) FINANCIAL ASSURANCE.—The
23	Administrator may establish financial as-
24	surance requirements to ensure that auc-

1	tion participants can and will perform on
2	their bids.
3	"(iv) Disclosure of Beneficial
4	OWNERSHIP.—Each bidder in the auction
5	shall be required to disclose the person or
6	entity sponsoring or benefitting from the
7	bidder's participation in the auction if such
8	person or entity is, in whole or in part,
9	other than the bidder or the bidder's em-
10	ployer.
11	"(v) Publication of Informa-
12	TION.—After the auction, the Adminis-
13	trator shall, in a timely fashion, publish
14	the number of bidders, number of winning
15	bidders, the quantity of allowances sold,
16	and the auction clearing price.
17	"(vi) Bidding limits.—No producer
18	of any class II, group II substance or im-
19	porter of any class II, group II substance
20	may, directly or in concert with another
21	participant, purchase more than 50 per-
22	cent of the allowances of any vintage year
23	offered for sale at any auction.
24	"(vii) Other requirements.—The
25	Administrator may include in the regula-

1	tions such other requirements or provisions
2	as the Administrator considers necessary
3	to promote effective, efficient, transparent,
4	and fair administration of auctions under
5	this section, including allowing a person to
6	commit at auction to purchase and take
7	possession of allowances after the auction.
8	"(B) REVISION OF REGULATIONS.—The
9	Administrator may, at any time, revise the ini-
10	tial regulations promulgated under subpara-
11	graph (A) based on the Administrator's experi-
12	ence in administering allowance auctions. Such
13	revised regulations need not meet the require-
14	ments identified in subparagraph (A) if the Ad-
15	ministrator determines that an alternative auc-
16	tion design would be more effective, taking into
17	account factors including costs of administra-
18	tion, transparency, fairness, and risks of collu-
19	sion or manipulation. In determining whether
20	and how to revise the initial regulations under
21	this paragraph, the Administrator shall not con-
22	sider maximization of revenues to the Federal
23	Government.
24	"(7) Imported products.—If the United
25	States ratifies or otherwise adheres to an inter-

1	national agreement, including any amendment to the
2	Montreal Protocol on Substances That Deplete the
3	Ozone Layer, which restricts the production and
4	consumption of class II, group II substances—
5	"(A) as of the date on which such inter-
6	national agreement becomes binding on all par-
7	ties, it shall no longer be unlawful for any per-
8	son to import any product containing any class
9	II, group II substance whose production and
10	consumption is regulated by the Montreal Pro-
11	tocol without holding one consumption allow-
12	ance or one destruction offset credit for each
13	carbon dioxide equivalent ton of the class II,
14	group II substance;
15	"(B) the Administrator shall promulgate
16	regulations within 12 months of the date the
17	United States ratifies or otherwise adheres to
18	such international agreement to establish a new
19	baseline for purposes of paragraph (2) which
20	new baseline shall be the original baseline less
21	the carbon dioxide equivalent of the annual av-
22	erage quantity of any class II substances con-
23	tained in imported products in calendar years
24	2004, 2005, and 2006 that are restricted by
25	such international agreement.

1	"(C) as of the date on which such inter-
2	national agreement becomes binding on all par-
3	ties, no importer of any product containing any
4	class II, group II substance regulated by the
5	Montreal Protocol may, directly or in concert
6	with another participant, purchase any allow-
7	ances offered for sale by the Administrator; and
8	"(D) The Administrator may adjust the
9	two allowance pools established in paragraph
10	(4) such that up to 90 percent of the consump-
11	tion allowances available for a calendar year are
12	placed in the producer-importer pool with the
13	remaining consumption allowances placed in the
14	secondary pool.
15	"(8) Offsets.—
16	"(A) Chlorofluorocarbon destruc-
17	TION.—Within 18 months after the date of en-
18	actment of this section, the Administrator shall
19	promulgate regulations to provide for the
20	issuance of offset credits for the destruction, in
21	the calendar year 2012 or later, of
22	chlorofluorocarbons in the United States. The
23	Administrator shall establish and distribute to
24	the destroying entity a quantity of destruction
25	offset credits equal to .8 times the number of

1	tons of carbon dioxide equivalents of reduction
2	achieved through the destruction. No destruc-
3	tion offset credits shall be established for the
4	destruction of a substance emitted as a byprod-
5	uct.
6	"(B) Definition.—For purposes of this
7	paragraph, the term 'destruction' means the
8	conversion of a substance by thermal, chemical,
9	or other means to another substance with a
10	very low carbon dioxide equivalent value and no
11	ozone depletion potential.
12	"(C) Regulations.—The regulations pro-
13	mulgated under this paragraph shall include
14	standards and protocols for project eligibility,
15	certification of destroyers, monitoring, tracking,
16	destruction efficiency, quantification of project
17	and baseline emissions and global warming po-
18	tential, and verification. The Administrator
19	shall ensure that destruction offset credits rep-
20	resent real and verifiable destruction of
21	chlorofluorocarbons or other class I or class II,
22	group I, substances authorized under subpara-
23	graph (D).
24	"(D) OTHER SUBSTANCES.—The Adminis-
25	trator may promulgate regulations to add to the

1 list of class I and class II, group I, substances 2 that can be destroyed for destruction offset 3 credits, taking into account a candidate sub-4 stance's carbon dioxide equivalent value, ozone 5 depletion potential, prevalence in banks in the 6 United States, and emission rates, as well as 7 the need for additional cost containment under 8 the class II, group II cap and the integrity of 9 the class II, group II cap. The Administrator 10 shall not add a class I or class II substance to 11 the list if the substance has not been completely 12 phased-out internationally pursuant to the Mon-13 treal Protocol. 14 "(E) Extension of offsets.—(i) At any 15 time after the Administrator promulgates regu-16 lations pursuant to subparagraph (A), the Ad-17 ministrator may include as destruction offset 18 credits under this paragraph offset credits 19 issued under part D of title VII, for issuance in 20 accordance with the standards and protocols es-21 tablished pursuant to subparagraph (C) of this 22 paragraph and such part D, and the require-23 ments of section 722(c)(1) shall apply. The Ad-24 ministrator may omit or modify a requirement

of such part D with respect to destruction off-

25

1	set credits if the Administrator determines that
2	the application of that requirement to such
3	credits is not feasible. In modifying or omitting
4	such a requirement on the basis of infeasibility,
5	the Administrator shall ensure, with an ade-
6	quate margin of safety, the integrity of destruc-
7	tion offset credits issued under this subpara-
8	graph and of the greenhouse gas emissions cap
9	established pursuant to section 703.
10	"(ii) The Administrator shall not make the
11	addition under clause (i) unless the Adminis-
12	trator finds that insufficient destruction is oc-
13	curring under this paragraph and that the addi-
14	tion would increase destruction.
15	"(c) Deadlines for Compliance.—The January
16	2015 deadline specified in section $611(\mathrm{c})$ and $611(\mathrm{e})$ shall
17	be January 1, 2012, in the case of class II, group II, sub-
18	stances. Notwithstanding the deadlines specified for class
19	II substances in sections 608, 609, 610, 612, and 613 that
20	occur prior to January 1, 2009, the deadline for promul-
21	gating regulations under those sections for class II, group
22	II, substances shall be January 1, 2012.
23	"(d) Exceptions for Essential Uses.—Notwith-
24	standing the phase down of production and consumption
25	required by this section, to the extent consistent with any

1	applicable international agreement to which the United
2	States is a party or otherwise adheres, the Administrator
3	may provide the following exceptions for essential uses:
4	"(1) Medical Devices.—The Administrator,
5	after notice and opportunity for public comment,
6	and in consultation with the Commissioner of the
7	Food and Drug Administration, may provide an ex-
8	ception for the production and consumption of class
9	II, group II substances solely for use in medical de-
10	vices.
11	"(2) AVIATION SAFETY.—The Administrator,
12	after notice and opportunity for public comment,
13	may authorize the production of limited quantities of
14	class II, group II substances solely for the purposes
15	of aviation safety if the Administrator of the Federal
16	Aviation Administration, in consultation with the
17	Administrator, determines that no safe and effective
18	substitute has been developed and that such author-
19	ization is necessary for aviation safety purposes.
20	"(e) Developing Countries.—Notwithstanding
21	the phase down of production required by this section, the
22	Administrator, after notice and opportunity for public
23	comment, may authorize the production of limited quan-
24	tities of class II, group II substances in excess of the
25	amounts otherwise allowable under this section solely for

- 1 export to, and use in, developing countries. Any produc-
- 2 tion authorized under this subsection shall be solely for
- 3 purposes of satisfying the basic domestic needs of such
- 4 countries as provided in applicable international agree-
- 5 ments, if any, to which the United States is a party or
- 6 otherwise adheres.
- 7 "(f) National Security; Fire Suppression,
- 8 ETC..—The provisions of subsection (f) and paragraphs
- 9 (1) and (2) of subsection (g) of section 604 shall apply
- 10 to class II, group II substances in the same manner and
- 11 to the same extent, consistent with any applicable inter-
- 12 national agreement to which the United States is a party
- 13 or otherwise adheres, as such provisions apply to the sub-
- 14 stances specified in such subsection.
- 15 "(g) Accelerated Schedule.—In lieu of section
- 16 606, the provisions of paragraphs (1), (2), and (3) of this
- 17 subsection shall apply in the case of class II, group II sub-
- 18 stances.
- 19 "(1) IN GENERAL.—The Administrator shall
- promulgate regulations, after notice and opportunity
- for public comment, which establish a schedule for
- 22 phasing down the production and consumption of
- class II, group II substances that is more stringent
- 24 than the schedule set forth in this section if, based
- on the availability of substitutes, the Administrator

determines that such more stringent schedule is practicable, taking into account technological achievability, safety, and other factors the Administrator deems relevant, or if the Montreal Protocol, or any applicable international agreement to which the United States is a party or otherwise adheres, is modified or established to include a schedule or other requirements to control or reduce production, consumption, or use of any class II, group II substance more rapidly than the applicable schedule under this section.

- "(2) Petition.—Any person may submit a petition to promulgate regulations under this subsection in the same manner and subject to the same procedures as are provided in section 606(b).
- "(3) Inconsistency.— If the Administrator determines that the provisions of this section regarding banking and destruction offset credits create a significant potential for inconsistency with the requirements of any applicable international agreement to which the United States is a party or otherwise adheres, the Administrator may promulgate regulations restricting the availability of banking and destruction offset credits to the extent necessary to avoid such inconsistency.

- 1 "(h) Exchange.—Section 607(b) (relating to inter-
- 2 pollutant transfers) shall apply in the case of exchanges
- 3 of class II, group II substances production or consumption
- 4 allowances on a carbon dioxide equivalent basis. In accord-
- 5 ance with section 607(b)(3), no exchanges or transfers
- 6 may take place between class II, group II substances and
- 7 class II, group I substances.
- 8 "(i) Labeling.—(1) In applying section 611 to prod-
- 9 ucts containing or manufactured with class II, group II
- 10 substances, in lieu of the words 'destroying ozone in the
- 11 upper atmosphere' on labels required under section 611
- 12 there shall be substituted the words 'contributing to global
- 13 warming'.
- 14 "(2) The Administrator may, through rulemaking,
- 15 exempt products containing or manufactured with class II,
- 16 group II substances determined to have a very low carbon
- 17 dioxide equivalent value from the requirements of section
- 18 611.
- 19 "(j) Nonessential Products.—For the purposes
- 20 of section 610, class II, group II substances shall be regu-
- 21 lated under section 610(b), except that in applying section
- 22 610(b) 'hydrofluorocarbon' shall be substituted for the
- 23 word 'chlorofluorocarbon' and 'class II, group II,' shall be
- 24 substituted for the term 'class I'. Class II, group II sub-

1	stances shall not be subject to the provisions of section
2	610(d).
3	"(k) Motor Vehicle Air Conditioners.—
4	"(1) Section 609(e) of the Clean Air Act (42
5	U.S.C. 7671h(e)) is amended by inserting ', group
6	I' after each reference to 'class II'.
7	"(2) Section 609 of the Clean Air Act (42
8	U.S.C. 7671h) is amended by adding the following
9	new subsection after subsection (e):
10	"'(f) Class II, Group II Substances.—
11	"(1) Repair.—The Administrator may pro-
12	mulgate regulations establishing requirements for re-
13	pair of motor vehicle air conditioners prior to adding
14	a class II, group II substance.
15	"(2) Small containers.—(A) The Adminis-
16	trator may promulgate regulations establishing serv-
17	icing practices and procedures for recovery of class
18	II, group II substances from containers which con-
19	tain less than 20 pounds of such class II, group II
20	substances.
21	"(B) Not later than 18 months after enact-
22	ment of this subsection, the Administrator shall ei-
23	ther promulgate regulations requiring that con-
24	tainers which contain less than 20 pounds of a class
25	II, group II substance be equipped with a device or

1 technology that limits refrigerant emissions and 2 leaks from the container and limits refrigerant emis-3 sions and leaks during the transfer of refrigerant 4 from the container to the motor vehicle air condi-5 tioner or issue a determination that such require-6 ments are not necessary or appropriate. 7 "(C) Not later than 18 months after enact-8 ment of this subsection, the Administrator shall pro-9 mulgate regulations establishing requirements for 10 consumer education materials on best practices asso-11 ciated with the use of containers which contain less 12 than 20 pounds of a class II, group II substance and 13 prohibiting the sale or distribution, or offer for sale 14 or distribution, of any class II, group II substance 15 in a container which contain less than 20 pounds of 16 such class II, group II substance, unless consumer 17 education materials consistent with such require-18 ments are displayed and available at point-of-sale lo-19 cations, provided to the consumer, or included in or 20 on the packaging of the container which contain less 21 than 20 pounds of a class II, group II substance. 22 "(D) The Administrator may, through rule-23 making, extend the requirements established under 24 this paragraph to containers which contain 30

pounds or less of a class II, group II substance if

25

1	the Administrator determines that such action would
2	produce significant environmental benefits
3	"(3) Restriction of Sales.—Effective Jan-
4	uary 1, 2014, no person may sell or distribute or
5	offer to sell or distribute or otherwise introduce into
6	interstate commerce any class II, group II substance
7	as an automotive refrigerant in any size container
8	unless the class II, group II substance has been
9	found acceptable for use in a motor vehicle air con-
10	ditioner under section 612.'.
11	"(l) Carbon Dioxide Equivalent Value.—In lieu
12	of section 602(e), the provisions of this subsection shall
13	apply in the case of class II, group II substances. Simulta-
14	neously with establishing the list of class II, group II sub-
15	stances, and simultaneously with any addition to that list,
16	the Administrator shall publish the carbon dioxide equiva-
17	lent value of each listed class Π , group Π substance, based
18	on a determination of the number of metric tons of carbon
19	dioxide that makes the same contribution to global warm-
20	ing over 100 years as 1 metric ton of each class II, group
21	II substance.
22	["(m) Reporting Requirements.—In lieu of sec-
23	tions 603(b) and 603 c), the provisions of paragraphs (1)
24	and (2) of this subsection shall apply in the case of class
25	II, group II substances:

1	["(1) In general.—On a quarterly basis, or
2	such other basis (not less than annually) as deter-
3	mined by the Administrator, each person who pro-
4	duced, imported, or exported a class II, group II
5	substance, or who imported a product containing a
6	class II, group II substance, shall file a report with
7	the Administrator setting forth the carbon dioxide
8	equivalent amount of the substance that such person
9	produced, imported, or exported, as well as the
10	amount that was contained in products imported by
11	that person, during the preceding reporting period.
12	Each such report shall be signed and attested by a
13	responsible officer. No such report shall be required
14	from a person after April 1 of the calendar year
15	after such person permanently ceases production,
16	importation, and exportation of the substance, as
17	well as importation of products containing the sub-
18	stance, and so notifies the Administrator in writing.
19	If the United States ratifies or otherwise adheres to
20	an international agreement that restricts the produc-
21	tion and consumption of class II, group II sub-
22	stances, then no such report shall be required from
23	a person with respect to importation of products
24	containing any class II, group II substance re-
25	stricted by such agreement after April 1 of the cal-

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

endar year following the year during which such international agreement becomes binding on all parties.

"(2) Baseline reports for class II, group II SUBSTANCES.—Unless such information has been previously reported to the Administrator, on the date on which the first report under paragraph (1) of this subsection is required to be filed, each person who produced, imported, or exported a class II, group II substance, or who imported a product containing a class II, group II substance, (other than a substance added to the list of class II, group II substances after the publication of the initial list of such substances under this section), shall file a report with the Administrator setting forth the carbon dioxide equivalent amount of such substance that such person produced, imported, exported, or that was contained in products imported by that person, during each of calendar years 2004, 2005, and 2006. In the case of a substance added to the list of class II, group II substances after publication of the initial list of such substances under this section, each person who produced, imported, exported, or imported products containing such substance in calendar year 2004, 2005, or 2006 shall file a report with the Ad-

- 1 ministrator within 180 days after the date on which
- 2 such substance is added to the list, setting forth the
- 3 carbon dioxide equivalent amount of the substance
- 4 that such person produced, imported, and exported,
- 5 as well as the amount that was contained in prod-
- 6 ucts imported by that person, in calendar years
- 7 2004, 2005, and 2006"
- 8 (b) Table of Contents for
- 9 such title VI is amended by adding the following new item
- 10 at the end thereof:

"Sec. 619. Hydrofluorocarbons (HFCs).".

