DISCUSSION DRAFT

	TH CONGRESS 1ST SESSION S.
,	To create clean energy jobs, achieve energy independence, reduce global warming pollution, and transition to a clean energy economy.
	IN THE SENATE OF THE UNITED STATES
_	and referred to the Committee on
То	A BILL create clean energy jobs, achieve energy independence, reduce global warming pollution, and transition to a clean energy economy.
1	Be it enacted by the Senate and House of Representa-
2	tives of the United States of America in Congress assembled,
3	SECTION 1. SHORT TITLE; TABLE OF CONTENTS.
4	(a) Short Title.—This Act may be cited as the
5	" Act".
6	(b) Table of Contents.—The table of contents of
7	this Act is as follows:
	Sec. 1. Short title; table of contents. Sec. 2. Definitions

Sec. 3. International participation.

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- Sec. 211. State programs addressing climate change and related impacts.

- Sec. 212. Climate Change Health Protection and Promotion Fund.
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1 SEC. 2. FINDINGS.

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- 2 Congress finds that—
- (1) the United States can take back control of the energy future of the United States to strengthen economic competitiveness, safeguard the health of families and the environment, and ensure the national security, of the United States by increasing energy independence;
 - (2) creating a clean energy future requires a comprehensive approach that includes support for the improvement of all energy sources, including coal, natural gas, nuclear power, and renewable generation;
 - (3) efficiency in the energy sector also represents a critical avenue to reduce energy consumption and carbon pollution, and those benefits can be captured while generating additional savings for consumers;
 - (4) substantially increasing the investment in the clean energy future of the United States will provide economic opportunities to millions of people in the United States and drive future economic growth in this country;

1	(5) the United States is responsible for many of
2	the initial scientific advances in clean energy tech-
3	nology, but, as of the date of enactment of this Act,
4	the United States has only 4 of the top 30 leading
5	companies in solar, wind, and advanced battery tech-
6	nology;
7	(6) investment in the clean energy sector will
8	allow companies in the United States to retake a
9	leadership position, and the jobs created by those in-
10	vestments will significantly accelerate growth in do-
11	mestic manufacturing;
12	(7) those opportunities also will result in sub-
13	stantial employment gains in construction, a sector
14	in which the median hourly wage is 17 percent high-
15	er than the national median;
16	(8) those jobs are distributed throughout the
17	United States, and the highest clean energy economy
18	employment growth rates in the last 10 years were
19	in the States of Idaho, Nebraska, South Dakota, Or-
20	egon, and New Mexico;
21	(9) focusing on clean energy will dramatically
22	reduce pollution and significantly improve the health
23	of families in and the environment of the United
24	States;

1	(10) moving to a low-carbon economy must pro-
2	tect the most vulnerable populations in the United
3	States, including low-income families that are par-
4	ticularly affected by volatility in energy prices;
5	(11) if unchecked, the impact of climate change
6	will include widespread health effects, including—
7	(A) increased outbreaks from waterborne
8	diseases;
9	(B) more droughts;
10	(C) diminished agricultural production;
11	(D) severe storms and floods;
12	(E) heat waves;
13	(F) wildfires; and
14	(G) a substantial rise in sea levels, due in
15	part to—
16	(i) melting mountain glaciers;
17	(ii) shrinking sea ice; and
18	(iii) thawing permafrost;
19	(12) the most recent science indicates that the
20	changes described in paragraph (11)(G) are occur-
21	ring faster and with greater intensity than expected;
22	(13) military officials, including retired admi-
23	rals and generals, concur with the intelligence com-
24	munity that climate change acts as a threat multi-

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agreement).

1 plier for instability and presents significant national 2 security challenges for the United States; 3 (14) massive portions of the infrastructure of 4 the United States, including critical military infra-5 structure, are at risk from the effects of climate 6 change; 7 (15) impacts are already being felt in local com-8 munities within the United States as well as by at-9 risk populations abroad; 10 (16) the Declaration of the Leaders from the 11 Major Economies Forum on Energy and Climate, 12 representing 17 of the largest economies in the 13 world, recognizes the need to limit the increase in 14 global average temperatures to within 2 degrees 15 Centigrade, as a necessary step to prevent the cata-16 strophic consequences of climate change; and 17 (17) the United States should lead the global 18 community in combating the threat of global climate 19 change and reaching a robust international agree-20 ment to address global warming under the United 21 Nations Framework Convention on Climate Change, 22 done at New York on May 9, 1992 (or a successor

1 SEC. 3. ECONOMYWIDE EMISSION REDUCTION GOALS.

- 2 The goals of this Act and the amendments made by
- 3 this Act are to reduce steadily the quantity of United
- 4 States greenhouse gas emissions such that—
- 5 (1) in 2012, the quantity of United States
- 6 greenhouse gas emissions does not exceed 97 percent
- 7 of the quantity of United States greenhouse gas
- 8 emissions in 2005;
- 9 (2) in 2020, the quantity of United States
- 10 greenhouse gas emissions does not exceed 80 percent
- of the quantity of United States greenhouse gas
- emissions in 2005;
- 13 (3) in 2030, the quantity of United States
- greenhouse gas emissions does not exceed 58 percent
- of the quantity of United States greenhouse gas
- emissions in 2005; and
- 17 (4) in 2050, the quantity of United States
- greenhouse gas emissions does not exceed 17 percent
- of the quantity of United States greenhouse gas
- emissions in 2005.
- 21 SEC. 4. DEFINITIONS.
- 22 In this Act:
- 23 (1) Administrator.—The term "Adminis-
- trator" means the Administrator of the Environ-
- 25 mental Protection Agency.