- 11 (c) Fire Suppression Agents.—Section 605(a) of
- 12 the Clean Air Act (42 U.S.C. 7671(a)) is amended by
- 13 striking "or" at the end of paragraph (2), striking the
- 14 period at the end of paragraph (3) and inserting "; or"
- 15 and adding the following new paragraph after paragraph
- 16 (3):
- 17 "(4) is listed as acceptable for use as a fire sup-
- pression agent for nonresidential applications in ac-
- cordance with section 612 (c) of the Clean Air Act.".
- 20 SEC. 333. BLACK CARBON.
- 21 (a) Definition.—As used in this section, the term
- 22 "black carbon" means the light absorbing component of
- 23 carbonaceous aerosols.
- 24 (b) Black Carbon Abatement Report.—Not
- 25 later than one year after the date of enactment of this

1	section, the Administrator shall, in consultation with other
2	appropriate Federal agencies, submit to Congress a report
3	regarding black carbon emissions. The report shall include
4	the following:
5	(1) A summary of the current research that
6	identifies—
7	(A) an inventory of the major sources of
8	black carbon emissions in the United States
9	and throughout the world, including—
10	(i) an estimate of the quantity of cur-
11	rent and projected future emissions; and
12	(ii) the net climate forcing of the
13	emissions from such sources, including
14	consideration of co-emissions of other pol-
15	lutants;
16	(B) effective and cost-effective control
17	technologies, operations, and strategies for ad-
18	ditional domestic and international black carbon
19	emissions reductions, such as diesel retrofit
20	technologies on existing on-road and off-road
21	engines and programs to address residential
22	cookstoves, forest burning, and other agri-
23	culture-based burning;
24	(C) potential metrics quantifying the cli-
25	matic effects of black carbon emissions, includ-

1	ing its radiative forcing and warming effects,
2	that may be used to compare the climate bene-
3	fits of different mitigation strategies, including
4	an assessment of the uncertainty in such
5	metrics; and
6	(D) the public health and environmental
7	benefits associated with additional controls for
8	black carbon emissions.
9	(2) Recommendations regarding—
10	(A) development of additional emissions
11	monitoring techniques and capabilities, mod-
12	eling, and other black carbon-related areas of
13	study;
14	(B) areas of focus for additional study of
15	technologies, operations, and strategies with the
16	greatest potential to reduce emissions of black
17	carbon; and
18	(C) actions, in addition to those identified
19	by the Administrator under section 851 of the
20	Clean Air Act (as amended by subsection (c)),
21	the Federal Government may take to encourage
22	or require reductions in black carbon emissions.
23	(e) Black Carbon Mitigation.—Title VIII of the
24	Clean Air Act, as added by section 331 of this Act, and

1	amended by section 222 of this Act, is further amended
2	by adding after part D the following new part:
3	"PART E—BLACK CARBON
4	"SEC. 851. BLACK CARBON.
5	"(a) Domestic Black Carbon Mitigation.—Not
6	later than one year after the date of enactment of this
7	section, the Administrator, taking into consideration the
8	public health and environmental impacts of black carbon
9	emissions, including the effects on global warming, the
10	Arctic, and other snow and ice-covered surfaces, shall pro-
11	pose regulations under the existing authorities of this Act
12	to reduce emissions of black carbon or propose a finding
13	that existing regulations promulgated pursuant to this Act
14	adequately regulate black carbon emissions. Not later than
15	two years after the date of enactment of this section, the
16	Administrator shall promulgate final regulations under the
17	existing authorities of this Act or finalize the proposed
18	finding.
19	"(b) International Black Carbon Mitiga-
20	TION.—
21	"(1) Report.—Not later than one year after
22	the date of enactment of this section, the Adminis-
23	trator, in coordination with the Secretary of State
24	and other appropriate Federal agencies, shall trans-
25	mit a report to Congress on the amount, type, and

1	direction of all present United States financial, tech-
2	nical, and related assistance to foreign countries to
3	reduce, mitigate, and otherwise abate black carbon
4	emissions.
5	"(2) Other opportunities.—The report re-
6	quired under paragraph (1) shall also identify oppor-
7	tunities and recommendations, including action
8	under existing authorities, to achieve significant
9	black carbon emission reductions in foreign countries
10	through technical assistance or other approaches
11	to—
12	"(A) promote sustainable solutions to
13	bring clean, efficient, safe, and affordable
14	stoves, fuels, or both stoves and fuels to resi-
15	dents of developing countries that are reliant on
16	solid fuels such as wood, dung, charcoal, coal,
17	or crop residues for home cooking and heating,
18	so as to help reduce the public health, environ-
19	mental, and economic impacts of black carbon
20	emissions from these sources by—
21	"(i) identifying key regions for large-
22	scale demonstration efforts, and key part-
23	ners in each such region; and
24	"(ii) developing for each such region a
25	large-scale implementation strategy with a

1	goal of collectively reaching 20,000,000
2	homes over 5 years with interventions that
3	will—
4	"(I) increase stove efficiency by
5	over 50 percent (or such other goal as
6	determined by the Administrator);
7	"(II) reduce emissions of black
8	carbon by over 60 percent (or such
9	other goal as determined by the Ad-
10	ministrator); and
11	"(III) reduce the incidence of se-
12	vere pneumonia in children under 5
13	years old by over 30 percent (or such
14	other goal as determined by the Ad-
15	ministrator);
16	"(B) make technological improvements to
17	diesel engines and provide greater access to
18	fuels that emit less or no black carbon;
19	"(C) reduce unnecessary agricultural or
20	other biomass burning where feasible alter-
21	natives exist;
22	"(D) reduce unnecessary fossil fuel burn-
23	ing that produces black carbon where feasible
24	alternatives exist;

1	"(E) reduce other sources of black carbon
2	emissions; and
3	"(F) improve capacity to achieve greater
4	compliance with existing laws to address black
5	carbon emissions.".
6	(d) Authorization of Appropriations.—There
7	are authorized to be appropriated such sums as are nec-
8	essary to carry out this section.
9	SEC. 334. STATES.
10	Section 116 of the Clean Air Act (42 U.S.C. 7416)
11	is amended by adding the following at the end thereof:
12	"For the purposes of this section, the phrases 'standard
13	or limitation respecting emissions of air pollutants' and
14	'requirements respecting control or abatement of air pollu-
15	tion' shall include any provision to: cap greenhouse gas
16	emissions, require surrender to the State or a political
17	subdivision thereof of emission allowances or offset credits
18	established or issued under this Act, and require the use
19	of such allowances or credits as a means of demonstrating
20	compliance with requirements established by a State or
21	political subdivision thereof.".
22	SEC. 335. STATE PROGRAMS.
23	Title VIII of the Clean Air Act, as added by section
24	331 of this Act and amended by several sections of this

- 1 Act, is further amended by adding after part E (as added
- 2 by section 333 of this Act) the following new part:

3 "PART F—MISCELLANEOUS

- 4 "SEC. 861. STATE PROGRAMS.
- 5 "Notwithstanding section 116, no State or political
- 6 subdivision thereof shall implement or enforce a cap that
- 7 covers any capped emissions emitted during the years
- 8 2012 through 2017. For purposes of this section, the term
- 9 'cap' means an absolute tonnage limit on the amount of
- 10 greenhouse gases that can be emitted by a group of
- 11 sources over a specified time period, and that does not
- 12 vary with any other factor, including the number of
- 13 sources covered, the amount of time the sources operate,
- 14 and the production of the sources. For purposes of this
- 15 section, the term 'cap' does not include, among other
- 16 things, fleet-wide motor vehicle emission requirements
- 17 that allow greater emissions with increased vehicle produc-
- 18 tion, or requirements that fuels, or other products, meet
- 19 an average pollution emission rate or lifecycle greenhouse
- 20 gas standard.".
- 21 SEC. 336. ENFORCEMENT.
- 22 (a) CITIZEN SUITS.—Section 304 of the Clean Air
- 23 Act (42 U.S.C. 7604) is amended by adding the following
- 24 new subsection at the end thereof:

- 1 "(h)(1) The persons authorized by subsection (a) to
- 2 commence an action under this section shall include any
- 3 person who has suffered, or reasonably expects to suffer,
- 4 a harm attributable, in whole or in part, to a violation
- 5 or failure to act referred to in subsection (a).
- 6 "(2) For purposes of this section, the term 'harm'
- 7 includes any effect of air pollution (including climate
- 8 change), currently occurring or at risk of occurring, and
- 9 the incremental exacerbation of any such effect or risk
- 10 that is associated with a small incremental emission of any
- 11 air pollutant (including any greenhouse gas as defined in
- 12 title VII), whether or not the effect or risk is widely
- 13 shared.
- 14 "(3) For purposes of this section, an effect or risk
- 15 associated with any air pollutant (including any green-
- 16 house gas as defined in title VII) shall be considered at-
- 17 tributable to the violation or failure to act concerned if
- 18 the violation or failure to act slows the pace of implemen-
- 19 tation of this Act or compliance with this Act or results
- 20 in any emission of greenhouse gas or other air pollutant
- 21 at a higher level than would have been emitted in the ab-
- 22 sence of the violation or failure to act.".
- 23 (b) General Judicial Review.—Section 307(b) of
- 24 the Clean Air Act (42 U.S.C. 7607(b)) is amended by add-
- 25 ing the following new paragraphs at the end thereof:

1	"(3)(A) A petition for review may be filed
2	under this section by any person who has suffered
3	or reasonably expects to suffer a harm attributable,
4	in whole or in part, to an action of the Adminis-
5	trator referred to in paragraph (1).
6	"(B) For purposes of this section, the term
7	'harm' may include any effect of air pollution (in-
8	cluding climate change), currently occurring or at
9	risk of occurring, and the incremental exacerbation
10	of any such effect or risk that is associated with a
11	small incremental emission of any air pollutant, (in-
12	cluding any greenhouse gas as defined in title VII),
13	whether or not the effect or risk is widely shared.
14	"(C) For purposes of this section, an effect or
15	risk associated with any air pollutant (including any
16	greenhouse gas as defined in title VII) shall be con-
17	sidered attributable to an action of the Adminis-
18	trator referred to in paragraph (1) concerned if the
19	action slows the pace of implementation of this Act
20	or compliance with this Act or results in any emis-
21	sion of greenhouse gas or other air pollutant at a
22	higher level than would have been emitted in the ab-
23	sence of the action of the Administrator.
24	"(4)(A) If the court determines that any action
25	of the Administrator is arbitrary, capricious, or oth-

1	erwise unlawful, the court may remand such action,
2	without vacatur, if vacatur would impair or delay
3	protection of the environment or public health or
4	otherwise undermine the timely achievement of the
5	purposes of this Act.
6	"(B) If the court determines that any action of
7	the Administrator is arbitrary, capricious, or other-
8	wise unlawful, and remands the matter to the Ad-
9	ministrator, the Administrator shall complete final
10	action on remand within an expeditious time period
11	no longer than the time originally allowed for the ac-
12	tion or one year, whichever is less, unless the court
13	on motion determines that a shorter or longer period
14	is necessary, appropriate, and consistent with the
15	purposes of this Act. The court of appeals shall have
16	jurisdiction to enforce a deadline for action on re-
17	mand under this subparagraph.".
18	(c) Petition for Reconsideration.—Section
19	307(d)(7)(B) of the Clean Air Act (42 U.S.C.
20	7607(d)(7)(B)) is amended as follows:
21	(1) By inserting after the second sentence "If
22	a petition for reconsideration is filed, the Adminis-
23	trator shall take final action on such petition, in-
24	cluding promulgation of final action either revising
25	or determining not to revise the action for which re-

1	consideration is sought, within 150 days after the
2	petition is received by the Administrator or the peti-
3	tion shall be deemed denied for the purpose of judi-
4	cial review.".
5	(2) By amending the third sentence to read as
6	follows: "Such person may seek judicial review of
7	such denial, or of any other final action, by the Ad-
8	ministrator, in response to a petition for reconsider-
9	ation, in the United States court of appeals for the
10	appropriate circuit (as provided in subsection (b)).".
11	(d) Judicial Review.—Part F of title VIII of the
12	Clean Air Act, as added by section 335 of this Act, is
13	amended by adding at the end the following new section:
14	"SEC. 862. JUDICIAL REVIEW.
15	"(a) In General.—With respect to a civil action
16	under section 304 or a petition for review under section
17	307 alleging a Federal agency violation of, or failure to
18	perform a nondiscretionary act or duty under, title VII
19	or this title, the provisions of section 304 and section 307
20	apply except as otherwise expressly provided in this sec-
21	tion.
22	"(b) Common Claims.—When civil actions arising
23	under title VII or this title are pending in the same court
24	and involve one or more common questions of fact or com-
25	mon claims regarding the same alleged Federal agency

1	violation or failure to act, the court may consolidate such
2	claims into a single action for judicial review. When civil
3	actions arising under title VII or this title are pending
4	in different districts and involve one or more common
5	questions of fact or common claims regarding the same
6	alleged violation or failure to act, such actions may be con-
7	solidated pursuant to section 1407 of title 28, United
8	States Code.
9	"(c) Remedies.—
10	"(1) IN GENERAL.—In addition to the remedies
11	available under this Act, a court may provide the
12	remedies specified in this subsection in the case of
13	a violation of title VII or this title.
14	"(2) Payment.—In any civil action alleging a
15	violation of title VII or this title if the court finds
16	that an agency has significantly violated title VII or
17	this title in its failure to perform any nondis-
18	cretionary act or duty under title VII or this title,
19	the court may award a payment, payable by the
20	United States Treasury, to be used for a beneficial
21	mitigation project recommended by the plaintiff or
22	to compensate the plaintiff for any impact from
23	global warming suffered by the plaintiff. The total
24	payment for all claims by all plaintiffs in any such

action shall not exceed the amount provided in sec-

25

1	tion 1332(b) of title 28, United States Code. A court
2	may deny a second payment under this section if the
3	court determines that the plaintiff has filed multiple
4	separate actions that could reasonably have been
5	combined into a single action. No payment may be
6	awarded under this paragraph for violations of an
7	agency's obligation to collect or report information
8	to the public. No court may award any payment
9	under this paragraph in any given year if the cumu-
10	lative payments awarded by courts under this para-
11	graph in such year are equal to or greater than
12	\$1,500,000.
13	"(3) Costs.—A court may award costs of liti-
14	gation to any substantially prevailing plaintiff or to
15	any other plaintiff whenever the court determines
16	such an award is appropriate in the case of a viola-
17	tion of title VII or this title. Such an award is ap-
18	propriate when such litigation contributes to the
19	Federal agency's compliance with title VII or this
20	title. For purposes of this paragraph, costs of litiga-
21	tion include reasonable attorney fees and expert fees.
22	"(4) Exclusive remedy.—Notwithstanding
23	any other provision of Federal law—
24	"(A) no plaintiff who is awarded a pay-
25	ment under this subsection for a failure to per-

1	form a mandatory duty under title VII or this
2	title may be awarded a payment for such failure
3	under any other Federal law; and
4	"(B) no plaintiff may be awarded a pay-
5	ment under this subsection for a failure to per-
6	form a mandatory duty under title VII or this
7	title if the plaintiff has been awarded a pay-
8	ment for such failure under any other Federal
9	law.".
10	SEC. 337. CONFORMING AMENDMENTS.
11	(a) Federal Enforcement.—Section 113 of the
12	Clean Air Act (42 U.S.C. 7413) is amended as follows:
13	(1) In subsection (a)(3), by striking "or title
14	VI," and inserting "title VI, title VII, or title VIII".
15	(2) In subsection (b), by striking "or a major
16	stationary source" and inserting "a major stationary
17	source, or a covered EGU under title VIII," in the
18	material preceding paragraph (1).
19	(3) In paragraph (2), by striking "or title VI"
20	and inserting "title VI, title VII, or title VIII".
21	(4) In subsection (c)—
22	(A) in the first sentence of paragraph (1),
23	by striking "or title VI (relating to strato-
24	spheric ozone control)," and inserting "title VI
25	(relating to stratospheric ozone control), or title

1	VII or VIII (relating to reduction of greenhouse
2	gas emissions),"; and
3	(B) in the first sentence of paragraph (3),
4	by striking "or VI" and inserting "VI, VII,
5	VIII".
6	(5) In subsection (d)(1)(B), by striking "or VI"
7	and inserting "VI, VII, or VIII".
8	(6) In subsection (f), in the first sentence, by
9	striking "or VI" and inserting "VI, VII, or VIII".
10	(b) RETENTION OF STATE AUTHORITY.—Section
11	116 of the Clean Air Act (42 U.S.C. 7416) is amended
12	as follows:
13	(1) By striking "and 233" and inserting "233".
14	(2) By striking "of moving sources)" and in-
15	serting "of moving sources), and 871 (preempting
16	certain State greenhouse gas programs for a limited
17	time)".
18	(c) Inspections, Monitoring, and Entry.—Sec-
19	tion 114(a) of the Clean Air Act (42 U.S.C. 7414(a)) is
20	amended by striking "section 112," and all that follows
21	through "(ii)" and inserting the following: "section 112,
22	or any regulation of greenhouse gas emissions under title
23	VII or VIII, (ii)".

1	(d) Enforcement.—Subsection (f) of section 304 of
2	the Clean Air Act (42 U.S.C. 7604(f)) is amended as fol-
3	lows:
4	(1) By striking "; or" at the end of paragraph
5	(3) thereof and inserting a comma.
6	(2) By striking the period at the end of para-
7	graph (4) thereof and inserting ", or".
8	(3) By adding the following after paragraph (4)
9	thereof:
10	"(5) any requirement of title VII or VIII.".
11	(e) Administrative Proceedings and Judicial
12	REVIEW.—Section 307 of the Clean Air Act (42 U.S.C.
13	7607) is amended as follows:
14	(1) In subsection (a), by striking ", or section
15	306" and inserting "section 306, or title VII or
16	VIII''.
17	(2) In subsection (b)(1)—
18	(A) by striking ",," and inserting "," in
19	each place such punctuation appears; and
20	(B) by striking "section 120," in the first
21	sentence and inserting "section 120, any final
22	action under title VII or VIII,".
23	(3) In subsection (d)(1) by amending subpara-
24	graph (S) to read as follows:

1	"(S) the promulgation or revision of any
2	regulation under title VII or VIII,".
3	TITLE IV—TRANSITIONING TO A
4	CLEAN ENERGY ECONOMY
5	Subtitle A—Ensuring Domestic
6	Competitiveness
7	PART 1—PRESERVING DOMESTIC
8	COMPETITIVENESS
9	SEC. 401. PURPOSES.
10	The purposes of this part are as follows:
11	(1) To prevent an increase in greenhouse gas
12	emissions in countries other than the United States
13	as a result of direct and indirect compliance costs in-
14	curred under title VII of the Clean Air Act.
15	(2) To compensate the owners and operators of
16	entities in eligible domestic industrial sectors and
17	subsectors for carbon emission costs incurred under
18	title VII of the Clean Air Act.
19	(3) To limit compensation to the owners and
20	operators of entities in eligible industrial sectors and
21	subsectors to an amount that will prevent carbon
22	leakage while also rewarding innovation and facility-
23	level investments in energy efficiency performance
24	improvements.

1	(4) To provide compensation to the owners and
2	operators of entities in eligible industrial sectors and
3	subsectors for the costs of directly and indirectly
4	purchasing emission allowances needed for compli-
5	ance with title VII of the Clean Air Act, but not for
6	costs associated with other related or unrelated mar-
7	ket dynamics.
8	(5) To eliminate or reduce distribution of re-
9	bates under this part when such distribution is no
10	longer necessary to prevent carbon leakage from eli-
11	gible sectors or subsectors.
12	SEC. 402. DEFINITIONS.
13	(a) In General.—Except as otherwise noted, for
14	purposes of this part, terms that are defined in title $\overline{\mathrm{VII}}$
15	of the Clean Air Act shall have the meanings given those
16	terms in title VII.
17	(b) OTHER DEFINITIONS.—In this part:
18	(1) The term "carbon leakage" means any sub-
19	stantial increase (as determined by the Adminis-
20	trator) in greenhouse gas emissions by manufac-
21	turing entities located in countries without commen-
22	surate greenhouse gas regulation, provided that such
23	increase is caused by an incremental cost of produc-
24	tion increase in the United States resulting from the
25	implementation of title VII of the Clean Air Act.

1	(2) The term "output" means the total tonnage
2	or other standard unit of production (as determined
3	by the Administrator) produced by a manufacturing
4	entity.
5	SEC. 403. DISTRIBUTION OF REBATES.
6	(a) Distribution of Rebates.—
7	(1) In general.—The Administrator shall an-
8	nually distribute rebates, in amounts calculated
9	under subsection (e), to the owners and operators of
10	entities in eligible industrial sectors and subsectors
11	designated under subsection (b), subject to the max-
12	imum quantity limitation established under para-
13	graph (2) of this subsection.
14	(2) MAXIMUM.—If the total rebates calculated
15	under subsection (c) exceed the amount authorized
16	for this program, the Administrator shall reduce the
17	amount distributed to owners and operators under
18	paragraph (1) on a pro rata basis.
19	(3) List.—Not later than February 1 of each
20	year starting in 2012, the Administrator shall pub-
21	lish in the Federal Register a list of eligible indus-
22	trial sectors and subsectors pursuant to subsection
23	(b) and the amount of the rebate per unit of produc-
24	tion that shall be provided to entities in each eligible
25	industrial sector in the following calendar year.

1	(b) Eligible Industrial Sectors and Subsec-
2	TORS.—
3	(1) In general.—Not later than January 1,
4	2011, the Administrator shall promulgate a rule des-
5	ignating, based on the criteria under paragraph (2),
6	the industrial sectors and subsectors eligible for re-
7	bates under this part.
8	(2) Presumptively eligible sectors and
9	SUBSECTORS.—An owner or operator of an entity
10	shall receive rebates under subsection (a) if such
11	source is in a sector or subsector that is included in
12	a six-digit classification of the North American In-
13	dustrial Classification System that meets the criteria
14	under subparagraphs (A) and (B). The Adminis-
15	trator may rescind the eligibility of such sector or
16	subsector only if the Administrator determines, after
17	notice and an opportunity for comment, that, even
18	in the absence of the rebates distributed under this
19	section, such sector or subsector would not be sub-
20	ject to carbon leakage.
21	(A) Energy or greenhouse gas inten-
22	SITY.—As determined by the Administrator, the
23	sector or subsector had—
24	(i) an energy intensity of at least 5
25	percent, calculated by dividing the cost of

1	purchased electricity and fuel costs of the
2	sector or subsector by the value of the
3	shipments of the sector or subsector, based
4	on data described in subparagraph (C); or
5	(ii) a greenhouse gas intensity of at
6	least 5 percent, calculated by dividing—
7	(I) [insert EPA projected allow-
8	ance price for the year 2020 when it
9	is provided to the Committee multi-
10	plied by the tons of carbon dioxide
11	equivalent greenhouse gas emissions
12	(including direct emissions from fuel
13	combustion, process emissions, and in-
14	direct emissions from the generation
15	of electricity used to produce the out-
16	put of a sector or subsector) of the
17	sector or subsector; by
18	(II) the value of the shipments of
19	the sector or subsector, based on data
20	described in subparagraph (C).
21	(B) TRADE INTENSITY.—As determined by
22	the Administrator, the sector or subsector had
23	a trade intensity of at least 15 percent, cal-
24	culated by dividing the value of the total im-
25	ports and exports of such sector or subsector by

1	the value of the shipments plus the value of im-
2	ports of such sector or subsector, based on data
3	described in subparagraph (C).
4	(C) Data sources.—
5	(i) ELECTRICITY AND FUEL COSTS,
6	VALUE OF SHIPMENTS.—For purposes of
7	this subsection, the Administrator shall de-
8	termine electricity and fuel costs and the
9	value of shipments from data from years
10	2006, 2007, or 2008 from the United
11	States Census of Mineral Industries and
12	the United States Census Annual Survey
13	of Manufacturers (using data from the
14	most recent year that is available, up to
15	and including 2008), or, if such data are
16	unavailable, from data from the 2002 or
17	2006 Energy Information Agency's Manu-
18	facturing Energy Consumption Survey
19	(using 2006 data if it is available) and the
20	2002 or 2007 Economic Census of the
21	United States (using 2007 data if it is
22	available). The Administrator shall use
23	Manufacturing Energy Consumption Sur-
24	vey data from the most detailed industrial
25	classification level if such data is available.

1	If data from the Manufacturing Energy
2	Consumption Survey are unavailable for
3	any sector or subsector at the six-digit
4	classification level in the North American
5	Industrial Classification System, then the
6	Administrator may extrapolate the infor-
7	mation necessary to determine the eligi-
8	bility of a sector or subsector under this
9	paragraph from available Manufacturing
10	Energy Consumption Survey data per-
11	taining to a broader industrial category
12	classified in the North American Industrial
13	Classification System. Fuel cost data shall
14	not include the cost of fuel used as feed-
15	stock by an industrial sector or subsector.
16	(ii) Imports and exports.—For
17	purposes of this subsection, the Adminis-
18	trator may establish the value of imports
19	and exports by using United States Inter-
20	national Trade Commission data.
21	(iii) Percentages.—The Adminis-
22	trator shall round the energy intensity,
23	greenhouse gas intensity, and trade inten-
24	sity percentages under subparagraphs (A)

1	and (B), respectively, to the nearest whole
2	number.
3	(iv) Greenhouse gas emission cal-
4	CULATIONS.—When calculating the tons of
5	carbon dioxide equivalent greenhouse gas
6	emissions for each sector or subsector
7	under subsection (b)(2)(A), the Adminis-
8	trator may, to the extent necessary with
9	respect to a sector or subsector, use eco-
10	nomic and engineering models and the best
11	available information on technology per-
12	formance levels for such sector or sub-
13	sector.
14	(3) Individual showing.—The owner or oper-
15	ator of an entity in a sector or subsector shall re-
16	ceive rebates under subsection (a) if the Adminis-
17	trator determines that sufficient evidence exists that
18	such sector or subsector should be treated separately
19	from the other sectors or subsectors in the same six-
20	digit section of the North American Industrial Clas-
21	sification System code and that the sector or sub-
22	sector meets the energy or greenhouse gas intensity
23	and trade intensity criteria in paragraph (2).
24	(4) Administrative determination of addi-
25	TIONAL ELICIBLE SECTORS OR SURSECTORS —

1	(A) Any person may petition the Adminis-
2	trator to designate, by rule, as eligible under
3	this subsection any sector or subsector that
4	does not meet the criteria under paragraph (2)
5	or (3) but demonstrates to the satisfaction of
6	the Administrator that it is subject to carbon
7	leakage, comparable to that of sectors or sub-
8	sectors that meet the criteria under paragraph
9	(2) or (3) .
10	(B) In determining whether a sector or
11	subsector is subject to carbon leakage, the Ad-
12	ministrator, in consultation with other Federal
13	agencies, as appropriate, shall take into ac-
14	count, in addition to the sector or subsector's
15	energy or greenhouse gas intensity and trade
16	intensity as calculated under paragraph (2),
17	each of the following:
18	(i) The potential for greater foreign
19	sourcing of production or services and the
20	effect of international competition on do-
21	mestic production.
22	(ii) The effect of international mar-
23	kets on product pricing.
24	(iii) The potential for net imports to
25	increase, or exports to decrease (resulting

1	in a loss of market share held by domestic
2	manufacturers to manufacturers located in
3	other countries), as a result of the direct
4	and indirect compliance costs of title VII
5	of the Clean Air Act.
6	(iv) The state of international negotia-
7	tions, agreements, and activities to reduce
8	global greenhouse gas emissions.
9	(C) For the purposes of subsection (b)(4),
10	section (b)(2)(C) shall be modified to require
11	the Administrator to use the most recent data
12	available for value of shipments from the listed
13	sources.
14	(c) Calculation of Rebates.—
15	(1) COVERED ENTITIES.—Except as provided in
16	subsection (a)(2), the quantity of rebates distributed
17	by the Administrator under this section for a cal-
18	endar year to the owner or operator of a covered en-
19	tity shall be equal to the sum of the covered entity's
20	direct compliance factor and the covered entity's in-
21	
	direct carbon factor. Calculations under this para-
22	graph shall be based on the average of the best

1	distribution. For purposes of determining such
2	amounts for each calendar year:
3	(A) DIRECT COMPLIANCE FACTOR.—The
4	direct compliance factor for a covered entity for
5	a calendar year is the product of—
6	(i) the output of the covered entity;
7	and
8	(ii) 85 percent of the average green-
9	house gas emissions (expressed in tons of
10	carbon dioxide equivalent) per unit of out-
11	put for all covered entities in the sector or
12	subsector, as determined by the Adminis-
13	trator based on reports provided under
14	subparagraph (C).
15	(B) Indirect carbon factor.—The in-
16	direct carbon factor for an entity for a calendar
17	year is the product obtained by multiplying the
18	output of the covered entity by both the emis-
19	sions intensity factor determined pursuant to
20	clause (i) and the electricity efficiency factor
21	determined pursuant to clause (ii) for the year
22	concerned.
23	(i) Emissions intensity factor.—
24	(I) REGULATED ELECTRICITY
25	MARKETS.—In a regulated electricity

1	market, the emissions intensity factor
2	is the average greenhouse gas emis-
3	sions (expressed in tons of carbon di-
4	oxide equivalents) per kilowatt hour of
5	the electricity purchased by the cov-
6	ered entity, as determined by the Ad-
7	ministrator based on reports provided
8	under subparagraph (D).
9	(II) Wholesale competitive
10	ELECTRICITY MARKETS.—In a whole-
11	sale competitive electricity market, the
12	emissions intensity factor is the aver-
13	age greenhouse gas emissions (ex-
14	pressed in tons of carbon dioxide
15	equivalents) per kilowatt hour of the
16	marginal source of supply of elec-
17	tricity purchased by the covered enti-
18	ty, as determined by the Adminis-
19	trator based on reports provided
20	under subparagraph (D).
21	(ii) Electricity efficiency fac-
22	TOR.—The electricity efficiency factor is
23	85 percent of the average amount of elec-
24	tricity (in kilowatt hours) used per unit of
25	output for all covered entities in the rel-

1	evant sector or subsector, as determined by
2	the Administrator based on reports pro-
3	vided under subparagraph (C).
4	(C) REPORT TO ADMINISTRATOR.—Each
5	owner or operator of an entity in any sector or
6	subsector designated under subsection (b) and
7	each department, agency, and instrumentality
8	of the United States shall provide the Adminis-
9	trator with such information as the Adminis-
10	trator finds necessary to determine the direct
11	compliance factor and the indirect carbon factor
12	for each covered entity subject to this section.
13	(D) Greenhouse gases from elec-
14	TRICITY.—Each person selling electricity to the
15	owner or operator of an entity in any sector or
16	subsector designated under subsection (b) shall
17	provide the owner or operator of the entity and
18	the Administrator, on a quarterly basis, such
19	information as is required to determine the
20	emissions intensity factor under subparagraph
21	(B)(i).
22	(E) Emissions intensity factor re-
23	DUCTION.—In calculating the average tons of
24	carbon dioxide equivalents of greenhouse gas
25	emissions for the numerator of the emissions

1	intensity factor under subparagraph (B)(i), the
2	Administrator shall reduce the actual, total ton-
3	nage (expressed in tons of carbon dioxide
4	equivalents) used by the value of any funding or
5	allowances the Administrator determines are
6	distributed at no cost under this Act to the per-
7	son making the sale of electricity and are used
8	by such person to prevent electricity rate in-
9	creases to the owner or operator of the entity.
10	(F) Iron and steel sector or subsec-
11	TORS.—For the purposes of determining the
12	amount of rebates to be distributed under this
13	section to the owner or operator of any iron and
14	steel manufacturing entity in a sector or sub-
15	sector designated under subsection (b), the Ad-
16	ministrator shall consider as in different sectors
17	and subsectors entities using integrated iron
18	and steelmaking technologies (including coke
19	ovens, blast furnaces, and other iron-making
20	technologies) and entities using electric arc fur-
21	nace technologies.
22	(2) Other eligible entities.—The amount
23	of rebates distributed by the Administrator for a cal-
24	endar year to an owner or operator of an entity that
25	is in an eligible industrial sector or subsector, but is

1	not a covered entity, shall be equal to the indirect
2	carbon factor for the entity, as determined under
3	paragraph (1)(B). Calculations under this paragraph
4	shall be based on the average of the best available
5	data from the calendar years that are 2 and 3 cal-
6	endar years prior to the calendar year of distribu-
7	tion.
8	(3) Initial years of operation.—The Ad-
9	ministrator shall issue regulations governing the dis-
10	tribution of rebates for the first and second years of
11	operation of an entity entitled to rebates under this
12	part. These regulations shall provide for—
13	(A) the distribution of rebates to such enti-
14	ties based on comparable entities in the same
15	sector or subsector; and
16	(B) an adjustment in the third year of op-
17	eration to reconcile the total amount of rebates
18	received during the first and second years of
19	operation to the amount the entity would have
20	received during the first and second years of
21	operation had the appropriate data been avail-
22	able.
23	SEC. 404. REPORTS TO CONGRESS.
24	Not later than one year after the first year in which
25	rebates is distributed pursuant to this part, and at least

1	every two years thereafter, the Administrator, in consulta-
2	tion with other Federal agencies, as appropriate, shall
3	transmit to Congress a report on the carbon leakage of
4	domestic industrial manufacturers and the effectiveness of
5	the distribution of rebates under section 403 in achieving
6	the purposes of this part. Such reports shall include rec-
7	ommendations on how to better achieve the purposes of
8	this part.
9	SEC. 405. MODIFICATION OR ELIMINATION OF DISTRIBU-
10	TION OF REBATES.
11	(a) Annual Phase Down Subject to Annual Re-
12	VIEW.—
13	(1) Reduction.—The relates provided to a
14	covered entity shall equal a percentage multiplied by
15	the sum of the entity's direct compliance factor and
16	the entity's indirect carbon factor. The rebates pro-
17	vided to an entity that is in an eligible sector or sub-
18	sector but is not a covered entity shall equal that
19	same percentage multiplied by the entity's indirect
20	carbon factor. This percentage shall equal 100 per-
21	cent for each calendar year through 2020. Subject
21 22	cent for each calendar year through 2020. Subject to paragraph (2), beginning in calendar year 2021,
	, and the second

1	(2) REVIEW.—If the President, determines that
2	other countries have not taken actions that have
3	substantially mitigated the risk that domestic com-
4	panies in a particular sector or subsector will reduce
5	existing, or not initiate new, production in the
6	United States due to the costs of complying with
7	this title, then the Administrator shall, by rule, re-
8	duce or eliminate the reduction under paragraph (1)
9	to reflect such risk. The Administrator may reduce
10	or eliminate the reduction under paragraph (1) for
11	individual sectors or aggregates of sectors and sub-
12	sectors, as appropriate.
13	(b) Annual Review for Elimination.—Each cal-
14	endar year after 2020, the Administrator may eliminate
15	the distribution of rebates to the owners and operators of
16	entities in an eligible sector or subsector if the Adminis-
17	trator, in consultation with other Federal agencies, as ap-
18	propriate, determines that more than 70 percent of the
19	global output from a sector or subsector is manufactured
20	in countries subject to commensurate greenhouse gas reg-
21	ulation. In making such determination, the Administrator
22	shall consider a country to have commensurate greenhouse
23	gas regulation if—
24	(1) the country's annual greenhouse gas inten-
25	sity or energy intensity (as described in section

1	403(b)) for a sector or subsector is equal to or less
2	than the greenhouse gas intensity or energy inten
3	sity for such sector or subsector in the United States
4	in the most recent calendar year for which reliable
5	data are available; or
6	(2) the country has implemented policies, in
7	cluding sectoral caps, export tariffs, or production
8	fees, that individually or collectively place a price or
9	greenhouse gas emissions from a sector or subsector
10	that is at least 60 percent of the cost of complying
11	with title VII of the Clean Air Act in the United
12	States for such sector or subsector, averaged over a
13	two-year period.
14	SEC. 406. CESSATION OF QUALIFYING ACTIVITIES.
15	If, as determined by the Administrator, an entity is
16	no longer in an eligible sector or subsector designated
17	under section 403(b), the Administrator shall not dis
18	tribute rebates to the owner or operator of such facility
19	under this part.
20	SEC. 407. AUTHORIZATION OF APPROPRIATIONS.
21	To carry out this part, there are authorized to be ap

22 propriated such sums as may be necessary.

1 PART 2—INTERNATIONAL RESERVE ALLOWANCE 2 **PROGRAM** 3 SEC. 411. DEFINITIONS. 4 In this part: (1) COVERED GOOD.—The term "covered good" 5 6 means a good that, as identified by the Administrator by regulation— 7 8 (A) is a primary product; 9 (B) generates, in the course of the manu-10 facture of the good, a substantial quantity of 11 direct greenhouse gas emissions or indirect 12 greenhouse gas emissions; and 13 (C) is closely related to a good of the 14 United States that is affected by a requirement 15 of title VII of the Clean Air Act. 16 (2) Indirect greenhouse gas emissions.— The term "indirect greenhouse gas emissions" 17 18 means greenhouse gas emissions resulting from the

19	generation of electricity consumed in manufacturing
20	a covered good.
21	(3) Primary Product.—The term "primary
22	product' means—
23	(A) iron, steel, steel mill products (includ-
24	ing pipe and tube), aluminum, cement, glass
25	(including flat, container, and specialty glass

1	and fiberglass), pulp, paper, chemicals, and in-
2	dustrial ceramics; and
3	(B) any other manufactured product
4	that—
5	(i) is sold in bulk for purposes of fur-
6	ther manufacture or inclusion in a finished
7	product; and
8	(ii) generates, in the course of the
9	manufacture of the product, direct green-
10	house gas emissions or indirect greenhouse
11	gas emissions that are comparable (on an
12	emissions-per-output basis) to emissions
13	generated in the manufacture of products
14	listed in subparagraph (A).
15	SEC. 412. PURPOSES.
16	The purposes of this part are—
17	(1) to promote a strong global effort to signifi-
18	cantly reduce greenhouse gas emissions;
19	(2) to ensure, to the maximum extent prac-
20	ticable, that greenhouse gas emissions occurring out-
21	side the United States do not undermine the objec-
22	tives of the United States in addressing global cli-
23	mate change; and
24	(3) to encourage effective international action
25	to achieve those objectives through—

1	(A) agreements negotiated between the
2	United States and foreign countries; and
3	(B) measures carried out by the United
4	States that comply with applicable international
5	agreements.
6	SEC. 413. INTERNATIONAL NEGOTIATIONS.
7	(a) FINDING.—Congress finds that the purposes de-
8	scribed in section 412 can be most effectively addressed
9	and achieved through agreements negotiated between the
10	United States and foreign countries.
11	(b) STATEMENT OF POLICY.—It is the policy of the
12	United States to work proactively under the United Na-
13	tions Framework Convention on Climate Change and, in
14	other appropriate forums, to establish binding agreements
15	committing all major greenhouse gas-emitting nations to
16	contribute equitably to the reduction of global greenhouse
17	gas emissions.
18	SEC. 414. REPORT TO CONGRESS AND FINDING.
19	(a) Report to Congress.—Not later than June 30,
20	2017, the President, in consultation with the Environ-
21	mental Protection Agency and other appropriate agencies,
22	shall submit to Congress a report on—
23	(1) the extent to which direct and indirect com-
24	pliance costs incurred pursuant to title VII of the

1	Clean Air Act have resulted in, or are likely to result
2	in—
3	(A) a reduction in existing, or failure to
4	initiate new, domestic production in sectors or
5	subsectors that produce or manufacture covered
6	goods;
7	(B) a reduction in existing, or failure to
8	initiate new, domestic jobs in sectors or subsec-
9	tors that manufacture or produce covered
10	goods; and
11	(C) an increase in greenhouse gas emis-
12	sions—
13	(i) by foreign manufacturing facilities
14	that manufacture or produce covered goods
15	and that do not have greenhouse gas com-
16	pliance obligations commensurate with
17	those that would apply in the United
18	States; and
19	(ii) that are caused by incremental
20	cost increases resulting from compliance
21	with title VII of the Clean Air Act;
22	(2) the extent to which the funding provided, or
23	expected to be provided, pursuant to part 1 has miti-
24	gated or addressed the factors listed in paragraph
25	(1); and

1	(3) the level of greenhouse gas regulation (in-
2	cluding requirements, export tariffs, or other meas-
3	ures adopted to imposed to reduce greenhouse gas
4	emissions) of particular sectors or subsectors in
5	other developed and developing countries, and the
6	cost of compliance with those regulations, taking
7	into account the distribution of allowances, credits,
8	or rebates.
9	(b) FINDING.—The President shall also make a find-
10	ing as to whether the direct and indirect compliance costs,
11	as mitigated by funding provided under part 1, are caus-
12	ing any of the adverse effects listed below. If the President
13	determines that direct and indirect costs, after mitigated
14	by rebates provided under part 1, to a sector or subsector
15	of complying with title VII of the Clean Air Act are caus-
16	ing a significant—
17	(1) reduction in existing, or failure to initiate
18	new, domestic production in any sector or subsector
19	that manufactures or produces covered goods;
20	(2) reduction in existing, or failure to initiate
21	new, domestic jobs in any sector or subsector that
22	manufacture or produce covered goods; or
23	(3) increase in greenhouse gas emissions—
24	(A) by foreign manufacturing facilities that
25	manufacture or produce covered goods and that