1	(2) Indian tribe.—The term "Indian tribe"
2	has the meaning given the term in section 302 of the
3	Clean Air Act (42 U.S.C. 7602).
4	(3) State.—The term "State" has the mean-
5	ing given that term in section 302 of the Clean Air
6	Act (42 U.S.C. 7602).
7	DIVISION A—AUTHORIZATIONS
8	FOR POLLUTION REDUCTION,
9	TRANSITION, AND ADAPTA-
10	TION
11	SEC. 101. STRUCTURE OF ACT.
12	(a) Allocated Programs.—The following pro-
13	grams authorized under this division are eligible to receive
14	an allocation under title VII of the Clean Air Act:
15	(1) The program for greenhouse gas emission
16	reductions through transportation efficiency under
17	section of this division.
18	(2) The program for State and local investment
19	in energy efficiency under section of this di-
20	vision.
21	(3) The program for energy efficiency in build-
22	ing codes under section of this division.
23	(4) The program for retrofit for energy and en-
24	vironmental performance under section of
25	this division.

1	(5) The program for nuclear worker training
2	under section of this division.
3	(6) The program for agricultural greenhouse
4	gas reductions under section of this division.
5	(7) The Coastal State Adaptation Program
6	under section of this division.
7	(8) The program for water system mitigation
8	and adaptation partnerships under section of
9	this division.
10	(9) The program for wildfire under section
11	of this division.
12	(10) The program for flood control, protection,
13	prevention and response under section of
14	this division.
15	(11) The program for international adaptation
16	under section of this division.
17	(12) The program for international clean tech-
18	nology deployment under section of this divi-
19	sion.
20	(13) The program for supplemental reductions
21	from reduced deforestation under section of
22	this division.
23	(14) The program for public health and climate
24	change under section of this division.

1	(15) The program for climate change safe-
2	guards for natural resources conservation under sec-
3	tion of this division.
4	(b) Nonallocated Programs.—The following pro-
5	grams are authorized under this division:
6	(1) The SmartWayTransportation Efficiency
7	Program under section of this division.
8	(2) The Carbon Capture and sequestration
9	demonstration and early deployment program under
10	section of this division.
11	(3) The program for nuclear waste research
12	and development under section of this divi-
13	sion.
14	(4) The Clean Energy and Accelerated Emis-
15	sion Reduction Program under section of
16	this division.
17	(5) The program for natural gas advanced tech-
18	nology research and development under section
19	of this division.
20	(6) The Clean Technology Business Competi-
21	tion Grant Program under section of this di-
22	vision.
23	(7) The Product Carbon Disclosure Program
24	under section of this division.

1	(8) The program for renewable energy under
2	section of this division.
3	(9) The program for advanced biofuels under
4	section of this division.
5	(10) The program for drinking water adapta-
6	tion, technology, education, and research under sec-
7	tion of this division.
8	(11) The program for clean energy curriculum
9	development grants under section of this di-
10	vision.
11	(12) The Energy Worker Training Program
12	under section of this division.
13	(13) The Green Construction Careers Dem-
14	onstration Project under section of this divi-
15	sion.
16	(14) The Economic Development Climate
17	Change Fund under section of this division
18	TITLE I—GREENHOUSE GAS
19	REDUCTION PROGRAMS
20	Subtitle A—Clean Transportation
21	SEC. 111. EMISSION STANDARDS.
22	[Title VIII of the Clean Air Act, as added by section
23	121 of division B, is amended by inserting after part A
24	the following new part:

1 "PART B-MOBILE SOURCES 2 "SEC. 821. GREENHOUSE GAS EMISSION STANDARDS FOR 3 MOBILE SOURCES. 4 "(a) New Motor Vehicles and New Motor Ve-HICLE ENGINES.—(1) Pursuant to section 202(a)(1), by December 31, 2010, the Administrator shall promulgate 6 standards applicable to emissions of greenhouse gases 7 8 from new heavy-duty motor vehicles or new heavy-duty 9 motor vehicle engines, excluding such motor vehicles cov-10 ered by the Tier II standards (as established by the Ad-11 ministrator as of the date of enactment of this section). 12 The Administrator may revise these standards from time 13 to time. 14 "(2) Regulations issued under section 202(a)(1) ap-15 plicable to emissions of greenhouse gases from new heavy-16 duty motor vehicles or new heavy-duty motor vehicle en-17 gines, excluding such motor vehicles covered by the Tier 18 II standards (as established by the Administrator as of 19 the date of enactment of this section), shall contain stand-20 ards that reflect the greatest degree of emission reduction 21 achievable through the application of technology which the 22 Administrator determines will be available for the model year to which such standards apply, giving appropriate consideration to cost, energy, and safety factors associated 25 with the application of such technology. Any such regula-

tions shall take effect after such period as the Adminis-

- 1 trator finds necessary to permit the development and ap-
- 2 plication of the requisite technology, and, at a minimum,
- 3 shall apply for a period no less than 3 model years begin-
- 4 ning no earlier than the model year commencing 4 years
- 5 after such regulations are promulgated.
- 6 "(3) Regulations issued under section 202(a)(1) ap-
- 7 plicable to emissions of greenhouse gases from new heavy-
- 8 duty motor vehicles or new heavy-duty motor vehicle en-
- 9 gines, excluding such motor vehicles covered by the Tier
- 10 II standards (as established by the Administrator as of
- 11 the date of enactment of this section), shall supersede and
- 12 satisfy any and all of the rulemaking and compliance re-
- 13 quirements of section 32902(k) of title 49, United States
- 14 Code.
- 15 "(4) Other than as specifically set forth in paragraph
- 16 (3) of this subsection, nothing in this section shall affect
- 17 or otherwise increase or diminish the authority of the Sec-
- 18 retary of Transportation to adopt regulations to improve
- 19 the overall fuel efficiency of the commercial goods move-
- 20 ment system.
- 21 "(b) Nonroad Vehicles and Engines.—(1) Pur-
- 22 suant to section 213(a)(4) and (5), the Administrator
- 23 shall identify those classes or categories of new nonroad
- 24 vehicles or engines, or combinations of such classes or cat-
- 25 egories, that, in the judgment of the Administrator, both

- 1 contribute significantly to the total emissions of green-
- 2 house gases from nonroad engines and vehicles, and pro-
- 3 vide the greatest potential for significant and cost-effective
- 4 reductions in emissions of greenhouse gases. The Adminis-
- 5 trator shall promulgate standards applicable to emissions
- 6 of greenhouse gases from these new nonroad engines or
- 7 vehicles by December 31, 2012. The Administrator shall
- 8 also promulgate standards applicable to emissions of
- 9 greenhouse gases for such other classes and categories of
- 10 new nonroad vehicles and engines as the Administrator de-
- 11 termines appropriate and in the timeframe the Adminis-
- 12 trator determines appropriate. The Administrator shall
- 13 base such determination, among other factors, on the rel-
- 14 ative contribution of greenhouse gas emissions, and the
- 15 costs for achieving reductions, from such classes or cat-
- 16 egories of new nonroad engines and vehicles. The Adminis-
- 17 trator may revise these standards from time to time.
- "
 (2) Standards under section 213(a)(4) and (5) ap-
- 19 plicable to emissions of greenhouse gases from those class-
- 20 es or categories of new nonroad engines or vehicles identi-
- 21 fied in the first sentence of paragraph (1) of this sub-
- 22 section, shall achieve the greatest degree of emission re-
- 23 duction achievable based on the application of technology
- 24 which the Administrator determines will be available at
- 25 the time such standards take effect, taking into consider-

- 1 ation cost, energy, and safety factors associated with the
- 2 application of such technology. Any such regulations shall
- 3 take effect after such period as the Administrator finds
- 4 necessary to permit the development and application of the
- 5 requisite technology.
- 6 "(3) For purposes of this section and standards
- 7 under section 213(a)(4) or (5) applicable to emissions of
- 8 greenhouse gases, the term 'nonroad engines and vehicles'
- 9 shall include non-internal combustion engines and the ve-
- 10 hicles these engines power (such as electric engines and
- 11 electric vehicles), for those non-internal combustion en-
- 12 gines and vehicles which would be in the same category
- 13 and have the same uses as nonroad engines and vehicles
- 14 that are powered by internal combustion engines.
- 15 "(c) AIRCRAFT AND AIRCRAFT ENGINES.—
- 16 "(1) Pursuant to section 231(a), the Adminis-
- trator shall promulgate standards applicable to emis-
- sions of greenhouse gases from new aircraft and new
- engines used in aircraft by December 31, 2012. Not-
- withstanding any requirement in section 231(a), the
- Administrator, in consultation with the Adminis-
- trator of the Federal Aviation Administration, shall
- also promulgate standards applicable to emissions of
- greenhouse gases from other classes and categories
- of aircraft and aircraft engines for such classes and

categories as the Administrator determines appropriate and in the timeframe the Administrator determines appropriate. The Administrator may revise

4 these standards from time to time.

"(2) Standards under section 231(a) applicable to emissions of greenhouse gases from new aircraft and new engines used in aircraft, and any later revisions or additional standards, shall achieve the greatest degree of emission reduction achievable based on the application of technology which the Administrator determines will be available at the time such standards take effect, taking into consideration cost, energy, and safety factors associated with the application of such technology. Any such standards shall take effect after such period as the Administrator finds necessary to permit the development and application of the requisite technology.

"(d) Averaging, Banking, and Trading of Emissions Credits.—In establishing standards applicable to emissions of greenhouse gases pursuant to this section and sections 202(a), 213(a)(4) and (5), and 231(a), the Administrator may establish provisions for averaging, banking, and trading of greenhouse gas emissions credits within or across classes or categories of motor vehicles and motor vehicle engines, nonroad vehicles and engines (in-