1	do not have greenhouse gas compliance obliga-
2	tions commensurate with those that would
3	apply in the United States; and
4	(B) that are caused by incremental cost in-
5	creases resulting from compliance with title VII
6	of the Clean Air Act;
7	then the President shall issue regulations creating the pro-
8	gram authorized by section 416.
9	(c) Delegation.—The President may delegate his
10	responsibilities under this section to an appropriate agen-
11	cy, department, or official of the United States Govern-
12	ment.
13	SEC. 415. PROHIBITION.
14	After the effective date of regulations issued by the
15	Administrator under section 416(a), no person may im-
16	port into the United States a covered good without sub-
17	mitting the required number of international reserve al-
18	lowances in accordance with such regulations.
19	SEC. 416. INTERNATIONAL RESERVE ALLOWANCE PRO-
20	GRAM.
21	(a) Establishment.—
22	(1) In general.—If the President makes an
23	affirmative determination under section 414(b),
23 24	affirmative determination under section 414(b), then, not later than 24 months after that determina-

1	(A) establishing, determining an appro-
2	priate price for, and offering for sale to United
3	States importers international reserve allow-
4	ances;
5	(B) requiring the submission of appro-
6	priate amounts of such allowances in conjunc-
7	tion with the importation into the United States
8	of a covered good produced by any sector or
9	subsector for which the President made an af-
10	firmative finding under section 414(b); and
11	(C) exempting from the requirements of
12	subparagraph (B) covered goods produced in—
13	(i) foreign countries that the United
14	Nations has identified as among the least
15	developed of developing countries; or
16	(ii) foreign countries that the Presi-
17	dent has determined to be responsible for
18	less than 0.5 percent of total global green-
19	house gas emissions.
20	(2) Purpose of Program.—The Adminis-
21	trator shall establish the program under paragraph
22	(1) in a manner that addresses, consistent with
23	international agreements to which the United States
24	is a party, the competitive imbalance in the costs of
25	producing or manufacturing covered goods in af-

1	fected sectors or subsectors resulting from the dif-
2	ference in—
3	(A) the direct and indirect costs of com-
4	plying with title VII of the Clean Air Act; and
5	(B) the direct and indirect costs, if any, of
6	complying in other countries with greenhouse
7	gas regulatory programs, requirements, export
8	tariffs, or other measures adopted or imposed
9	to reduce greenhouse gas emissions.
10	(b) Covered Facilities.—International reserve al-
11	lowances may not be held by covered entities to comply
12	with the compliance obligations of section 722 of the Clean
	A • A
13	Air Act.
1314	Subtitle B—Green Jobs and
14	Subtitle B—Green Jobs and
14 15	Subtitle B—Green Jobs and Worker Transition
14 15 16	Subtitle B—Green Jobs and Worker Transition SEC. 421. CLEAN ENERGY CURRICULUM DEVELOPMENT
14 15 16 17	Subtitle B—Green Jobs and Worker Transition SEC. 421. CLEAN ENERGY CURRICULUM DEVELOPMENT GRANTS.
14 15 16 17 18	Subtitle B—Green Jobs and Worker Transition SEC. 421. CLEAN ENERGY CURRICULUM DEVELOPMENT GRANTS. (a) AUTHORIZATION.—The Secretary of Education is authorized to award grants, on a competitive basis, to eli-
14 15 16 17 18	Subtitle B—Green Jobs and Worker Transition SEC. 421. CLEAN ENERGY CURRICULUM DEVELOPMENT GRANTS. (a) AUTHORIZATION.—The Secretary of Education is authorized to award grants, on a competitive basis, to eli-
14 15 16 17 18 19 20 21	Subtitle B—Green Jobs and Worker Transition SEC. 421. CLEAN ENERGY CURRICULUM DEVELOPMENT GRANTS. (a) AUTHORIZATION.—The Secretary of Education is authorized to award grants, on a competitive basis, to eligible partnerships to develop programs of study (considered).
14 15 16 17 18 19 20 21	Subtitle B—Green Jobs and Worker Transition SEC. 421. CLEAN ENERGY CURRICULUM DEVELOPMENT GRANTS. (a) AUTHORIZATION.—The Secretary of Education is authorized to award grants, on a competitive basis, to eligible partnerships to develop programs of study (containing the information described in section 122(c)(1)(A)
14 15 16 17 18 19 20 21 22 23	Subtitle B—Green Jobs and Worker Transition SEC. 421. CLEAN ENERGY CURRICULUM DEVELOPMENT GRANTS. (a) AUTHORIZATION.—The Secretary of Education is authorized to award grants, on a competitive basis, to eligible partnerships to develop programs of study (containing the information described in section 122(e)(1)(A) of the Carl D. Perkins Career and Technical Education

1	(b) ELIGIBLE PARTNERSHIPS.—For purposes of this
2	section, an eligible partnership shall include—
3	(1) at least 1 local education agency eligible for
4	funding under section 131 of the Carl D. Perkins
5	Career and Technical Education Act of 2006 (20
6	U.S.C. 2351) or an area career and technical edu-
7	cation school or education service agency described
8	in such section;
9	(2) at least 1 postsecondary institution eligible
10	for funding under section 132 of such Act (20
11	U.S.C. 2352); and
12	(3) representatives of the community including
13	business, labor organizations, and industry that have
14	experience in clean energy.
15	(c) APPLICATION.—An eligible partnership seeking a
16	grant under this section shall submit an application to the
17	Secretary at such time and in such manner as the Sec-
18	retary may require. Applications shall include—
19	(1) a description of the eligible partners and
20	partnership, the roles and responsibilities of each
21	partner, and a demonstration of each partner's ca-
22	pacity to support the program;
23	(2) a description of the career area or areas
24	within the field of clean energy to be developed, the

1	reason for the choice, and evidence of the labor mar-
2	ket need to prepare students in that area;
3	(3) a description of the new or existing program
4	of study and both secondary and postsecondary com-
5	ponents;
6	(4) a description of the students to be served by
7	the new program of study;
8	(5) a description of how the program of study
9	funded by the grant will be replicable and dissemi-
10	nated to schools outside of the partnership, including
11	urban and rural areas;
12	(6) a description of applied learning that will be
13	incorporated into the program of study and how it
14	will incorporate or reinforce academic learning;
15	(7) a description of how the program of study
16	will be delivered;
17	(8) a description of how the program will pro-
18	vide accessibility to students, especially economically
19	disadvantaged, low performing, and urban and rural
20	students; and
21	(9) a description of how the program will ad-
22	dress placement of students in nontraditional fields
23	as described in section 3(20) of the Carl D. Perkins
24	Career and Technical Education Act of 2006 (20
25	U.S.C. 2302(20)).

1	(d) Priority.—The Secretary shall give priority to
2	applications that—
3	(1) use online learning or other innovative
4	means to deliver the program of study to students,
5	educators, and instructors outside of the partner-
6	ship; and
7	(2) focus on low performing students and spe-
8	cial populations as defined in section $3(29)$ of the
9	Carl D. Perkins Career and Technical Education
10	Act of 2006 (20 U.S.C. 2302(29)).
11	(e) Peer Review.—The Secretary shall convene a
12	peer review process to review applications for grants under
13	this section and to make recommendations regarding the
14	selection of grantees. Members of the peer review com-
15	mittee shall include—
16	(1) educators who have experience imple-
17	menting curricula with comparable purposes; and
18	(2) business and industry experts in clean en-
19	ergy-related fields.
20	(f) Uses of Funds.—Grants awarded under this
21	section shall be used for the development, implementation,
22	and dissemination of programs of study (as described in
23	section $122(c)(1)(A)$ of the Carl D. Perkins Career and
24	Technical Education Act (20 U.S.C. 342(e)(1)(A))) in ca-
25	reer areas related to clean energy.

1	SEC. 422. WORKFORCE TRAINING AND EDUCATION IN
2	CLEAN ENERGY, ENERGY EFFICIENCY, CLI-
3	MATE CHANGE MITIGATION, AND SUSTAIN-
4	ABLE ENVIRONMENTAL PRACTICES.
5	(a) Definition.—In this section, the term "institu-
6	tion of higher education" has the meaning given the term
7	in section 101 of the Higher Education Act of 1965 (20
8	U.S.C. 1001).
9	(b) In General.—From funds made available under
10	subsection (e), the Secretary of Labor shall carry out a
11	sustainability workforce training and education program.
12	In carrying out the program, the Secretary shall award
13	grants to institutions of higher education to provide work-
14	force training and education in industries and practices,
15	such as—
16	(1) clean energy, including wind, solar, and geo-
17	thermal energy;
18	(2) green construction, green retrofitting, and
19	green design;
20	(3) green chemistry,
21	(4) water and energy conservation;
22	(5) recycling and waste reduction;
23	(6) sustainable agriculture and farming;
24	(7) sustainable culinary practices;
25	(8) Smart Grid technology, design, and deploy-
26	ment;

1	(9) advanced vehicle technology, including plug-
2	in electric drive vehicles; and
3	(10) electric power transmission systems, in-
4	cluding upgrading and reconductoring.
5	(c) AWARD CONSIDERATIONS.—Of the funds made
6	available under subsection (b) for a fiscal year, not less
7	than half shall be awarded to institutions of higher edu-
8	cation with existing (as of the date of the award) academic
9	programs that lead to certificates or degrees in 1 or more
10	of the industries and practices described in paragraphs (1)
11	through (10) of subsection (b).
12	(d) Peer Review.—The Secretary shall convene a
13	peer review process to review applications for grants under
14	this section and to make recommendations regarding the
15	selection of grantees. Members of the peer review com-
16	mittee shall include—
17	(1) educators who have relevant experience in
18	implementing curricula with comparable aims and
19	subject matter; and
20	(2) business and industry experts who work in
21	clean energy-related fields.
22	(e) Authorization of Appropriations.—There
23	are authorized to be appropriated such sums as are nec-
24	essary to carry out this section for fiscal year 2009 and
25	each subsequent fiscal year.

	900
1	SEC. 423. WAGE RATE REQUIREMENTS.
2	Each recipient of support under the provisions of this
3	subtitle or subtitle J of title I of the National and Commu-
4	nity Service Act of 1990 (42 U.S.C. 12511 et seq.) shall
5	provide reasonable assurance that all those employed in
6	the performance of programs authorized under those pro-
7	visions, including those employed by contractors or sub-
8	contractors, will be paid wages at rates not less than those
9	prevailing on similar work in the locality as determined
10	by the Secretary of Labor in accordance with subchapter
11	IV of chapter 31 of part A of subtitle II of title 40, United
12	States Code (commonly referred to as the "Davis-Bacon
13	Act'').
14	SEC. 424. WORKER TRANSITION.
	[to be supplied]
15	Subtitle C—Consumer Assistance
16	SEC. 431. [TO BE SUPPLIED].
17	Subtitle D—Exporting Clean
18	Technology
19	SEC. 451. PURPOSES.
20	The purposes of this subtitle are—
21	(1) to provide United States assistance to en-
22	courage widespread deployment, in developing coun-

tries, of technologies that reduce greenhouse gas

23

24

emissions; and

1	(2) to provide such assistance in a manner that
2	encourages such countries to adopt policies and
3	measures that substantially reduce emissions of
4	greenhouse gases.
5	SEC. 452. DEFINITIONS.
6	In this subtitle:
7	(1) Appropriate congressional commit-
8	TEES.—The term "appropriate congressional com-
9	mittees" means—
10	(A) the Committees on Energy and Com-
11	merce and Foreign Affairs of the House of Rep-
12	resentatives; and
13	(B) the Committees on Environment and
14	Public Works, Energy and Natural Resources,
15	and Foreign Relations of the Senate.
16	(2) Developing country.—The term "devel-
17	oping country" means a country eligible to receive fi-
18	nancial assistance from the International Bank for
19	Reconstruction and Development (commonly known
20	as the World Bank).
21	(3) Eligible country.—The term "eligible
22	country" means a developing country that is deter-
23	mined by the President under section 454 to be eli-
24	gible to receive assistance from the International
25	Clean Technology Fund.

1	(4) Interagency group.—The term "inter-
2	agency group" means the group established by the
3	President under section 453 to administer the Inter-
4	national Clean Technology Fund.
5	(5) International clean technology
6	FUND.—The term "International Clean Technology
7	Fund" means the International Clean Technology
8	Fund established under section 453.
9	SEC. 453. FUND ESTABLISHMENT AND GOVERNANCE.
10	(a) Establishment.—There is hereby established in
11	the Treasury of the United States an International Clean
12	Technology Fund.
13	(b) Interagency Group.—The President shall es-
14	tablish an interagency group to administer the Inter-
15	national Clean Technology Fund. The Members of the
16	interagency group shall include—
17	(1) the Secretary of State;
18	(2) the Administrator of the Environmental
19	Protection Agency;
20	(3) the Secretary of Energy;
21	(4) the Secretary of the Treasury; and
22	(5) any other head of a Federal agency or exec-
23	utive branch appointee that the President may des-
24	ignate.

1	(c) Chairperson.—The Secretary of State shall
2	serve as the chairperson of the interagency group.
3	SEC. 454. DETERMINATION OF ELIGIBLE COUNTRIES.
4	(a) Publication and Revision of List.—Not later
5	than January 1, 2012, and annually thereafter, the Presi-
6	dent shall determine and publish a list of countries eligible
7	for assistance under this subtitle.
8	(b) Criteria for Eligibility.—The criteria for
9	designation as an eligible country shall include the fol-
10	lowing:
11	(1) The country is a developing country that
12	has signed and ratified an international treaty or
13	agreement that requires such country to undertake
14	nationally appropriate greenhouse gas mitigation ac-
15	tivities.
16	(2) The President has determined that the
17	country has undertaken nationally appropriate miti-
18	gation activities that will achieve substantial reduc-
19	tions in greenhouse gas emissions, relative to busi-
20	ness-as-usual levels, in a measurable, reportable, and
21	verifiable manner.
22	(3) Such other criteria as the President deter-
23	mines will serve the purposes of this subtitle or
24	other United States national security, foreign policy,
25	environmental, or economic objectives.

1 SEC. 455. FUNDING.

2	(a) In General.—The Secretary of State, in con-
3	sultation with the interagency group, is authorized to pro-
4	vide assistance from the International Clean Technology
5	Fund for projects (which, for purposes of this subtitle,
6	shall include sector-based or cross-sectoral programs, poli-
7	cies, or measures) that are in eligible countries and ap-
8	proved under this subtitle.
9	(b) Forms of Assistance under this
10	subtitle may be provided in the form of grants, loans, or
11	such other forms of assistance as the Secretary of State
12	may authorize after consultation with the interagency
13	group.
14	(c) Distribution of Assistance.—
15	(1) In General.—The Secretary of State, in
16	consultation with the interagency group, shall dis-
17	tribute assistance from the International Clean
18	Technology Fund—
19	(A) directly;
20	(B) through agreements with the Inter-
21	national Bank for Reconstruction and Develop-
22	ment (commonly known as the World Bank),
23	one or more other multilateral development
24	banks, or international development institu-
25	tions:

1	(C) through an international fund created
2	pursuant to the United Nations Framework
3	Convention on Climate Change, done at New
4	York on May 9, 1992, or an agreement nego-
5	tiated under such Convention; or
6	(D) through some combination of the
7	mechanisms identified in subparagraphs (A)
8	through (C).
9	(2) Distribution through international
10	INSTITUTION OR FUND.—If assistance is distributed
11	through an international institution or fund, as au-
12	thorized in paragraph (1), the Secretary of State
13	and the interagency group shall seek to ensure the
14	establishment and implementation of adequate mech-
15	anisms to apply and enforce the project selection cri-
16	teria and other requirements of this subtitle.
17	(3) Limitation.—Not more than 20 percent of
18	amounts made available to carry out this subtitle
19	shall be spent in any single country in any year.
20	(d) Project Categories.—Assistance under this
21	subtitle shall be limited to projects that achieve substantial
22	reductions in greenhouse gas emissions through the de-
23	ployment of low- or zero-carbon technologies, including
24	projects that—

1	(1) deploy technologies to capture and sequester
2	carbon dioxide emissions from electric generating
3	units or large industrial sources;
4	(2) deploy renewable electricity generation from
5	wind, solar, biomass, geothermal, marine, or
6	hydrokinetic sources;
7	(3) achieve substantial increases in the effi-
8	ciency of electricity consumption, distribution, or
9	transmission; or
10	(4) reduce transportation sector emissions
11	through increased transportation system efficiency
12	or use of transportation fuels that have lifecycle
13	greenhouse gas emissions that are substantially
14	lower than those attributable to fossil fuel-based al-
15	ternatives.
16	(e) Criteria for Project Selection.—Not later
17	than 2 years after the date of enactment of this subtitle,
18	the interagency group shall develop and publish a set of
19	criteria to be used in selecting projects within eligible
20	countries for assistance under this subtitle. These criteria
21	shall—
22	(1) require that—
23	(A) the project will result in substantial
24	measurable, reportable, and verifiable reduc-

1	tions in greenhouse gas emissions relative to
2	business-as-usual levels;
3	(B) the project will not have significant ad-
4	verse effects on human health, safety, or wel-
5	fare, the environment, or natural resources
6	within or outside the boundaries of the project;
7	(C) the project owner or operator has dem-
8	onstrated capacity to implement and maintain
9	any technologies purchased or installed with as-
10	sistance from the International Clean Tech-
11	nology Fund;
12	(D) the project will not cause any net loss
13	of United States jobs or displacement of United
14	States production;
15	(E) the project meets such other require-
16	ments as the interagency group determines ap-
17	propriate to further the purposes of this sub-
18	title; and
19	(F) the project will be co-financed by the
20	host country government, private sector institu-
21	tions, or a multinational development bank; and
22	(2) give preference to projects that—
23	(A) maximize greenhouse gas reductions
24	achieved per dollar of assistance provided;

1	(B) promise to achieve large-scale green-
2	house gas reductions at a sectoral or cross-sec-
3	toral level; or
4	(C) have the potential to catalyze a shift
5	within the host country towards widespread de-
6	ployment of low- or zero-carbon energy tech-
7	nologies.
8	(f) Project Approval.—Except where assistance is
9	distributed through an international institution or fund
10	pursuant to subsection (c), the Secretary of State, in con-
11	sultation with the interagency group, shall select projects
12	to receive assistance under this subtitle in accordance with
13	the selection criteria developed under subsection (e).
14	(g) Monitoring, Evaluation, and Enforce-
15	MENT.—The Secretary of State, in consultation with the
16	interagency group, shall establish and implement a system
17	to monitor and evaluate the performance of projects re-
18	ceiving assistance under this subtitle. The Secretary of
19	State shall have the authority to suspend or terminate as-
20	sistance in whole or in part for a project if it is determined
21	that the project is not operating in compliance with the
22	approved proposal.
23	SEC. 456. ANNUAL REPORTS.
24	Not later than March 1, 2012, and annually there-
25	after, the President shall submit to the appropriate Con-