- 1 cluding marine vessels), and aircraft and aircraft engines,
- 2 to the extent the Administrator determines appropriate
- 3 and considering the factors appropriate in setting stand-
- 4 ards under those sections. Such provisions may include
- 5 reasonable and appropriate provisions concerning genera-
- 6 tion, banking, trading, duration, and use of credits.
- 7 "(e) Reports.—The Administrator shall, from time
- 8 to time, submit a report to Congress that projects the
- 9 amount of greenhouse gas emissions from the transpor-
- 10 tation sector, including transportation fuels, for the years
- 11 2030 and 2050, based on the standards adopted under
- 12 this section.
- 13 "(f) Greenhouse Gases.—Notwithstanding the
- 14 provisions of section 711, hydrofluorocarbons shall be con-
- 15 sidered a greenhouse gas for purposes of this section.".
- 16 SEC. 112. GREENHOUSE GAS EMISSION REDUCTIONS
- 17 THROUGH TRANSPORTATION EFFICIENCY.
- 18 (a) IN GENERAL.—[Title VIII of the Clean Air Act,
- 19 as added by section 121 of division B, is further amended
- 20 by inserting after part C the following new part]:
- 21 "PART D—TRANSPORTATION EMISSIONS
- 22 "SEC. 841. GREENHOUSE GAS EMISSION REDUCTIONS
- 23 THROUGH TRANSPORTATION EFFICIENCY.
- 24 "(a) IN GENERAL.—The Administrator, in consulta-
- 25 tion with the Secretary of Transportation (referred to in

1	this part as the 'Secretary'), shall promulgate, and update
2	from time to time, regulations to establish—
3	"(1) national transportation-related greenhouse
4	gas emission reduction goals that are commensurate
5	with the emission reduction goals established under
6	the [Act] and amendments made by
7	that Act;
8	"(2) standardized emission models and related
9	methods, to be used by States, metropolitan plan-
10	ning organizations, and air quality agencies to ad-
11	dress emission reduction goals, including—
12	"(A) the development of surface transpor-
13	tation-related greenhouse gas emission reduc-
14	tion targets pursuant to sections 134 and 135
15	of title 23, and sections 5303 and 5304 of title
16	49, United States Code;
17	"(B) the assessment of projected surface
18	transportation-related greenhouse gas emissions
19	from transportation strategies;
20	"(C) the assessment of projected surface
21	transportation-related greenhouse gas emissions
22	from State and regional transportation plans;
23	"(D) the establishment of surface trans-
24	portation-related greenhouse gas emission base

1	lines at a national, State, and regional level;
2	and
3	"(E) the measurement and assessment of
4	actual surface transportation-related emissions
5	to assess progress toward achievement of emis-
6	sion targets at the State and regional level;
7	"(3) methods for collection of data on transpor-
8	tation-related greenhouse gas emissions; and
9	"(4) publication and distribution of successful
10	strategies employed by States, metropolitan planning
11	organizations, and other entities to reduce transpor-
12	tation-related greenhouse gas emissions.
13	"(b) Role of Department of Transpor-
14	TATION.—The Secretary, in consultation with the Admin-
15	istrator, shall promulgate, and update from time to time,
16	regulations—
17	"(1) to improve the ability of transportation
18	planning models and tools, including travel demand
19	models, to address greenhouse gas emissions;
20	"(2) to assess projected surface transportation-
21	related travel activity and transportation strategies
22	from State and regional transportation plans; and
23	"(3) to update transportation planning require-
24	ments and approval of transportation plans as nec-
25	essary to carry out this section

1	"(c) Consultation and Models.—In promul-
2	gating the regulations, the Administrator and the Sec-
3	retary—
4	"(1) shall consult with States, metropolitan
5	planning organizations, and air quality agencies;
6	"(2) may use existing models and methodolo-
7	gies if the models and methodologies are widely con-
8	sidered to reflect the best practicable modeling or
9	methodological approach for assessing actual and
10	projected transportation-related greenhouse gas
11	emissions from transportation plans and projects;
12	and
13	"(3) shall consider previously developed plans
14	that were based on models and methodologies for re-
15	ducing greenhouse gas emissions in applying those
16	regulations to the first approvals after promulgation.
17	"(d) Timing.—The Administrator and the Secretary
18	shall—
19	"(1) publish proposed regulations under sub-
20	sections (a) and (b) not later than 1 year after the
21	date of enactment of this section; and
22	"(2) promulgate final regulations under sub-
23	sections (a) and (b) not later than 18 months after
24	the date of enactment of this section.
25	"(e) Assessment.—

1	"(1) In general.—At least every 6 years after
2	promulgating final regulations under subsections (a)
3	and (b), the Administrator and the Secretary shall
4	jointly assess current and projected progress in re-
5	ducing national transportation-related greenhouse
6	gas emissions.
7	"(2) Requirements.—The assessment shall
8	examine the contributions to emission reductions at-
9	tributable to—
10	"(A) improvements in vehicle efficiency;
11	"(B) greenhouse gas performance of trans-
12	portation fuels;
13	"(C) reductions in vehicle miles traveled;
14	"(D) changes in consumer demand and use
15	of transportation management systems; and
16	"(E) any other greenhouse gas-related
17	transportation policies enacted by Congress.
18	"(3) Results of Assessment.—The Sec-
19	retary and the Administrator shall consider—
20	"(A) the results of the assessment con-
21	ducted under this subsection; and
22	"(B) based on those results, whether tech-
23	nical or other updates to regulations required
24	under this section and sections 134 and 135 of