1	gressional committees a report on the assistance provided
2	under this subtitle during the prior fiscal year. Such re-
3	port shall include—
4	(1) a description of the amount of obligations
5	and expenditures for assistance provided to each eli-
6	gible country during the prior fiscal year;
7	(2) a description of each project that received
8	assistance, including the amount of obligations and
9	expenditures for assistance provided to such project,
10	during the prior fiscal year; and
11	(3) an estimate of the greenhouse gas emission
12	reductions achieved by assistance provided under
13	this subtitle during the prior fiscal year.
14	Subtitle E—Adapting to Climate
15	Change
16	PART 1—DOMESTIC ADAPTATION
17	Subpart A—National Climate Change Adaptation
18	Program
19	SEC. 461. DEFINITIONS.
20	As used in this subpart—
21	(1) COUNCIL.—The term "Council" means the
22	National Climate Change Adaptation Council estab-
23	lished under section 462.
24	(2) National assessment.—The term "Na-
25	tional Assessment' refers to a National Climate

1	Change Vulnerability Assessment prepared pursuant
2	to section 464.
3	(3) NATIONAL CLIMATE CHANGE ADAPTATION
4	FUND.—The term "National Climate Change Adap-
5	tation Fund" means the National Climate Change
6	Adaptation Fund established under section 467 of
7	this Act.
8	(4) NOAA.—The term "NOAA" means the Na-
9	tional Oceanic and Atmospheric Administration.
10	(5) Program.—The term "Program" means
11	the National Climate Change Adaptation Program
12	established under section 463.
13	(6) Tribal Government.—The term "tribal
14	government" means the official government of a fed-
15	erally recognized Indian tribe.
16	SEC. 462. NATIONAL CLIMATE CHANGE ADAPTATION COUN-
17	CIL.
18	(a) Establishment.—Not later than 90 days after
19	the date of enactment of this Act, the President shall es-
20	tablish a National Climate Change Adaptation Council,
21	consisting of representatives, appointed by the head of the
22	respective Federal agency, of—
23	(1) NOAA;
24	(2) the Environmental Protection Agency;
25	(3) the Department of Agriculture;

1	(4) the Department of Commerce;
2	(5) the Department of Defense;
3	(6) the Department of Energy;
4	(7) the Department of Health and Human
5	Services;
6	(8) the Department of Homeland Security;
7	(9) the Department of Housing and Urban De-
8	velopment;
9	(10) the Department of the Interior;
10	(11) the Department of Transportation;
11	(12) the Army Corps of Engineers;
12	(13) the Centers for Disease Control;
13	(14) the Federal Emergency Management
14	Agency;
15	(15) the National Aeronautics and Space Ad-
16	
	ministration;
17	ministration; (16) the United States Geological Survey; and
17 18	,
	(16) the United States Geological Survey; and
18	(16) the United States Geological Survey; and (17) such other Federal agencies or depart-
18 19	(16) the United States Geological Survey; and (17) such other Federal agencies or depart- ments as the President considers appropriate.
18 19 20	 (16) the United States Geological Survey; and (17) such other Federal agencies or departments as the President considers appropriate. (b) Chairperson.—The representative described in
18 19 20 21	 (16) the United States Geological Survey; and (17) such other Federal agencies or departments as the President considers appropriate. (b) Chairperson.—The representative described in subsection (a)(1) shall be the chairperson of the Council.

1	the impacts of climate change on the United States and
2	its territories.
3	SEC. 463. NATIONAL CLIMATE CHANGE ADAPTATION PRO-
4	GRAM.
5	The Secretary of Commerce, acting through the Ad-
6	ministrator of NOAA, shall establish within NOAA a Na-
7	tional Climate Change Adaptation Program for the pur-
8	pose of increasing the overall effectiveness of Federal cli-
9	mate change adaptation efforts. Under the Program, the
10	Administrator of NOAA shall, in consultation as appro-
11	priate with the Council—
12	(1) develop and publish periodic National As-
13	sessments under section 464;
14	(2) provide to Federal agencies, local, State,
15	and tribal governments, and nongovernmental stake-
16	holders policy-relevant scientific information, re-
17	search products, decision tools, and technical sup-
18	port related to climate change impacts and adapta-
19	tion to such impacts, as provided in section 465; and
20	(3) advise Federal agencies on issues related to
21	climate change impacts and adaptation to such im-
22	pacts, including through the provision of technical
23	support to Federal agencies in the development of
24	agency climate change adaptation plans as required
25	under section 466.

1	SEC. 464. NATIONAL CLIMATE CHANGE VULNERABILITY AS-
2	SESSMENTS.
3	(a) In General.—Not later than January 1, 2012,
4	and every 4 years thereafter, the Administrator of NOAA
5	shall publish and deliver to the President a National Cli-
6	mate Change Vulnerability Assessment evaluating regional
7	and national vulnerability to impacts of climate change,
8	strategies to adapt to such impacts, and priorities for fur-
9	ther research related to climate change impacts and adapt-
10	ive capacity.
11	(b) Contents.—
12	(1) REGIONAL ASSESSMENTS.—Each National
13	Assessment shall include regional assessments for a
14	sufficient number of geographic regions within the
15	United States and its territories to effectively ad-
16	dress specific climate change impacts at the regional
17	and State or territorial levels. Each regional assess-
18	ment shall—
19	(A) assess, at an appropriate geographic
20	scale, the nature and probability of predicted
21	short-term, medium-term, and long-term im-
22	pacts of climate change on human health and a
23	broad range of natural systems, resources, in-
24	frastructure, and social and economic sectors;
25	(B) provide a regionally prioritized list of
26	vulnerable systems and areas and an estimate

1	of the range of anticipated costs of climate
2	change impacts within the region;
3	(C) describe current efforts within the re-
4	gion to adapt to climate change impacts, in
5	areas such as public health, emergency re-
6	sponse, infrastructure and development, water
7	resource management, agriculture, forest man-
8	agement, and coastal management;
9	(D) identify gaps in current adaptation ef-
10	forts within the region, strategies to address
11	such gaps, and estimates of the costs of imple-
12	menting such strategies;
13	(E) describe current research, observation,
14	and monitoring activities focused on under-
15	standing regional climate change impacts and
16	adaptation to such impacts, as well as research
17	and data needs and priorities in these areas;
18	(F) assess the adequacy of existing mecha-
19	nisms for communication and coordination
20	within the region between Federal agencies and
21	regional, State, local, and tribal stakeholders
22	and recommend measures to enhance such com-
23	munication and coordination; and

1	(G) include any other information relevant
2	to understanding regional climate change im-
3	pacts and adaptation.
4	(2) National Synthesis.—Each National As-
5	sessment shall include a synthesis of the regional as-
6	sessments, including—
7	(A) a description of relevant research on
8	national-scale, international-scale, or global-
9	scale climate change impacts, vulnerabilities,
10	and adaptive strategies not addressed in the re-
11	gional assessments;
12	(B) based on the regional assessments, a
13	nationally prioritized list of vulnerable systems
14	and regions in the United States and a national
15	estimate of the range of costs of short-term,
16	medium-term, and long-term costs of predicted
17	climate change impacts;
18	(C) a nationally prioritized list of strate-
19	gies and actions to address climate change im-
20	pacts, including estimates of the costs of imple-
21	menting such strategies and actions and the ap-
22	propriate roles of relevant Federal Government
23	agencies;
24	(D) a description of priorities for devel-
25	oping Federal research, observation, and moni-

1	toring, and policy tools to meet the needs of
2	State and local decisionmakers identified in the
3	regional assessments;
4	(E) an assessment of the adequacy of ex-
5	isting mechanisms for communication and co-
6	ordination between Federal agencies and re-
7	gional, State, local, and tribal stakeholders and
8	recommendations for measures to enhance such
9	communication and coordination;
10	(F) a description of the progress made to-
11	wards achieving the objectives identified in the
12	prior National Assessment, except that such re-
13	quirement shall not apply to the first National
14	Assessment; and
15	(G) any other relevant results from the re-
16	gional assessments that have implications for
17	Federal climate change research, mitigation, or
18	adaptation efforts.
19	(e) Methodological and Procedural Require-
20	MENTS.—
21	(1) Consultation with council.—In devel-
22	oping the National Assessments, the Administrator
23	of NOAA shall consult with the Council and shall
24	seek input and assistance from the Federal agencies

1	represented on the Council within their respective
2	areas of expertise.
3	(2) Consultation with local, state, and
4	REGIONAL STAKEHOLDERS.—In developing the Na-
5	tional Assessments, the Administrator of NOAA and
6	participating Federal agencies shall consult with
7	State, local, and tribal governments and nongovern-
8	mental stakeholders at the local, State, and regional
9	levels, to facilitate coordination of efforts and to
10	maximize the utility to local, State, regional, and
11	tribal decision makers of the information provided
12	by the National Assessment.
13	(3) Best available science.—The National
14	Assessments shall be based on the best scientific and
15	commercial data available.
16	(4) Treatment of uncertainty.—To ensure
17	that scientific uncertainties are addressed through a
18	consistent methodology, all components of the Na-
19	tional Assessments shall follow either—
20	(A) the guidance on treatment of uncer-
21	tainty set forth in the Intergovernmental Panel
22	on Climate Change's Guidance Notes for Lead
23	Authors of the IPCC Fourth Assessment Re-
24	port on Addressing Uncertainty; or

1	(B) such similar uniform guidelines on the
2	treatment of uncertainty as the Administrator
3	of NOAA may establish.
4	(5) Utilization of Prior Research and As-
5	SESSMENTS.—In developing the National Assess-
6	ments, the Administrator of NOAA shall, to the ex-
7	tent practicable, take into consideration research
8	and information contained in—
9	(A) the reports of the Intergovernmental
10	Panel on Climate Change;
11	(B) reports or research published by the
12	Global Change Research Program and the Cli-
13	mate Change Science Program; and
14	(C) any existing climate change adaptation
15	strategy, report, or assessment prepared by or
16	for a Federal, State, local, or tribal government
17	entity.
18	SEC. 465. CLIMATE CHANGE ADAPTATION SERVICES.
19	(a) NATIONAL CLIMATE SERVICE.—The Secretary of
20	Commerce, acting through the Administrator of NOAA,
21	shall establish within NOAA a National Climate Service
22	to serve as a clearinghouse to provide State, local, and
23	tribal government decisionmakers with access to regionally
24	and nationally relevant information, data, forecasts, and

1	services relating to climate change impacts and adaptation
2	to such impacts. The National Climate Service shall—
3	(1) develop and provide access to policy-relevant
4	climate information products, databases, decision
5	tools, and services for Federal, State, local, and trib-
6	al government decisionmakers and policymakers;
7	(2) provide technical assistance to Federal,
8	State, local, and tribal government efforts to assess
9	vulnerability to climate change impacts and develop
10	appropriate strategies and plans to reduce such vul-
11	nerability;
12	(3) facilitate communication and coordination
13	among Federal, State, local, and tribal stakeholders
14	with regard to climate change information and adap-
15	tation strategies; and
16	(4) undertake education and outreach initiatives
17	related to climate change impacts, vulnerabilities,
18	and the application of climate information in deci-
19	sionmaking.
20	(b) REGIONAL AND NATIONAL WORKSHOPS.—To fa-
21	cilitate information exchange, outreach, and coordination
22	of efforts on assessment of and adaptation to climate
23	change impacts, the Administrator of NOAA shall, during
24	each 4-year cycle during which a National Assessment is
25	being prepared (or, in the case of the first National As-

1	sessment, the period between the date of enactment of this
2	Act and January 1, 2012), convene—
3	(1) at least one stakeholder workshop in each
4	region identified by the National Assessment, to
5	which appropriate governmental and nongovern-
6	mental stakeholders from the region are invited; and
7	(2) at a date after all of the regional workshops
8	described in paragraph (1) have been completed, at
9	least one national-level workshop to which appro-
10	priate governmental and nongovernmental stake-
11	holders from all of the regions identified by the Na-
12	tional Assessments are invited.
13	(c) Observation and Monitoring.—The Adminis-
14	trator of NOAA is authorized to deploy such observation
15	and monitoring systems, including remote sensing sys-
16	tems, as may be necessary to support the National Climate
17	Change Adaptation Program established under this sub-
18	part.
19	SEC. 466. FEDERAL AGENCY CLIMATE CHANGE ADAPTA-
20	TION PLANS.
21	(a) Publication and Review.—
22	(1) Presidential Review.—Within 1 year
23	after the date of publication of each National As-
24	sessment, each Federal agency with representation
25	on the Council shall—

1	(A) complete an agency climate change ad-
2	aptation plan detailing the agency's current and
3	projected efforts to address the potential im-
4	pacts of climate change on matters within the
5	agency's jurisdiction; and
6	(B) submit such agency climate change ad-
7	aptation plan to the President for review.
8	(2) Submission to congress.—Within 18
9	months after the date of publication of each Na-
10	tional Assessment, each Federal agency with rep-
11	resentation on the Council shall submit the agency
12	climate change adaptation plan described in para-
13	graph (1), as finalized following Presidential review,
14	to the House Committee on Energy and Commerce,
15	the Senate Committee on Environment and Public
16	Works, and the committees in the House of Rep-
17	resentatives and the Senate with principal jurisdic-
18	tion over the relevant agency.
19	(b) REQUIREMENTS.—Each agency climate change
20	adaptation plan shall include—
21	(1) a review of the current impacts of climate
22	change on matters within the agency's jurisdiction;
23	(2) a review of anticipated future (short-term,
24	medium-term, and long-term) impacts of climate
25	change on matters within the agency's jurisdiction,

1	including an assessment of the probability of such
2	impacts that follows the guidelines on treatment of
3	uncertainty established for the National Assess-
4	ments;
5	(3) a description of priorities, within the scope
6	of the agency's jurisdiction, for building the adaptive
7	capacity of the United States and its territories;
8	(4) a review of the agency's current efforts to
9	address climate change impacts on matters within
10	its jurisdiction, including a description of how cur-
11	rent and future impacts are being integrated into
12	agency decisionmaking and a description of budg-
13	etary and human resources dedicated to adaptation
14	to climate change;
15	(5) a description of initiatives that will be un-
16	dertaken to address climate change impacts on mat-
17	ters within the jurisdiction of the agency, includ-
18	ing—
19	(A) the strategic objectives of such initia-
20	tives;
21	(B) the resources that will be dedicated to
22	such initiatives;
23	(C) timelines for implementation; and
24	(D) benchmarks and methods for assessing
25	effectiveness;

1	(6) a description of current and proposed mech-
2	anisms to enhance cooperation on climate change ad-
3	aptation efforts with other Federal agencies and
4	with State, local, and tribal governments and non-
5	governmental stakeholders;
6	(7) an assessment of the agency's success in
7	meeting the objectives outlined in its most recent
8	agency climate change adaptation plan, except that
9	this paragraph shall not apply to the first agency cli-
10	mate change adaptation plan; and
11	(8) an estimate of the budgetary and human re-
12	sources needed to address climate change impacts on
13	matters within the jurisdiction of the agency.
13 14	matters within the jurisdiction of the agency. SEC. 467. FEDERAL FUNDING FOR STATE, LOCAL, AND
14	SEC. 467. FEDERAL FUNDING FOR STATE, LOCAL, AND
14 15 16	SEC. 467. FEDERAL FUNDING FOR STATE, LOCAL, AND TRIBAL ADAPTATION PROJECTS.
14 15 16	SEC. 467. FEDERAL FUNDING FOR STATE, LOCAL, AND TRIBAL ADAPTATION PROJECTS. (a) NATIONAL CLIMATE CHANGE ADAPTATION
14 15 16 17	SEC. 467. FEDERAL FUNDING FOR STATE, LOCAL, AND TRIBAL ADAPTATION PROJECTS. (a) NATIONAL CLIMATE CHANGE ADAPTATION FUND.—
14 15 16 17	SEC. 467. FEDERAL FUNDING FOR STATE, LOCAL, AND TRIBAL ADAPTATION PROJECTS. (a) NATIONAL CLIMATE CHANGE ADAPTATION FUND.— (1) ESTABLISHMENT.—There is established in
14 15 16 17 18	SEC. 467. FEDERAL FUNDING FOR STATE, LOCAL, AND TRIBAL ADAPTATION PROJECTS. (a) NATIONAL CLIMATE CHANGE ADAPTATION FUND.— (1) ESTABLISHMENT.—There is established in the Treasury of the United States a National Climater.
14 15 16 17 18 19 20	SEC. 467. FEDERAL FUNDING FOR STATE, LOCAL, AND TRIBAL ADAPTATION PROJECTS. (a) NATIONAL CLIMATE CHANGE ADAPTATION FUND.— (1) ESTABLISHMENT.—There is established in the Treasury of the United States a National Climate Change Adaptation Fund.
14 15 16 17 18 19 20 21	SEC. 467. FEDERAL FUNDING FOR STATE, LOCAL, AND TRIBAL ADAPTATION PROJECTS. (a) NATIONAL CLIMATE CHANGE ADAPTATION FUND.— (1) ESTABLISHMENT.—There is established in the Treasury of the United States a National Climate Change Adaptation Fund. (2) AUTHORIZATION OF APPROPRIATIONS.—

1	(b) Establishment of Program.—Not later than
2	January 1, 2013, the President shall—
3	(1) directly, or through such Federal agency or
4	agencies as the President may designate, promulgate
5	regulations establishing an integrated program to
6	use funds in the National Climate Change Adapta-
7	tion Fund to provide financial assistance to State,
8	local, and tribal governments, individually or jointly,
9	for implementation of projects to reduce vulner-
10	ability to climate change impacts; and
11	(2) submit such regulations to the House Com-
12	mittee on Energy and Commerce, the Senate Com-
13	mittee on Environment and Public Works, and other
14	committees of relevant jurisdiction in the House of
15	Representatives and the Senate.
16	(c) Consultation.—In promulgating the regula-
17	tions under subsection (b), the President, or such Federal
18	agency or agencies as the President may designate, shall—
19	(1) consult with the Administrator of NOAA
20	and the Council; and
21	(2) take into consideration the findings and rec-
22	ommendations of the most recent National Assess-
23	ment and any relevant agency climate change adap-
24	tation plans developed pursuant to section 466.

1	(d) Requirements.—The regulations promulgated
2	under subsection (a) shall—
3	(1) identify the Federal agency or agencies to
4	be charged with administering each element of the
5	program, and any relevant information relating to
6	organization, governance, and respective responsibil-
7	ities under the program;
8	(2) identify priorities and objectives for building
9	State, local, and tribal governments' capacity to
10	adapt to climate change impacts through financial
11	support for State, local, and tribal projects;
12	(3) identify mechanisms, including grants or
13	loans, through which funds within the National Cli-
14	mate Change Adaptation Fund will be used to pro-
15	vide financial support for projects implemented by
16	State, local, or tribal governments;
17	(4) identify categories of projects eligible for
18	funding under the program, consistent with the re-
19	gional and national adaptation priorities identified in
20	the National Assessment;
21	(5) describe procedures for submission, evalua-
22	tion, and approval of project proposals;
23	(6) establish selection criteria for evaluating cli-
24	mate change adaptation project proposals submitted,
25	individually or jointly, by State, local, and tribal gov-

1	ernments, including consideration of environmental
2	impacts and cost-effectiveness in reducing vulner-
3	ability to climate change impacts;
4	(7) establish criteria for allocating funding
5	among different regions, States, localities, and In-
6	dian tribes, and among different project categories;
7	(8) establish criteria and mechanisms for re-
8	viewing project performance and for enforcing any
9	restrictions imposed as a condition of supporting an
10	approved project; and
11	(9) provide such other information regarding
12	implementation of the proposed program as the
13	President or the promulgating agency or agencies
14	consider appropriate.
15	(e) Program Implementation.—If, after the 1-
16	year period beginning on the date of submission of the
17	regulations under subsection (b), Congress has not en-
18	acted a statute codifying the program established by the
19	regulations or an alternative to such program, the agency
20	or agencies identified in the regulations pursuant to sub-
21	section (d)(1) shall implement the regulations.
22	(f) Periodic Revisions.—
23	(1) Submission of Revised Regulations.—
24	If a program has been implemented pursuant to sub-
25	section (e), the President shall, not later than Janu-

1	ary 1 of the calendar year following the publication
2	of each subsequent National Assessment, promulgate
3	and submit to Congress revised regulations that—
4	(A) meet the requirements of subsection
5	(d); and
6	(B) reflect any relevant information or rec-
7	ommendations included in the most recent Na-
8	tional Assessment and relevant agency climate
9	change adaptation plans.
10	(2) Implementation of Revised Regula-
11	TIONS.—If, after the 1-year period beginning on the
12	date of submission of any revised regulations under
13	paragraph (1), Congress has not enacted a statute
14	codifying the program established by revised regula-
15	tions or an alternative to such program, the agency
16	or agencies identified in the revised regulations
17	under subsection $(d)(1)$ shall implement the revised
18	regulations.
19	Subpart B—Public Health and Climate Change
20	SEC. 471. NATIONAL POLICY ON PUBLIC HEALTH AND CLI-
21	MATE CHANGE.
22	It is the policy of the Federal Government, in co-
23	operation with State, tribal, and local governments, other
24	concerned public and private organizations and citizens to
25	use all practicable means and measures—

1	(1) to assist the efforts of public health profes-
2	sionals, first responders, States, tribes, municipali-
3	ties, and local communities to incorporate measures
4	to adapt health systems to address impacts of cli-
5	mate change;
6	(2) to encourage further research, interdiscipli-
7	nary partnership, and collaboration between stake-
8	holders to understand and monitor the health im-
9	pacts of climate change, for preparedness activities,
10	and for improvement of health care infrastructure;
11	and
12	(3) to encourage each and every American to
13	learn about the impact of climate change on health.
14	SEC. 472. NATIONAL STRATEGY.
15	(a) Requirement.—The Secretary of Health and
16	Human Services shall, within two years after the date of
17	the enactment of this Act, on the basis of the best avail-
18	able science, promulgate a national strategy for mitigating
19	the impacts of climate change on public health in the
20	United States.
21	(b) Consultation and Comment.—In developing
22	the national strategy, the Secretary shall—
23	(1) consult with the Director of the Centers for
24	Disease Control and Prevention, Administrator of
25	the Environmental Protection Agency, Director of

1	the National Institutes of Health, Administrator of
2	the National Oceanic and Atmospheric Administra-
3	tion, Administrator of the National Aeronautical
4	Space Association, Administrator of the Federal
5	Emergency Management Association, Secretary of
6	Agriculture, Indian tribes, local governments, public
7	health organizations, scientists, and other interested
8	stakeholders; and
9	(2) provide opportunity for public comment.
10	SEC. 473. AUTHORIZATION OF APPROPRIATIONS.
11	There are authorized to be appropriated such sums
12	as are necessary to develop and implement the national
13	policy set forth in section 471 and the National Strategy
14	set forth in section 472.
15	Subpart C—Natural Resource Adaptation
16	SEC. 481. PURPOSES.
17	The purposes of this subpart are to—
18	(1) establish an integrated Federal program to
19	assist natural resources to become more resilient and
20	adapt to and withstand the impacts of climate
21	change and ocean acidification; and
22	(2) provide financial support and incentives for
23	programs, strategies, and activities that assist nat-
24	ural resources to become more resilient and adapt to

1	the impacts of climate change and ocean acidifica-
2	tion.
3	SEC. 482. NATURAL RESOURCES CLIMATE CHANGE ADAP-
4	TATION POLICY.
5	It is the policy of the Federal Government, in co-
6	operation with State and local governments, tribal organi-
7	zations, and other interested stakeholders to use all prac-
8	ticable means and measures to assist natural resources to
9	become more resilient and adapt to and withstand the im-
10	pacts of climate change and ocean acidification.
11	SEC. 483. DEFINITIONS.
12	In this subpart:
13	(1) Coastal state.—The term "coastal
14	State" has the meaning given the term in section
15	304 of the Coastal Zone Management Act of 1972
16	(16 U.S.C. 1453).
17	(2) Ecological processes.—The term "eco-
18	logical processes" means biological, chemical, or
19	physical interaction between the biotic and abiotic
20	components of an ecosystem and includes—
21	(A) nutrient cycling;
22	(B) pollination;
23	(C) predator-prey relationships;
24	(D) soil formation;
25	(E) gene flow;

1	(F) disease epizootiology;
2	(G) larval dispersal and settlement;
3	(H) hydrological cycling;
4	(I) decomposition; and
5	(J) disturbance regimes such as fire and
6	flooding.
7	(3) Natural resources.—The term "natural
8	resources" means the terrestrial, freshwater, estua-
9	rine, and marine fish, wildlife, plants, land, water,
10	habitats, and ecosystems of the United States.
11	(4) Tribal organization.—The term "tribal
12	organization" has the meaning given the term in
13	section 4 of the Indian Self-Determination and Edu-
14	cation Assistance Act (25 U.S.C. 450b).
15	SEC. 484. COUNCIL ON ENVIRONMENTAL QUALITY.
16	The Chair of the Council on Environmental Quality
17	shall—
18	(1) advise the President on implementation and
19	development of—
20	(A) a Natural Resources Climate Change
21	Adaptation Strategy required under section
22	486; and
23	(B) Federal natural resource agency adap-
24	tation plans required under section 488;

1	(2) serve as the Chair of the Natural Resources
2	Climate Change Adaptation Panel established under
3	section 485; and
4	(3) coordinate Federal agency strategies, plans,
5	programs, and activities related to assisting natural
6	resources to become more resilient and adapt to and
7	withstand the impacts of climate change and ocean
8	acidification.
9	SEC. 485. NATURAL RESOURCES CLIMATE CHANGE ADAP-
10	TATION PANEL.
11	(a) Establishment.—Not later than 90 days after
12	the date of the enactment of this Act, the President shall
13	establish a Natural Resources Climate Change Adaptation
14	Panel, consisting of—
15	(1) the head of the respective Federal agency or
16	department of—
17	(A) the Department of Commerce, acting
18	through the Administrator of NOAA;
19	(B) the Department of the Interior;
20	(C) the Environmental Protection Agency;
21	(D) the Department of Agriculture; and
22	(E) the Army Corps of Engineers; and
23	(2) the Chair of the Council on Environmental
24	Quality; and

1	(3) the heads of such other Federal agencies or
2	departments with jurisdiction over natural resources
3	of the United States as the President considers ap-
4	propriate.
5	(b) Functions.—The Panel shall serve as a forum
6	for interagency consultation on and the coordination of the
7	development and implementation of a national Natural
8	Resources Climate Change Adaptation Strategy required
9	under section 486.
10	(c) Chair.—The Chair of the Council on Environ-
11	mental Quality shall serve as the Chair of the Panel.
12	SEC. 486. NATURAL RESOURCES CLIMATE CHANGE ADAP-
13	TATION STRATEGY.
13	TATION STRATEGY.
13 14	TATION STRATEGY. (a) IN GENERAL.—Not later than 2 years after the
13 14 15	TATION STRATEGY. (a) IN GENERAL.—Not later than 2 years after the date of the enactment of this Act, the President, through
13 14 15 16 17	TATION STRATEGY. (a) IN GENERAL.—Not later than 2 years after the date of the enactment of this Act, the President, through the Natural Resources Climate Change Adaptation Panel
13 14 15 16 17	tation strategy. (a) In General.—Not later than 2 years after the date of the enactment of this Act, the President, through the Natural Resources Climate Change Adaptation Panel established under section 485, shall develop a Natural Re-
13 14 15 16 17 18	TATION STRATEGY. (a) IN GENERAL.—Not later than 2 years after the date of the enactment of this Act, the President, through the Natural Resources Climate Change Adaptation Panel established under section 485, shall develop a Natural Resources Climate Change Adaptation Strategy for assisting
13 14 15 16 17 18	the Natural Resources Climate Change Adaptation Panel established under section 485, shall develop a Natural Resources Climate Change Adaptation Strategy for assisting natural resources in becoming more resilient and adapting
13 14 15 16 17 18 19 20	the Natural Resources Climate Change Adaptation Panel established under section 485, shall develop a Natural Resources Climate Change Adaptation Strategy for assisting natural resources in becoming more resilient and adapting to the impacts of climate change and ocean acidification.
13 14 15 16 17 18 19 20 21	the Natural Resources Climate Change Adaptation Panel established under section 485, shall develop a Natural Resources Climate Change Adaptation Strategy for assisting natural resources in becoming more resilient and adapting to the impacts of climate change and ocean acidification. (b) Administration.—In developing and revising a

1	(1) base the strategy on the best available
2	science, as identified by the Climate Change Adapta-
3	tion Science and Information Program established
4	under section 487;
5	(2) develop the strategy in cooperation with
6	States, United States territories, and Indian tribes;
7	(3) coordinate with other Federal agencies as
8	appropriate;
9	(4) consult with local governments, conservation
10	organizations, scientists, and other interested stake-
11	holders;
12	(5) provide public notice and opportunity for
13	comment; and
14	(6) review and revise the Strategy every 5 years
15	to incorporate new information regarding the im-
16	pacts of climate change and ocean acidification on
17	natural resources and advances in the development
18	of strategies for becoming more resilient and adapt-
19	ing to those impacts.
20	(c) Contents.—The National Resources Adaptation
21	Strategy shall include—
22	(1) an assessment, at an appropriate geo-
23	graphic scale, of the nature and probability of pre-
24	dicted short-term, medium-term, and long-term im-
25	pacts of climate change and ocean acidification on

1	natural resources, including cumulative and syner-
2	gistic effects;
3	(2) a description of current research, observa-
4	tion, and monitoring activities related to the impacts
5	of climate change and ocean acidification on natura
6	resources, as well as identification of research and
7	data needs and priorities;
8	(3) identification of natural resources that are
9	likely to be adversely affected by climate change and
10	ocean acidification and have a need for conservation
11	(4) specific protocols for integrating climate
12	change and ocean acidification adaptation strategies
13	and activities into the conservation and management
14	of natural resources by Federal agencies to ensure
15	consistency across agency jurisdictions and re-
16	sources;
17	(5) specific actions that Federal agencies should
18	take to assist natural resources in adapting to and
19	withstanding the impacts of climate change and
20	ocean acidification, including a timeline to imple
21	ment those actions;
22	(6) specific mechanisms for ensuring commu-
23	nication and coordination among Federal agencies
24	and between Federal agencies and State natural re-

1	source agencies, United States territories, and In-
2	dian tribes; and
3	(7) a process for guiding the development of de-
4	tailed agency and department specific adaptation
5	plans required under section 488 to address the im-
6	pacts of climate change and ocean acidification on
7	the natural resources in the jurisdiction of each
8	agency.
9	(d) Implementation.—Consistent with their au-
10	thorities under other laws, each Federal agency with rep-
11	resentation on the National Resources Climate Change
12	Adaptation Panel shall integrate the elements of the strat-
	age into a general plana programs and activities related to
13	egy into agency plans, programs, and activities related to
13 14	the conservation and management of natural resources.
14	the conservation and management of natural resources.
14 15	the conservation and management of natural resources. SEC. 487. NATURAL RESOURCES CLIMATE CHANGE ADAP-
14 15 16 17	the conservation and management of natural resources. SEC. 487. NATURAL RESOURCES CLIMATE CHANGE ADAPTATION SCIENCE AND INFORMATION PRO-
14 15 16	the conservation and management of natural resources. SEC. 487. NATURAL RESOURCES CLIMATE CHANGE ADAPTATION SCIENCE AND INFORMATION PROGRAM.
14 15 16 17	the conservation and management of natural resources. SEC. 487. NATURAL RESOURCES CLIMATE CHANGE ADAPTATION SCIENCE AND INFORMATION PROGRAM. (a) Establishment.—Not later than 90 days after
114 115 116 117 118	the conservation and management of natural resources. SEC. 487. NATURAL RESOURCES CLIMATE CHANGE ADAPTATION SCIENCE AND INFORMATION PROGRAM. (a) Establishment.—Not later than 90 days after the date of the enactment of this Act, the Secretary of Commerce, acting through the Administrator of the
14 15 16 17 18 19 20	the conservation and management of natural resources. SEC. 487. NATURAL RESOURCES CLIMATE CHANGE ADAPTATION SCIENCE AND INFORMATION PROGRAM. (a) Establishment.—Not later than 90 days after the date of the enactment of this Act, the Secretary of Commerce, acting through the Administrator of the
14 15 16 17 18 19 20 21	the conservation and management of natural resources. SEC. 487. NATURAL RESOURCES CLIMATE CHANGE ADAPTATION SCIENCE AND INFORMATION PROGRAM. (a) ESTABLISHMENT.—Not later than 90 days after the date of the enactment of this Act, the Secretary of Commerce, acting through the Administrator of the NOAA, and the Secretary of the Interior, acting through
14 15 16 17 18 19 20 21	the conservation and management of natural resources. SEC. 487. NATURAL RESOURCES CLIMATE CHANGE ADAPTATION SCIENCE AND INFORMATION PROGRAM. (a) ESTABLISHMENT.—Not later than 90 days after the date of the enactment of this Act, the Secretary of Commerce, acting through the Administrator of the NOAA, and the Secretary of the Interior, acting through the Director of the United States Geological Survey, shall

1	Wildlife Science Center within the United States Geologi-
2	cal Survey and through counterpart programs established
3	by the Secretary of Commerce within the National Oceanic
4	and Atmospheric Administration.
5	(b) Functions.—The National Resources Climate
6	Change Adaptation Science and Information Program
7	shall—
8	(1) provide technical assistance to Federal
9	agencies, State and local governments, and tribal or-
10	ganizations in their efforts to assess the impacts of
11	climate change and ocean acidification on natural re-
12	sources;
13	(2) conduct and sponsor research and provide
14	Federal agencies, State and local governments, and
15	tribal organizations with research products, decision
16	and monitoring tools and information, to develop
17	strategies for assisting natural resources to become
18	more resilient and adapt to and withstand the im-
19	pacts of climate change and ocean acidification; and
20	(3) assist Federal agencies in the development
21	of detailed agency and department specific adapta-
22	tion plans required under section 488.
23	(c) Survey.—Not later than 180 days after the date
24	of enactment of this Act and every 5 years thereafter, the
25	Secretary of Commerce and the Secretary of the Interior

1	shall undertake a climate change and ocean acidification
2	impact survey that—
3	(1) identifies natural resources considered likely
4	to be adversely affected by climate change and ocean
5	acidification;
6	(2) includes baseline monitoring and ongoing
7	trend analysis;
8	(3) identifies and prioritizes needed monitoring
9	and research that is of greatest relevance to the on-
10	going needs of natural resource managers to address
11	the impacts of climate change and ocean acidifica-
12	tion; and
13	(4) identifies decision tools necessary to develop
14	strategies for assisting natural resources to become
15	more resilient and adapt to and withstand the im-
16	pacts of climate change and ocean acidification.
17	(d) Science Advisory Board.—
18	(1) Establishment.—Not later than 180 days
19	after the date of enactment of this Act, the Sec-
20	retary of Commerce and the Secretary of the Inte-
21	rior shall establish and appoint the members of a
22	Science Advisory Board, to be comprised of not
23	fewer than 10 and not more than 20 members—
24	(A) who have expertise in fish, wildlife,
25	plant, aquatic, and coastal and marine biology,

1	ecology, climate change, ocean acidification, and
2	other relevant scientific disciplines;
3	(B) who represent a balanced membership
4	among Federal, State, and local representatives,
5	universities, and conservation organizations;
6	and
7	(C) at least ½ of whom are recommended
8	by the President of the National Academy of
9	Sciences.
10	(2) Duties.—The Science Advisory Board
11	shall—
12	(A) advise the Natural Resources Climate
13	Change Adaptation Science and Information
14	Program established under subsection (a) on
15	the state-of-the-science regarding the impacts of
16	climate change and ocean acidification on nat-
17	ural resources and scientific strategies and
18	mechanisms for adaptation; and
19	(B) identify and recommend priorities for
20	ongoing research needs on such issues.
21	(3) Collaboration.—The Science Advisory
22	Board shall collaborate with other climate change
23	and ecosystem research entities in other Federal
24	agencies and departments.

1	(4) AVAILABILITY TO THE PUBLIC.—The advice
2	and recommendations of the Science Advisory Board
3	shall be made available to the public.
4	SEC. 488. FEDERAL NATURAL RESOURCE AGENCY ADAPTA-
5	TION PLANS.
6	(a) Development.—Not later than 1 year after the
7	date of the development of a Natural Resources Climate
8	Change Adaptation Strategy under section 486, each Fed-
9	eral agency with representation on the Natural Resources
10	Climate Change Adaptation Panel established under sec-
11	tion 485 shall—
12	(1) complete an agency adaptation plan, con-
13	sistent with the Natural Resources Climate Change
14	Adaptation Strategy under section 486 and the Nat-
15	ural Resources Climate Change Adaptation Policy
16	under section 482, detailing the agency's current
17	and projected efforts to address the potential im-
18	pacts of climate change and ocean acidification on
19	natural resources within the agency's jurisdiction
20	and necessary additional actions, including a
21	timeline for implementation of those actions;
22	(2) provide opportunities for public review and
23	comment on the agency adaptation plan; and
24	(3) submit such plan to the President for ap-
25	proval.