1	title 23, and sections 5303 and 5304 of title 49,
2	United States Code, are necessary.".
3	(b) Metropolitan Planning Organizations.—
4	(1) Title 23.—Section 134 of title 23, United
5	States Code, is amended—
6	(A) in subsection (a)(1)—
7	(i) by striking "minimizing" and in-
8	serting "reducing"; and
9	(ii) by inserting ", reliance on oil, im-
10	pacts on the environment, transportation-
11	related greenhouse gas emissions," after
12	"consumption";
13	(B) in subsection $(h)(1)(E)$ —
14	(i) by inserting "sustainability, and
15	livability, reduce surface transportation-re-
16	lated greenhouse gas emissions and reli-
17	ance on oil, adapt to the effects of climate
18	change," after "energy conservation,";
19	(ii) by inserting "and public health"
20	after "quality of life"; and
21	(iii) by inserting ", including housing
22	and land use patterns" after "development
23	patterns";
24	(C) in subsection (i)—
25	(i) in paragraph (4)(A)—

1	(I) by striking "consult, as ap-
2	propriate," and inserting "cooperate";
3	(II) by inserting "transportation
4	public transportation, air quality, and
5	housing, and shall consult, as appro-
6	priate, with State and local agencies
7	responsible for" after "responsible
8	for" and
9	(III) by inserting "public
10	health," after "conservation,"; and
11	(ii) in paragraph (5)(C)(iii), by insert-
12	ing "and through the website of the metro-
13	politan planning organization, including
14	emission reduction targets and strategies
15	developed under subsection (k)(6), includ-
16	ing an analysis of the anticipated effects of
17	the targets and strategies," after "World
18	Wide Web"; and
19	(D) in subsection (k), by adding at the end
20	the following:
21	"(6) Transportation greenhouse gas re-
22	DUCTION EFFORTS.—
23	"(A) In general.—Within a metropolitan
24	planning area serving a transportation manage-
25	ment area, the transportation planning process

1	under this section shall address transportation-
2	related greenhouse gas emissions by including
3	emission reduction targets and strategies to
4	meet those targets.
5	"(B) ELIGIBLE ORGANIZATIONS.—
6	"(i) MPOS WITHIN TMAS.—All provi-
7	sions and requirements of this section, in-
8	cluding the requirements of the transpor-
9	tation greenhouse gas reduction efforts,
10	shall apply to metropolitan planning orga-
11	nizations that also serve as transportation
12	management areas.
13	"(ii) Other Mpos.—A metropolitan
14	planning organization that does not serve
15	as a transportation management area—
16	"(I) may develop transportation
17	greenhouse gas emission reduction
18	targets and strategies to meet those
19	targets; and
20	(Π) if those targets and strate-
21	gies are developed, shall be subject to
22	all provisions and requirements of this
23	section [and section of the
24	[Act]], including re-

1	quirements of the transportation
2	greenhouse gas reduction efforts.
3	"(C) ESTABLISHMENT OF TARGETS AND
4	CRITERIA.—
5	"(i) In general.—Not later than 2
6	years after the promulgation of the final
7	regulations required under [section 841 of
8	the Clean Air Act], each metropolitan
9	planning organization that also serves as a
10	transportation management area shall de-
11	velop surface transportation-related green-
12	house gas emission reduction targets, as
13	well as strategies to meet those targets, in
14	consultation with State air agencies as
15	part of the metropolitan transportation
16	planning process under this section.
17	"(ii) Multiple designations.—If
18	more than 1 metropolitan planning organi-
19	zation has been designated within a metro-
20	politan area, each metropolitan planning
21	organization shall coordinate with other
22	metropolitan planning organizations in the
23	same metropolitan area to develop the tar-
24	gets and strategies described in clause (i).

1	"(III) MINIMUM REQUIREMENTS.—
2	Each metropolitan transportation plan de-
3	veloped by a metropolitan planning organi-
4	zation under clause (i) shall, within the
5	plan, demonstrate progress in stabilizing
6	and reducing transportation-related green-
7	house gas emissions so as to contribute to
8	the achievement of State targets pursuant
9	to section $135(f)(9)$.
10	"(iv) Requirements for targets
11	AND STRATEGIES.—The targets and strat-
12	egies developed under this subparagraph
13	shall, at a minimum—
14	"(I) be based on the emission
15	and travel demand models and related
16	methodologies established in the final
17	regulations required under [section
18	841 of the Clean Air Act];
19	"(II) inventory all sources of sur-
20	face transportation-related greenhouse
21	gas emissions;
22	"(III) apply to those modes of
23	surface transportation that are ad-
24	dressed in the planning process under
25	this section;

1	"(IV) be integrated and con-
2	sistent with regional transportation
3	plans and transportation improvement
4	programs; and
5	"(V) be selected through scenario
6	analysis, and include, pursuant to the
7	requirements of the transportation
8	planning process under this section,
9	transportation investment and man-
10	agement strategies that reduce green-
11	house gas emissions from the trans-
12	portation sector over the life of the
13	plan, such as—
14	"(aa) efforts to increase
15	public transportation ridership,
16	including through service im-
17	provements, capacity expansions,
18	and access enhancement;
19	"(bb) efforts to increase
20	walking, bicycling, and other
21	forms of nonmotorized transpor-
22	tation;
23	"(ce) implementation of zon-
24	ing and other land use regula-
25	tions and plans to support infill,