1	(b) Submission to Congress.—Not later than 30
2	days after the date of approval by the President, each Fed-
3	eral agency with representation on the Natural Resources
4	Climate Change Adaptation Panel under section 485 shall
5	submit to the Committee on Energy and Commerce of the
6	House of Representatives, the Committee on Environment
7	and Public Works of the Senate, and the committees of
8	the House of Representatives and the Senate with prin-
9	cipal jurisdiction over the relevant agency an agency adap-
10	tation plan described in subsection (a) along with a sched-
11	ule for the implementation of such plan.
12	(c) Requirements.—Each agency adaptation plan
13	shall include prioritized goals and measures and a sched-
14	ule for implementation—
15	(1) to assess the current and future impacts of
16	climate change and ocean acidification on natural re-
17	sources within the agency's jurisdiction, including
18	cumulative and synergistic effects, and to identify
19	and monitor those natural resources that are likely
20	to be adversely affected and that have need for con-
21	servation;
22	(2) to assess the agency's efforts to address the
23	current and future impacts of climate change and
24	ocean acidification on natural resources within the
25	scope of the agency's jurisdiction and to develop and

1	implement strategies to assist such resources in be-
2	coming more resilient and adapting to and with-
3	standing those impacts, including—
4	(A) the protection, maintenance, and res-
5	toration of habitats and ecosystems;
6	(B) the establishment of habitat linkages
7	and corridors;
8	(C) the restoration and conservation of ec-
9	ological processes;
10	(D) the protection of a broad diversity of
11	native species across their range; and
12	(E) the protection of wildlife health, recog-
13	nizing that climate can alter the distribution
14	and ecology of parasites, pathogens, and vec-
15	tors.
16	(3) to integrate such adaptation strategies into
17	agency plans, programs, activities, and actions re-
18	lated to the conservation and management of nat-
19	ural resources and to establish new plans, programs,
20	activities, and actions as necessary;
21	(4) including a description of current and pro-
22	posed mechanisms to enhance cooperation and co-
23	ordination on natural resources adaptation efforts
24	with other Federal agencies. State and local govern-

1	ments, and tribal organizations and nongovern-
2	mental stakeholders;
3	(5) to develop specific written guidance to re-
4	source managers to—
5	(A) explain how managers are expected to
6	address the effects of climate change and ocean
7	acidification;
8	(B) identify how managers are to obtain
9	any site-specific information that may be nec-
10	essary; and
11	(C) to reflect best practices shared among
12	relevant agencies, while also recognizing the
13	unique missions, objectives, and responsibilities
14	of each agency; and
15	(6) to identify and assess data and information
16	gaps necessary to develop natural resource adapta-
17	tion plans and strategies.
18	(d) Implementation.—Upon approval by the Presi-
19	dent, each Federal agency shall implement their agency
20	plan through existing and new policies, programs, activi-
21	ties, and actions to the extent not inconsistent with exist-
22	ing authority. To the maximum extent practicable and
23	consistent with applicable law, implementation shall be
24	conducted in a way that protects, maintains, and restores
25	the resilience of natural resources under the jurisdiction

- 1 of other agencies and their ability to adapt and withstand
- 2 the impacts of climate change and ocean acidification.
- 3 (e) Revision and Review.—Not less than every 5
- 4 years, each Federal agency adaptation plan shall be re-
- 5 viewed and revised to incorporate the best available science
- 6 and other information regarding the impacts of climate
- 7 change and ocean acidification on natural resources.
- 8 SEC. 489. STATE NATURAL RESOURCES ADAPTATION
- 9 PLANS.
- 10 (a) REQUIREMENT.—In order to be eligible to receive
- 11 funds under section 490, not later than 1 year after the
- 12 development of a Natural Resources Climate Change Ad-
- 13 aptation Strategy required under section 486 each State
- 14 shall prepare a State natural resources adaptation plan
- 15 detailing the State's current and projected efforts to ad-
- 16 dress the potential impacts of climate change and ocean
- 17 acidification on natural resources and coastal areas within
- 18 the State's jurisdiction.
- 19 (b) REVIEW OR APPROVAL.—Each State plan shall
- 20 be reviewed and approved by the Secretary of the Interior
- 21 and, as applicable, the Secretary of Commerce, to be con-
- 22 sistent with a national Natural Resources Climate Change
- 23 Adaptation Strategy required under section 486 and the
- 24 Federal natural resource agency adaptation plans under
- 25 section 488.

1	(1) Within 10 days after transmittal of a plan,
2	revision to a plan, or resubmittal of a plan by a
3	State, the Secretary of the Interior and the Sec-
4	retary of Commerce shall commence a review of the
5	strategy, revised plan, or revision, respectively.
6	(2) Within 180 days after transmittal of a plan,
7	or a revision to a plan, the Secretary of the Interior
8	and the Secretary of Commerce shall approve or dis-
9	approve the plan by written notice.
10	(3) Within 90 days after transmittal of a resub-
11	mitted plan, as a result of disapproval by written no-
12	tice, the Secretary of the Interior and the Secretary
13	of Commerce shall approve or disapprove the plan by
14	written notice.
15	(e) Contents.—A State natural resources adapta-
16	tion plan shall—
17	(1) include a strategy for addressing the im-
18	pacts of climate change and ocean acidification on
19	fish, wildlife, plants, habitats, ecosystems, wildlife
20	health, and ecological processes that—
21	(A) describes the impacts of climate
22	change and ocean acidification on the diversity
23	and health of the fish, wildlife and plant popu-
24	lations, habitats, ecosystems, and associated ec-
25	ological processes;

1	(B) establishes programs for monitoring
2	the impacts of climate change on fish, wildlife,
3	and plant populations, habitats, ecosystems,
4	and associated ecological processes;
5	(C) describes and prioritizes proposed con-
6	servation actions to assist fish, wildlife, plant
7	populations, habitats, ecosystems, and associ-
8	ated ecological processes in becoming more re-
9	silient and adapting to those impacts;
10	(D) includes strategies, specific conserva-
11	tion actions, and a time frame for implementing
12	conservation actions for fish, wildlife, and plant
13	populations, habitats, ecosystems, and associ-
14	ated ecological processes;
15	(E) establishes methods for assessing the
16	effectiveness of conservation actions taken to
17	assist fish, wildlife, and plant populations, habi-
18	tats, ecosystems, and associated ecological proc-
19	esses in becoming more resilient and adapting
20	to the impacts of climate changes and ocean
21	acidification and for updating those actions to
22	respond appropriately to new information or
23	changing conditions;

1	(F) is incorporated into a revision of the
2	comprehensive wildlife conservation strategy of
3	a State—
4	(i) that has been submitted to the
5	United States Fish and Wildlife Service;
6	and
7	(ii) that has been approved by the
8	Service or on which a decision on approval
9	is pending; and
10	(G) is developed—
11	(i) with the participation of the State
12	fish and wildlife agency, the State coastal
13	agency, the State agency responsible for
14	administration of Land and Water Con-
15	servation Fund grants, the State Forest
16	Legacy program coordinator, and other
17	State agencies considered appropriate by
18	the Governor of such State; and
19	(ii) in coordination with the Secretary
20	of the Interior, and where applicable, the
21	Secretary of Commerce; and
22	(2) include, in the case of a coastal State, a
23	strategy for addressing the impacts of climate
24	change and ocean acidification on the coastal zone
25	that—

1	(A) identifies natural resources that are
2	likely to be impacted by climate change and
3	ocean acidification and describes those impacts;
4	(B) identifies and prioritizes continuing re-
5	search and data collection needed to address
6	those 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) habitat loss, including projected
19	losses of coastal wetlands and potentials
20	for inland migration of natural shoreline
21	habitats;
22	(v) coastal species and ecosystem mi-
23	grations, and changes in species population
24	dynamics;

1	(vi) changes in storm frequency, in-
2	tensity, or rainfall patterns;
3	(vii) saltwater intrusion into coastal
4	rivers and aquifers;
5	(viii) changes in chemical or physical
6	characteristics of marine and estuarine
7	systems;
8	(ix) increased harmful algal blooms;
9	and
10	(x) spread of invasive species;
11	(C) identifies and prioritizes adaptation
12	strategies to assist natural resources to become
13	more resilient and to adapt to and withstand
14	and minimize the impacts of climate change
15	and ocean acidification, including—
16	(i) protection, maintenance, and res-
17	toration of ecologically important coastal
18	lands, coastal and ocean ecosystems, and
19	species biodiversity and the establishment
20	of habitat buffer zones, migration cor-
21	ridors, and climate refugia; and
22	(ii) improved planning, siting policies,
23	and hazard mitigation strategies;
24	(D) establishes programs for the long-term
25	monitoring of the impacts of climate change

1	and ocean acidification on the coastal zone and
2	to assess and adjust, when necessary, such
3	adaptive management strategies;
4	(E) establishes performance measures for
5	assessing the effectiveness of adaptation strate-
6	gies intended to improve resilience and the abil-
7	ity of natural resources in the coastal zone to
8	adapt to and withstand the impacts of climate
9	change and ocean acidification and of adapta-
10	tion strategies intended to minimize those im-
11	pacts on the coastal zone and to update those
12	strategies to respond to new information or
13	changing conditions; and
14	(F) is developed with the participation of
15	the State coastal agency and other appropriate
16	State agencies and in coordination with the
17	Secretary of Commerce and other appropriate
18	Federal agencies.
19	(d) Public Input.—States shall provide for solicita-
20	tion and consideration of public and independent scientific
21	input in the development of their plans.
22	(e) COORDINATION WITH OTHER PLANS.—The State
23	plan shall take into consideration research and informa-
24	tion contained in, and coordinate with and integrate the

1	goals and measures identified in, as appropriate, other
2	natural resources conservation strategies, including—
3	(1) the national fish habitat action plan;
4	(2) plans under the North American Wetlands
5	Conservation Act (16 U.S.C. 4401 et seq.);
6	(3) the Federal, State, and local partnership
7	known as "Partners in Flight";
8	(4) federally approved coastal zone management
9	plans under the Coastal Zone Management Act of
10	1972 (16 U.S.C. 1451 et seq.);
11	(5) federally approved regional fishery manage-
12	ment plants and habitat conservation activities
13	under the Magnuson-Stevens Fishery Conservation
14	and Management Act (16 U.S.C. 1801 et seq.);
15	(6) the national coral reef action plan;
16	(7) recovery plans for threatened species and
17	endangered species under section 4(f) of the Endan-
18	gered Species Act of 1973 (16 U.S.C. 1533(f));
19	(8) habitat conservation plans under section 10
20	of that Act (16 U.S.C. 1539);
21	(9) other Federal and State plans for imperiled
22	species;
23	(10) State hazard mitigation plans; and
24	(11) other State-based strategies that com-
25	prehensively implement adaptation activities to re-

1	mediate the effects of climate change and ocean
2	acidification on fish, wildlife, plants, and other nat-
3	ural resources.
4	(f) UPDATING.—Each State plan shall be updated
5	not less than every 5 years.
6	(g) Funding.—
7	(1) In general.—Funds made available to
8	States under section 490 shall be used only for ac-
9	tivities that are consistent with a State natural re-
10	sources adaptation plan that has been approved by
11	the Secretaries of Interior and Commerce.
12	(2) Initial.—Until the earlier of the date that
13	is 3 years after the date of the enactment of this Act
14	or the date on which a State receives approval for
15	the State strategy, a State shall be eligible to receive
16	funding under section 490 for adaptation activities
17	that are—
18	(A) consistent with the comprehensive
19	wildlife strategy of the State and, where appro-
20	priate, other natural resources conservation
21	strategies; and
22	(B) in accordance with a workplan devel-
23	oped in coordination with—
24	(i) the Secretary of the Interior; and

1	(ii) the Secretary of Commerce, for
2	any coastal State subject to the condition
3	that coordination with the Secretary of
4	Commerce shall be required only for those
5	portions of the strategy relating to activi-
6	ties affecting the coastal zone.
7	(3) Pending approval.—During the period
8	for which approval by the applicable Secretary of a
9	State plan is pending, the State may continue receiv-
10	ing funds under section 490 pursuant to the
11	workplan described in paragraph (2)(B).
12	SEC. 490. NATURAL RESOURCES CLIMATE CHANGE ADAP-
13	TATION FUND.
13 14	TATION FUND. (a) ESTABLISHMENT OF FUND.—There is estab-
14	(a) Establishment of Fund.—There is estab-
14 15	(a) ESTABLISHMENT OF FUND.—There is established in the Treasury of the United States a Natural Re-
14 15 16 17	(a) ESTABLISHMENT OF FUND.—There is established in the Treasury of the United States a Natural Resources Climate Change Adaptation Fund.
14 15 16 17	 (a) ESTABLISHMENT OF FUND.—There is established in the Treasury of the United States a Natural Resources Climate Change Adaptation Fund. (b) AUTHORIZATION AND AVAILABILITY OF
14 15 16 17 18	 (a) ESTABLISHMENT OF FUND.—There is established in the Treasury of the United States a Natural Resources Climate Change Adaptation Fund. (b) AUTHORIZATION AND AVAILABILITY OF FUNDS.—
14 15 16 17 18	 (a) ESTABLISHMENT OF FUND.—There is established in the Treasury of the United States a Natural Resources Climate Change Adaptation Fund. (b) AUTHORIZATION AND AVAILABILITY OF FUNDS.— (1) AUTHORIZATION.—There are authorized to
14 15 16 17 18 19 20	(a) Establishment of Fund.—There is established in the Treasury of the United States a Natural Resources Climate Change Adaptation Fund. (b) Authorization and Availability of Funds.— (1) Authorization.—There are authorized to be appropriated to the National Resources Climate
14 15 16 17 18 19 20 21	(a) Establishment of Fund.—There is established in the Treasury of the United States a Natural Resources Climate Change Adaptation Fund. (b) Authorization and Availability of Funds.— (1) Authorization.—There are authorized to be appropriated to the National Resources Climate Change Adaptation Fund such sums as may be necessary.

1	tion Fund shall be available without further appro-
2	priation or fiscal year limitation.
3	(c) Distributions.—
4	(1) States.—Of the amounts made available
5	each fiscal year to carry out this subpart, 40 percent
6	shall be available to States to carry out adaptation
7	activities in accordance with a State natural re-
8	sources adaptation plans approved under section
9	489. Specifically—
10	(A) 32.5 percent shall be available to State
11	wildlife agencies through the Wildlife Conserva-
12	tion and Restoration Account established under
13	section 3(a)(2) of the Pittman-Robertson Wild-
14	life Restoration Act (16 U.S.C. 669b(a)(2));
15	and
16	(B) 7.5 percent shall be available to State
17	coastal agencies pursuant to the formula estab-
18	lished by the Secretary of Commerce under sec-
19	tion 306(c) of the Coastal Management Act of
20	1972 (16 U.S.C. 1455(c)).
21	(2) Department of the interior.—Of the
22	amounts made available each fiscal year to carry out
23	this subpart—

1	(A) 17 percent shall be available to the
2	Secretary of the Interior for use in funding ad-
3	aptation activities carried out—
4	(i) under endangered species, migra-
5	tory bird, and other fish and wildlife pro-
6	grams administered by the United States
7	Fish and Wildlife Service;
8	(ii) on wildlife refuges and other pub-
9	lic land under the jurisdiction of the
10	United States Fish and Wildlife Service,
11	the Bureau of Land Management, or the
12	National Park Service; or
13	(iii) within Federal water managed by
14	the Bureau of Reclamation;
15	(B) 5 percent shall be available to the Sec-
16	retary of the Interior for adaptation activities
17	carried out under cooperative grant programs,
18	including—
19	(i) the cooperative endangered species
20	conservation fund authorized under section
21	6 of the Endangered Species Act of 1973
22	(16 U.S.C. 1535);
23	(ii) programs under the North Amer-
24	ican Wetlands Conservation Act (16
25	U.S.C. 4401 et seq.);

1	(iii) the multinational species con-
2	servation fund established under the head-
3	ing "MULTINATIONAL SPECIES CON-
4	SERVATION FUND" of title I of the De-
5	partment of the Interior and Related
6	Agencies Appropriations Act, 1999 (16
7	U.S.C. 4946);
8	(iv) the Neotropical Migratory Bird
9	Conservation Fund established by section
10	9(a) of the Neotropical Migratory Bird
11	Conservation Act (16 U.S.C. 6108(a));
12	(v) the Coastal Program of the United
13	States Fish and Wildlife Service;
14	(vi) the National Fish Habitat Action
15	Plan;
16	(vii) the Partners for Fish and Wild-
17	life Program;
18	(viii) the Landowner Incentive Pro-
19	gram;
20	(ix) the Wildlife Without Borders Pro-
21	gram of the United States Fish and Wild-
22	life Service; and
23	(x) the Park Flight Migratory Bird
24	Program of the National Park Service; and

1	(C) 1 percent shall be available to the Sec-
2	retary of the Interior to provide financial assist-
3	ance to Indian tribes to carry out adaptation
4	activities through the Tribal Wildlife Grants
5	Program of the United States Fish and Wildlife
6	Service.
7	(3) Land and water conservation fund.—
8	(A) Deposits.—
9	(i) In general.—Of the amounts
10	made available for each fiscal year to carry
11	out this subpart 12 percent shall be depos-
12	ited into the Land and Water Conservation
13	Fund established under section 2 of the
14	Land and Water Conservation Fund Act of
15	1965 (16 U.S.C. 460l–5).
16	(ii) Use of deposits.—Deposits into
17	the Land and Water Conservation Fund
18	under this paragraph shall—
19	(I) be supplemental to authoriza-
20	tions provided under section 3 of the
21	Land and Water Conservation Fund
22	Act of 1965 (16 U.S.C. 460l-6) which
23	shall remain available for nonadapta-
24	tion needs; and

1	(II) be available for expenditure
2	to carry out this subpart without fur-
3	ther appropriation or fiscal year limi-
4	tation.
5	(B) Allocations.—Of the amounts de-
6	posited under this paragraph into the Land and
7	Water Conservation Fund—
8	(i) 1/6 shall be available to the Sec-
9	retary of the Interior and made available
10	on a competitive basis to carry out adapta-
11	tion activities through the acquisition of
12	land and interests in land under section 6
13	of the Land and Water Conservation Fund
14	Act of 1965 (16 U.S.C. 460l–8)—
15	(I) to States in accordance with
16	their natural resources adaptation
17	plans, and to Indian tribes;
18	(II) notwithstanding section 5 of
19	that Act (16 U.S.C. 460l-7); and
20	(III) in addition to any funds
21	provided pursuant to annual appro-
22	priations Acts, the Energy Policy Act
23	of 2005 (42 U.S.C. 15801 et seq.), or
24	any other authorization for non-
25	adaptation needs;

1	(ii) 1/3 shall be available to the Sec-
2	retary of the Interior to carry out adapta-
3	tion activities through the acquisition of
4	lands and interests in land under section 7
5	of the Land and Water Conservation Fund
6	Act of 1965 (16 U.S.C. 460l-9);
7	(iii) 1/6 shall be available to the Sec-
8	retary of Agriculture and made available to
9	the States to carry out adaptation activi-
10	ties through the acquisition of land and in-
11	terests in land under section 7 of the For-
12	est Legacy Program under the Cooperative
13	Forestry Assistance Act of 1978 (16
14	U.S.C. 2103c); and
15	(iv) 1/3 shall be available to the Sec-
16	retary of Agriculture to carry out adapta-
17	tion activities through the acquisition of
18	land and interests in land under section 7
19	of the Land and Water Conservation Fund
20	Act of 1965 (16 U.S.C. 460l-9).
21	(C) Expenditure of funds.—In allo-
22	cating funds under subparagraph (B), the Sec-
23	retary of the Interior and the Secretary of Agri-
24	culture shall take into consideration factors in-
25	cluding—

1	(i) the availability of non-Federal con-
2	tributions from State, local, or private
3	sources;
4	(ii) opportunities to protect wildlife
5	corridors or otherwise to link or consoli-
6	date fragmented habitats;
7	(iii) opportunities to reduce the risk of
8	catastrophic wildfires, extreme flooding, or
9	other climate-related events that are harm-
10	ful to fish and wildlife and people; and
11	(iv) the potential for conservation of
12	species or habitat types at serious risk due
13	to climate change, ocean acidification, and
14	other stressors.
15	(4) Forest service.—Of the amounts made
16	available each fiscal year to carry out this subpart,
17	5 percent shall be available to the Secretary of Agri-
18	culture for use in funding adaptation activities car-
19	ried out on national forests and national grasslands
20	under the jurisdiction of the Forest Service, or pur-
21	suant to the cooperative Wings Across the Americas
22	Program.
23	(5) Environmental protection agency.—
24	Of the amounts made available each fiscal year to
25	carry out this subpart, 5 percent shall be available

1	to the Administrator of the Environmental Protec-
2	tion Agency for use in adaptation activities restoring
3	and protecting—
4	(A) large-scale freshwater aquatic eco-
5	systems, such as the Everglades, the Great
6	Lakes, Flathead Lake, the Missouri River, the
7	Mississippi River, the Colorado River, the Sac-
8	ramento-San Joaquin Rivers, the Ohio River,
9	the Columbia-Snake River System, the Apa-
10	lachicola, Chattahoochee, and Flint River Sys-
11	tem, the Connecticut River, and the Yellowstone
12	River;
13	(B) large-scale estuarine ecosystems, such
14	as Chesapeake Bay, Long Island Sound, Puget
15	Sound, the Mississippi River Delta, the San
16	Francisco Bay Delta, Narragansett Bay, and
17	Albemarle-Pamlico Sound; and
18	(C) freshwater and estuarine ecosystems,
19	watersheds, and basins identified as priorities
20	by the Administrator, working in cooperation
21	with other Federal agencies, States, local gov-
22	ernments, scientists, and other conservation
23	partners.
24	(6) Corps of engineers.—Of the amounts
25	made available each fiscal year to carry out this sub-

1	part, 7.5 percent shall be available to the Secretary
2	of the Army for use by the Corps of Engineers to
3	carry out adaptation activities restoring—
4	(A) large-scale freshwater aquatic eco-
5	systems, such as the ecosystems described in
6	paragraph (5)(A);
7	(B) large-scale estuarine ecosystems, such
8	as the ecosystems described in paragraph
9	(5)(B);
10	(C) freshwater and estuarine ecosystems,
11	watersheds, and basins identified as priorities
12	by the Corps of Engineers, working in coopera-
13	tion with other Federal agencies, States, local
14	governments, scientists, and other conservation
15	partners; and
16	(D) habitats and ecosystems through the
17	implementation of estuary habitat restoration
18	projects authorized by the Estuary Restoration
19	Act of 2000 (33 U.S.C. 2901 et seq.), project
20	modifications for improvement of the environ-
21	ment, aquatic restoration and protection
22	projects authorized by section 206 of the Water
23	Resources Development Act of 1996 (33 U.S.C.
24	2330), and other appropriate programs and ac-
25	tivities.