1	transit-oriented development, re-
2	development, or mixed use devel-
3	opment;
4	"(dd) travel demand man-
5	agement programs (including
6	carpool, vanpool, or car-share
7	projects), transportation pricing
8	measures, parking policies, and
9	programs to promote telecom-
10	muting, flexible work schedules,
11	and satellite work centers;
12	"(ee) surface transportation
13	system operation improvements,
14	including intelligent transpor-
15	tation systems or other oper-
16	ational improvements to reduce
17	long-term greenhouse gas emis-
18	sions through reduced congestion
19	and improved system manage-
20	ment;
21	"(ff) intercity passenger rail
22	improvements;
23	"(gg) intercity bus improve-
24	ments;

1	"(hh) freight rail improve-
2	ments;
3	"(ii) use of materials or
4	equipment associated with the
5	construction or maintenance of
6	transportation projects that re-
7	duce greenhouse gas emissions;
8	"(jj) public facilities for sup-
9	plying electricity to electric or
10	plug-in hybrid-electric vehicles; or
11	"(kk) any other effort that
12	demonstrates progress in reduc-
13	ing transportation-related green-
14	house gas emissions in each met-
15	ropolitan planning organization
16	under this subsection.
17	"(D) REVIEW AND APPROVAL.—Not later
18	than 180 days after the date of submission of
19	a plan under this section—
20	"(i) the Secretary and the Adminis-
21	trator shall review the plan; and
22	"(ii) the Secretary shall approve a
23	plan developed by a metropolitan planning
24	organization pursuant to subparagraph (C)
25	if—

1	"(I) the Secretary finds that a
2	metropolitan planning organization
3	has developed, submitted, and pub-
4	lished the plan of the metropolitan
5	planning organization pursuant to this
6	section;
7	"(II) the Secretary, in consulta-
8	tion with the Administrator, deter-
9	mines that the plan is likely to achieve
10	the targets established by the metro-
11	politan planning organization under
12	this subsection; and
13	"(III) the development of the
14	plan complies with the minimum re-
15	quirements established under clauses
16	(iii) and (iv) of subparagraph (C).
17	"(E) Certification.—Failure to comply
18	with the requirements under subparagraph (C)
19	shall not impact certification standards under
20	paragraph (5).
21	"(7) Definition of metropolitan planning
22	ORGANIZATION.—In this subsection, the term 'met-
23	ropolitan planning organization' means a metropoli-
24	tan planning organization described in clause (i) or
25	(ii) of paragraph (6)(B).

1	"(8) Scenario analysis.—The term 'scenario
2	analysis' means the use of a planning tool that—
3	"(A) develops a range of scenarios rep-
4	resenting various combinations of transpor-
5	tation and land use strategies, and estimates of
6	how each of those scenarios would perform in
7	meeting the greenhouse gas emission reduction
8	targets based on analysis of various forces
9	(such as health, transportation, economic or en-
10	vironmental factors, and land use) that affect
11	growth;
12	"(B) may include features such as—
13	"(i) the involvement of the general
14	public, key stakeholders, and elected offi-
15	cials on a broad scale;
16	"(ii) the creation of an opportunity
17	for those participants to educate each
18	other as to growth trends and trade-offs,
19	as a means to incorporate values and feed-
20	back into future plans; and
21	"(iii) the use of continuing efforts and
22	ongoing processes; and
23	"(C) may include key elements such as—
24	"(i) identification of the driving forces
25	behind planning decisions and outcomes;

1	"(ii) determination of patterns of
2	interaction;
3	"(iii) creation of scenarios for discus-
4	sion purposes;
5	"(iv) analysis of implications;
6	"(v) evaluation of scenarios; and
7	"(vi) use of monitoring indicators.".
8	(2) Title 49.—Section 5303 of title 49, United
9	States Code, is amended—
10	(A) in subsection (a)(1)—
11	(i) by striking "minimizing" and in-
12	serting "reducing"; and
13	(ii) by inserting ", reliance on oil, im-
14	pacts on the environment, transportation-
15	related greenhouse gas emissions," after
16	"consumption";
17	(B) in subsection $(h)(1)(E)$ —
18	(i) by inserting "sustainability, and
19	livability, reduce surface transportation-re-
20	lated greenhouse gas emissions and reli-
21	ance on oil, adapt to the effects of climate
22	change," after "energy conservation,";
23	(ii) by inserting "and public health"
24	after "quality of life"; and

1	(iii) by inserting ", including housing
2	and land use patterns" after "development
3	patterns";
4	(C) in subsection (i)—
5	(i) in paragraph (4)(A)—
6	(I) by striking "consult, as ap-
7	propriate," and inserting "cooperate";
8	(II) by inserting "transportation
9	public transportation, air quality, and
10	housing, and shall consult, as appro-
11	priate, with State and local agencies
12	responsible for" after "responsible
13	for' and
14	(III) by inserting "public
15	health," after "conservation,"; and
16	(ii) in paragraph (5)(C)(iii), by insert-
17	ing "and through the website of the metro-
18	politan planning organization, including
19	emission reduction targets and strategies
20	developed under subsection (k)(6), includ-
21	ing an analysis of the anticipated effects of
22	the targets and strategies," after "World
23	Wide Web"; and
24	(D) in subsection (k), by adding at the end
25	the following:

1	"(6) Transportation greenhouse gas re-
2	DUCTION EFFORTS.—
3	"(A) IN GENERAL.—Within a metropolitan
4	planning area serving a transportation manage-
5	ment area, the transportation planning process
6	under this section shall address transportation-
7	related greenhouse gas emissions by including
8	emission reduction targets and strategies to
9	meet those targets.
10	"(B) Eligible organizations.—
11	"(i) In general.—The requirements
12	of the transportation greenhouse gas re-
13	duction efforts shall apply only to metro-
14	politan planning organizations within a
15	transportation management area.
16	"(ii) Development of Plan.—A
17	metropolitan planning organization that
18	does not serve as a transportation manage-
19	ment area—
20	"(I) may develop transportation
21	greenhouse gas emission reduction
22	targets and strategies to meet those
23	targets; and
24	"(II) if those targets and strate-
25	gies are developed, shall be subject to

1 all provisions and requirements of this
2 section, including requirements of the
3 transportation greenhouse gas reduc
4 tion efforts.
5 "(C) Establishment of targets and
6 CRITERIA.——
7 "(i) IN GENERAL.—Not later than 2
8 years after the promulgation of the final
9 regulations required under [section 841 o
the Clean Air Act], each metropolitan
planning organization shall develop surface
transportation-related greenhouse ga
emission reduction targets, as well a
strategies to meet those targets, in con
sultation with State air agencies as part o
the metropolitan transportation planning
17 process under this section.
18 "(ii) Multiple designations.—I
more than 1 metropolitan planning organi
zation has been designated within a metro
politan area, each metropolitan planning
organization shall coordinate with othe
23 metropolitan planning organizations in the
same metropolitan area to develop the tar
25 gets and strategies described in clause (i)

1	"(iii) Minimum requirements.—
2	Each metropolitan transportation plan de-
3	veloped by a metropolitan planning organi-
4	zation under clause (i) shall, within the
5	plan, demonstrate progress in stabilizing
6	and reducing transportation-related green-
7	house gas emissions so as to contribute to
8	the achievement of State targets pursuant
9	to section $135(f)(9)$ of title 23.
10	"(iv) Requirements for targets
11	AND STRATEGIES.—The targets and strat-
12	egies developed under this subparagraph
13	shall, at a minimum—
14	"(I) be based on the emission
15	models and related methodologies es-
16	tablished in the final regulations re-
17	quired under [section 841 of the
18	Clean Air Act];
19	"(II) inventory all sources of sur-
20	face transportation-related greenhouse
21	gas emissions;
22	"(III) apply to those modes of
23	surface transportation that are ad-
24	dressed in the planning process under
25	this section;

1	"(IV) be integrated and con-
2	sistent with regional transportation
3	plans and transportation improvement
4	programs; and
5	"(V) be selected through scenario
6	analysis (as defined in section 134(k)
7	of title 23), and include, pursuant to
8	the requirements of the transportation
9	planning process under this section,
10	transportation investment and man-
11	agement strategies that reduce green-
12	house gas emissions from the trans-
13	portation sector over the life of the
14	plan, such as—
15	"(aa) efforts to increase
16	public transportation ridership,
17	including through service im-
18	provements, capacity expansions,
19	and access enhancement;
20	"(bb) efforts to increase
21	walking, bicycling, and other
22	forms of nonmotorized transpor-
23	tation;
24	"(cc) implementation of zon-
25	ing and other land use regula-

1	tions and plans to support infill,
2	transit-oriented development, re-
3	development, or mixed use devel-
4	opment;
5	"(dd) travel demand man-
6	agement programs (including
7	carpool, vanpool, or car-share
8	projects), transportation pricing
9	measures, parking policies, and
10	programs to promote telecom-
11	muting, flexible work schedules,
12	and satellite work centers;
13	"(ee) surface transportation
14	system operation improvements,
15	including intelligent transpor-
16	tation systems or other oper-
17	ational improvements to reduce
18	long-term greenhouse gas emis-
19	sions through reduced congestion
20	and improved system manage-
21	ment;
22	"(ff) intercity passenger rail
23	improvements;
24	"(gg) intercity bus improve-
25	ments;

1	"(hh) freight rail improve-
2	ments;
3	"(ii) use of materials or
4	equipment associated with the
5	construction or maintenance of
6	transportation projects that re-
7	duce greenhouse gas emissions;
8	"(jj) public facilities for sup-
9	plying electricity to electric or
10	plug-in hybrid-electric vehicles; or
11	"(kk) any other effort that
12	demonstrates progress in reduc-
13	ing transportation-related green-
14	house gas emissions in each met-
15	ropolitan planning organization
16	under this subsection.
17	"(D) REVIEW AND APPROVAL.—Not later
18	than 180 days after the date of submission of
19	a plan under this section—
20	"(i) the Secretary and the Adminis-
21	trator shall review the plan; and
22	"(ii) the Secretary shall approve a
23	plan developed by a metropolitan planning
24	organization pursuant to subparagraph (C)
25	if—

1	"(I) the Secretary finds that a
2	metropolitan planning organization
3	has developed, submitted, and pub-
4	lished the plan of the metropolitan
5	planning organization pursuant to this
6	section;
7	"(II) the Secretary, in consulta-
8	tion with the Administrator, deter-
9	mines that the plan is likely to achieve
10	the targets established by the metro-
11	politan planning organization under
12	this subsection; and
13	"(III) the development of the
14	plan complies with the minimum re-
15	quirements established under clauses
16	(iii) and (iv) of subparagraph (C).
17	"(E) Certification.—Failure to comply
18	with the requirements under subparagraph (C)
19	shall not impact certification standards under
20	paragraph (5).
21	"(7) Definition of metropolitan planning
22	ORGANIZATION.—In this subsection, the term 'met-
23	ropolitan planning organization' means a metropoli-
24	tan planning organization described in clause (i) or
25	(ii) of paragraph (6)(B).".