1	(7) DEPARTMENT OF COMMERCE.—Of the
2	amounts made available each fiscal year to carry out
3	this subpart, 7.5 percent shall be available to the
4	Secretary of Commerce for use in funding adapta-
5	tion activities to protect, maintain, and restore
6	coastal, estuarine, and marine resources, habitats,
7	and ecosystems, including such activities carried out
8	under—
9	(A) the coastal and estuarine land con-
10	servation program;
11	(B) the community-based restoration pro-
12	gram;
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	impacts of climate change and ocean acidifica-
19	tion;
20	(D) the Open Rivers Initiative;
21	(E) the Magnuson-Stevens Fishery Con-
22	servation and Management Act (16 U.S.C.
23	1801 et seq.);
24	(F) the Marine Mammal Protection Act of
25	1972 (16 U.S.C. 1361 et seq.);

1	(G) the Endangered Species Act of 1973
2	(16 U.S.C. 1531 et seq.);
3	(H) the Marine Protection, Research, and
4	Sanctuaries Act of 1972 (33 U.S.C. 1401 et
5	seq.); and
6	(I) the Coral Reef Conservation Act of
7	2000 (16 U.S.C. 6401 et seq.).
8	(d) Cost Sharing.—Notwithstanding any other pro-
9	vision of law, a State or Indian tribe that receives a grant
10	under paragraphs (1) or (2)(C) of subsection (d) shall use
11	funds from non-Federal sources to pay 10 percent of the
12	costs of each activity carried out using amounts under the
13	grant.
14	(e) Consistency With Federal Plans.—Funds
15	made available under paragraph (2) through (7) of sub-
16	section (d) shall be used only for adaptation activities that
17	are consistent with the natural resources adaptation plans
18	required to be developed by each Federal agency under
19	section 488.
20	PART 2—INTERNATIONAL CLIMATE CHANGE
21	ADAPTATION PROGRAM
22	SEC. 491. FINDINGS AND PURPOSES.
23	(a) FINDINGS.—Congress finds that—
24	(1) global climate change is a potentially sig-
25	nificant threat multiplier for instability around the

1	world and is likely to exacerbate competition and
2	conflict over agricultural, vegetative, marine, and
3	water resources and displace people, thus increasing
4	hunger and poverty and causing increased pressure
5	on developing countries;
6	(2) the strategic, social, political, economic, cul-
7	tural, and environmental consequences of global cli-
8	mate change are likely to have disproportionate im-
9	pacts on developing countries, which have less eco-
10	nomic and financial capacity to respond to such im-
11	pacts;
12	(3) the countries most vulnerable to climate
13	change, due both to exposure to harmful impacts
14	and to their lower capacity to adapt, are developing
15	countries with very low industrial emissions that
16	have contributed less to climate change than more
17	affluent countries;
18	(4) developing countries rely, to a much greater
19	degree, on the natural and environmental systems
20	likely to be affected by climate change for suste-
21	nance and livelihoods, as well as economic growth
22	and stability;
23	(5) the consequences of global climate change,
24	including increases in poverty and destabilization of
25	economies and societies, are likely to pose a long-

1	term threat to the national security, foreign policy,
2	and economic interests of the United States;
3	(6) it is in the national security, foreign policy,
4	and economic interests of the United States to rec-
5	ognize, plan for, and mitigate the international stra-
6	tegic, social, political, cultural, environmental and
7	economic effects of a changing climate and to assist
8	developing countries to increase their resilience to
9	those effects;
10	(7) under the United Nations Framework Con-
11	vention on Climate Change and under the Bali Ac-
12	tion Plan, developed country parties, including the
13	United States, committed to provide "new and addi-
14	tional financial resources" to assist developing coun-
15	tries in meeting the costs of adaptation; and
16	(8) consistent with the United Nations Frame-
17	work Convention on Climate Change and the Bali
18	Action Plan, funding directed towards these pur-
19	poses must be predictable, sustainable, and addi-
20	tional to internationally agreed levels of overseas de-
21	velopment assistance.
22	(b) Purposes.—The purposes of this part are—
23	(1) to provide assistance from the United
24	States to the most vulnerable developing countries in
25	order to support the development and implementa-

1	tion of climate change adaptation programs and
2	projects that reduce the vulnerability and increase
3	the resilience of communities to climate change im-
4	pacts including impacts upon water availability, agri-
5	cultural productivity, flood risk, coastal resources,
6	timing of seasons, biodiversity, economic livelihoods,
7	health and diseases, and human migration; and
8	(2) to provide such assistance in a manner that
9	promotes and protects the national security, foreign
10	policy, environmental, and economic interests of the
11	United States where such interests may be advanced
12	by minimizing, averting, or increasing resilience to
13	climate change impacts.
13 14	climate change impacts. SEC. 492. DEFINITIONS.
	2
14	SEC. 492. DEFINITIONS.
14 15	SEC. 492. DEFINITIONS. In this part:
141516	SEC. 492. DEFINITIONS. In this part: (1) Appropriate congressional commit-
14151617	SEC. 492. DEFINITIONS. In this part: (1) Appropriate congressional committees.—The term "appropriate congressional com-
14 15 16 17 18	SEC. 492. DEFINITIONS. In this part: (1) Appropriate congressional committees.—The term "appropriate congressional committees" means—
14 15 16 17 18 19	SEC. 492. DEFINITIONS. In this part: (1) APPROPRIATE CONGRESSIONAL COMMITTEES.—The term "appropriate congressional committees" means— (A) the Committee on Energy and Com-
14151617181920	SEC. 492. DEFINITIONS. In this part: (1) APPROPRIATE CONGRESSIONAL COMMITTEES.—The term "appropriate congressional committees" means— (A) the Committee on Energy and Commerce, the Committee on Foreign Affairs, and
14 15 16 17 18 19 20 21	SEC. 492. DEFINITIONS. In this part: (1) APPROPRIATE CONGRESSIONAL COMMITTEES.—The term "appropriate congressional committees" means— (A) the Committee on Energy and Commerce, the Committee on Foreign Affairs, and any other relevant committees on national secu-
14 15 16 17 18 19 20 21 22	SEC. 492. DEFINITIONS. In this part: (1) APPROPRIATE CONGRESSIONAL COMMITTEES.—The term "appropriate congressional committees" means— (A) the Committee on Energy and Commerce, the Committee on Foreign Affairs, and any other relevant committees on national security, the environment, and foreign policy of the

1	relevant committees on national security, the
2	environment, and foreign policy of the Senate.
3	(2) Most vulnerable developing coun-
4	TRIES.—The term "most vulnerable developing
5	countries" means, as determined by the Adminis-
6	trator of USAID, developing countries that are most
7	vulnerable to climate change impacts, and may in-
8	clude countries identified by the United Nations as
9	least developed countries, low-lying and other small
10	island developing countries, and other developing
11	countries that are at risk of substantial adverse im-
12	pacts of climate change and have limited capacity to
13	respond to such impacts, considering the approaches
14	included in any international treaties and agree-
15	ments.
16	(3) Program.—The term "Program" means
17	the International Climate Change Adaptation Pro-
18	gram established under section 493.
19	(4) USAID.—The term "USAID" means the
20	United States Agency for International Develop-
21	ment.
22	SEC. 493. ESTABLISHMENT.
23	The Secretary of State, working with the Adminis-
24	trator of USAID and the Administrator of the Environ-

1	mental Protection Agency, shall establish an International
2	Climate Change Adaptation Program within USAID.
3	SEC. 494. FUNCTIONS OF PROGRAM.
4	(a) Activities and Foreign Aid.—
5	(1) In general.—In order to achieve the pur-
6	poses under section 491, the Program may carry out
7	activities and projects and make grants to any pri-
8	vate or public group (including public international
9	organizations), association, or other entity engaged
10	in peaceful activities, to—
11	(A) provide assistance to the most vulner-
12	able developing countries for the development of
13	national or regional climate change adaptation
14	plans, associated national policies, and in the
15	planning, financing, and execution of adapta-
16	tion projects;
17	(B) support investments, capacity-building
18	activities, and other assistance, to reduce vul-
19	nerability and promote community-level resil-
20	ience related to climate change and its impacts
21	in the most vulnerable developing countries, in-
22	cluding impacts on water availability, agricul-
23	tural productivity, flood risk, coastal resources,
24	timing of seasons, biodiversity, economic liveli-
25	hoods, human migration, or other social, eco-

1	nomic, political, cultural, or environmental mat-
2	ters;
3	(C) support climate change adaptation re-
4	search in or for the most vulnerable developing
5	countries;
6	(D) encourage the protection and rehabili-
7	tation of natural systems, the enhancement and
8	diversification of agricultural, fishery, and other
9	livelihoods, and the reduction of disaster risk, in
10	order to reduce vulnerability and provide in-
11	creased resilience to climate change for local
12	communities and livelihoods in the most vulner-
13	able developing countries;
14	(E) support the deployment of technologies
15	that would help the most vulnerable developing
16	countries respond to the destabilizing impacts
17	of climate change and encourage the identifica-
18	tion and adoption of appropriate renewable and
19	efficient energy technologies that are beneficial
20	in increasing community-level resilience to the
21	impacts of global climate change in those coun-
22	tries; and
23	(F) encourage the engagement of local
24	communities through full disclosure of informa-
25	tion, consultation, and the communities' in-

1	formed participation relating to the develop-
2	ment of plans, programs and projects to in-
3	crease community-level resilience to climate
4	change impacts.
5	(2) Limitation.—Not more than 10 percent of
6	amounts made available to carry out this part shall
7	be spent in any single country in any year.
8	(3) Prioritizing assistance.—In providing
9	assistance under this part, the Administrator of
10	USAID shall give priority to countries that are most
11	vulnerable to the adverse impacts of climate change,
12	determined by the likelihood and severity of such im-
13	pacts and the country's capacity to adapt to such
14	impacts.
15	(b) Community Engagement.—
16	(1) The Administrator of USAID shall ensure
17	that local communities in areas where any projects
18	or activities are planned under the Program are en-
19	gaged through full disclosure of information, public
20	participation, and consultation.
21	(2) For each country receiving assistance under
22	the Program, the Administrator of USAID shall es-
23	tablish a process for consultation with, and disclo-
24	sure of information to, local, national, and inter-

1	national stakeholders regarding any projects and ac-
2	tivities planned under the Program.
3	(3) The Administrator of USAID shall, to the
4	extent practicable, ensure that projects or activities
5	under the Program are aligned with broader devel-
6	opment, poverty alleviation, or natural resource
7	management objectives and initiatives in the recipi-
8	ent country.
9	(c) Reporting.—
10	(1) Initial Report.—Not later than 180 days
11	after the date of enactment of this part, the Admin-
12	istrator of USAID shall submit to the President and
13	appropriate congressional committees an initial re-
14	port that—
15	(A) based on the most recent information
16	available from reliable public sources or knowl-
17	edge obtained by USAID on a reliable basis,
18	identifies the developing countries that are most
19	vulnerable to climate change impacts and in
20	which assistance may have the greatest and
21	most sustainable benefit to reducing vulner-
22	ability to climate change; and
23	(B) describes the process and methodology
24	for selecting the recipients of assistance or
25	grants under subsection (a)(1).

1	(2) Annual reports.—Not later than 12
2	months after the date on which the initial report is
3	submitted pursuant to paragraph (1), and annually
4	thereafter, the Administrator of the USAID shall
5	submit reports to the President and appropriate con-
6	gressional committees that—
7	(A) describe the extent to which global cli-
8	mate change, through its potential negative im-
9	pacts on sensitive populations and natural re-
10	sources in the most vulnerable developed coun-
11	tries, may threaten, cause, or exacerbate polit-
12	ical, economic, environmental, cultural, or social
13	instability or international conflict in those re-
14	gions;
15	(B) describe the ramifications of any po-
16	tentially destabilizing impacts climate change
17	may have on the national security, foreign pol-
18	icy, and economic interests of the United
19	States, including—
20	(i) the creation of refugees and inter-
21	nally displaced peoples;
22	(ii) international or internal armed
23	conflicts over water, food, land, or other
24	resources:

1	(iii) loss of agricultural and other live-
2	lihoods, cultural stability, and other causes
3	of increased poverty and economic desta-
4	bilization;
5	(iv) decline in availability of resources
6	needed for survival, including water;
7	(v) increased impact of natural disas-
8	ters (including droughts, flooding, and
9	other severe weather events);
10	(vi) increased prevalence or virulence
11	of climate-related diseases; and
12	(vii) intensified urban migration;
13	(C) describe how funds made available
14	under section 495 were spent during the pre-
15	vious calendar year to enhance the national se-
16	curity, foreign policy, and economic interests of
17	the United States and assist in avoiding the
18	economically, politically, environmentally, cul-
19	turally, and socially destabilizing impacts of cli-
20	mate change in most vulnerable developing
21	countries;
22	(D) identify and recommend the developing
23	countries that are most vulnerable to climate
24	change impacts and in which assistance may
25	have the greatest and most sustainable benefit

1	to reducing vulnerability to climate change, in-
2	cluding in the form of deploying technologies,
3	investments, capacity-building activities, and
4	other types of assistance for adaptation to cli-
5	mate change impacts and approaches to reduce
6	greenhouse gases in ways that may also provide
7	community-level resilience to climate change im-
8	pacts; and
9	(E) describe cooperation undertaken with
10	other nations and international organizations to
11	carry out this part.
12	SEC. 495. FUNDING.
13	(a) Distribution of Funds.—The Administrator
14	of USAID shall distribute the funds for the purposes of
15	this part.
16	(b) Oversight.—The Administrator of USAID shall
17	oversee the expenditures by the Program.
18	(e) Conditional Distribution to International
19	ADAPTATION FUNDS.—The Administrator of USAID
20	shall, after consulting with the Secretary of State, the Sec-
21	retary of the Treasury, and the Administrator of the Envi-
22	ronmental Protection Agency, distribute at least 40 per-
23	cent and up to 60 percent of the funds available to the
24	Program to an international fund that meets the require-
25	ments of subsection (d), if any such fund exists, and shall

1	annually certify in a report to Congress that any inter-
2	national fund receiving funds under this section meets the
3	requirements of subsection (d) or that no international
4	fund meeting the requirements of subsection (d) exists. In
5	the event that no fund meeting the requirements of sub-
6	section (e) exists, the Administrator shall distribute avail-
7	able funds directly in accordance with the requirements
8	of this part. The Administrator of USAID shall notify the
9	appropriate congressional committees not less than 15
10	days prior to an allocation or transfer of funds pursuant
11	to this subsection.
12	(d) International Fund Eligibility.—An inter-
13	national fund is eligible for funding under the Program
14	provided that it is created pursuant to the United Nations
15	Framework Convention on Climate Change, done at New
16	York on May 9, 1992, or an agreement negotiated under
17	the Convention and that the agreement—
18	(1) specifies the terms and conditions under
19	which the United States is to provide monies to the
20	fund, and under which the international fund is to
21	disburse monies to recipient countries;
22	(2) ensures that assistance from the United
23	States to the fund and the principal and income of
24	the fund are disbursed only for purposes that are

1	consistent with those described in paragraph
2	491(b)(1);
3	(3) requires a regular meeting of a governing
4	body of the international fund that includes rep-
5	resentation from most vulnerable developing coun-
6	tries and provides full public access;
7	(4) requires that local communities and indige-
8	nous peoples in areas where any activities or pro-
9	grams are planned are engaged through full disclo-
10	sure of information, public participation, and con-
11	sultation;
12	(5) spends not more than 10 percent of the
13	amounts available to the fund in any single country
14	in any year; and
15	(6) requires the international fund to prepare
16	and make public an annual report that—
17	(A) identifies and recommends the devel-
18	oping countries that are most vulnerable to cli-
19	mate change impacts and in which assistance
20	can have the greatest and most sustainable ben-
21	efit to reducing vulnerability to climate change;
22	(B) describes the process and methodology
23	for selecting the recipients of assistance or
24	grants from the fund;

1	(C) describes specific programs and
2	projects funded by the international fund and
3	the extent to which the assistance is addressing
4	the adaptation needs of the most vulnerable de-
5	veloping countries;
6	(D) describes the performance goals for as-
7	sistance authorized under the fund and ex-
8	presses such goals in an objective and quantifi-
9	able form, to the extent practicable;
10	(E) describes the performance indicators to
11	be used in measuring or assessing the achieve-
12	ment of the performance goals described in sub-
13	paragraph (D);
14	(F) provides a basis for recommendations
15	for adjustments to assistance authorized under
16	this part to enhance the impact of such assist-
17	ance; and
18	(G) describes the participation of other na-
19	tions and international organizations in funding
20	and governing the international fund.
21	SEC. 496. MONITORING AND EVALUATION OF PROGRAM.
22	(a) In General.—The Administrator of USAID
23	shall establish and implement a system to monitor and
24	evaluate the effectiveness and efficiency of assistance pro-
25	vided under this part in order to maximize the long-term

1	sustainable development impact of such assistance, includ-
2	ing the extent to which the assistance is meeting the pur-
3	poses of this part and addressing the adaptation needs of
4	developing countries.
5	(b) Goals.—In carrying out subsection (a), the Ad-
6	ministrator of USAID shall—
7	(1) in consultation with national governments
8	in recipient countries, establish performance goals
9	for assistance authorized under this part and ex-
10	press such goals in an objective and quantifiable
11	form, to the extent practicable;
12	(2) establish performance indicators to be used
13	in measuring or assessing the achievement of the
14	performance goals described in paragraph (1), in-
15	cluding an evaluation of the extent to which the Pro-
16	gram provides for full disclosure of information and
17	consultation and informed participation by local
18	communities and an evaluation of the extent to
19	which local communities participated in the projects
20	and programs implemented under this part and the
21	impacts of local community participation on the
22	goals and objectives of the projects and programs;
23	(3) provide a basis for recommendations for ad-
24	justments to assistance authorized under this part to
25	enhance the impact of such assistance; and

648

	(4) include in the annual report to Congress
2	and other relevant agencies required under section
3	494(c)(2), the monitoring and evaluation of pro-
1	grams subject to this section in its findings.