1	(c) States.—
2	(1) Title 23.—Section 135 of title 23, United
3	States Code, is amended—
4	(A) in subsection $(d)(1)(E)$ —
5	(i) by inserting "sustainability, and
6	livability, reduce surface transportation-re-
7	lated greenhouse gas emissions and reli-
8	ance on oil, adapt to the effects of climate
9	change," after "energy conservation,";
10	(ii) by inserting "and public health"
11	after "quality of life"; and
12	(iii) by inserting ", including housing
13	and land use patterns" after "development
14	patterns"; and
15	(B) in subsection (f)—
16	(i) in paragraph (2)(D)(i)—
17	(I) by striking ", as appropriate,
18	in consultation" and inserting "in co-
19	operation";
20	(II) by inserting "State and local
21	agencies responsible for transpor-
22	tation, public transportation, air qual-
23	ity, and housing and in consultation
24	with" before "State, tribal"; and

1	(III) by inserting "public
2	health," after "conservation,";
3	(ii) in paragraph (3)(B)(iii), by insert-
4	ing "and through the website of the State,
5	including emission reduction targets and
6	strategies developed under paragraph (9)
7	and an analysis of the anticipated effects
8	of the targets and strategies" after "World
9	Wide Web"; and
10	(iii) by adding at the end the fol-
11	lowing:
12	"(9) Transportation greenhouse gas re-
13	DUCTION EFFORTS.—
14	"(A) In General.—Within a State, the
15	transportation planning process under this sec-
16	tion, shall address transportation-related green-
17	house gas emissions by including emission re-
18	duction targets and strategies to meet those
19	targets.
20	"(B) Establishment of targets and
21	CRITERIA.—
22	"(i) In general.—Not later than 2
23	years after the promulgation of the final
24	regulations required under [section 841 of
25	the Clean Air Act], each State shall de-

1	velop surface transportation-related green-
2	house gas emission reduction targets, as
3	well as strategies to meet those targets, in
4	consultation with State air agencies as
5	part of the transportation planning process
6	under this section.
7	"(ii) Minimum requirements.—
8	Each transportation plan developed by a
9	State under clause (i) shall, within the
10	plan, demonstrate progress in stabilizing
11	and reducing transportation-related green-
12	house gas emissions in the State so as to
13	contribute to the achievement of national
14	targets pursuant to section [841(a)(1) of
15	the Clean Air Act.
16	"(iii) Requirements for targets
17	AND STRATEGIES.—The targets and strat-
18	egies developed under this subparagraph
19	shall, at a minimum—
20	"(I) be based on the emission
21	models and related methodologies es-
22	tablished in the final regulations re-
23	quired under [section 841 of the
24	Clean Air Act];

1	"(II) inventory all sources of sur-
2	face transportation-related greenhouse
3	gas emissions;
4	"(III) apply to those modes of
5	surface transportation that are ad-
6	dressed in the planning process under
7	this section;
8	"(IV) be integrated and con-
9	sistent with statewide transportation
10	plans and statewide transportation
11	improvement programs; and
12	"(V) be selected through scenario
13	analysis (as defined in section
14	134(k)), and include, pursuant to the
15	requirements of the transportation
16	planning process under this section,
17	transportation investment and man-
18	agement strategies that reduce green-
19	house gas emissions from the trans-
20	portation sector over the life of the
21	plan, such as—
22	"(aa) efforts to increase
23	public transportation ridership,
24	including through service im-

1	provements, capacity expansions,
2	and access enhancement;
3	"(bb) efforts to increase
4	walking, bicycling, and other
5	forms of nonmotorized transpor-
6	tation;
7	"(cc) implementation of zon-
8	ing and other land use regula-
9	tions and plans to support infill,
10	transit-oriented development, re-
11	development, or mixed use devel-
12	opment;
13	"(dd) travel demand man-
14	agement programs (including
15	carpool, vanpool, or car-share
16	projects), transportation pricing
17	measures, parking policies, and
18	programs to promote telecom-
19	muting, flexible work schedules,
20	and satellite work centers;
21	"(ee) surface transportation
22	system operation improvements,
23	including intelligent transpor-
24	tation systems or other oper-
25	ational improvements to reduce

1	congestion and improve system
2	management;
3	"(ff) intercity passenger rail
4	improvements;
5	"(gg) intercity bus improve-
6	ments;
7	"(hh) freight rail improve-
8	ments;
9	"(ii) use of materials or
10	equipment associated with the
11	construction or maintenance of
12	transportation projects that re-
13	duce greenhouse gas emissions;
14	"(jj) public facilities for sup-
15	plying electricity to electric or
16	plug-in hybrid-electric vehicles; or
17	"(kk) any other effort that
18	demonstrates progress in reduc-
19	ing transportation-related green-
20	house gas emissions.
21	"(C) COORDINATION AND CONSULTATION
22	WITH PUBLIC AGENCIES.—Transportation
23	greenhouse gas targets and plans pursuant to
24	this section shall be developed—
25	"(i) in coordination with—

1	"(I) all metropolitan planning or-
2	ganizations covered by this section
3	within the State; and
4	"(II) transportation and air qual-
5	ity agencies within the State; and
6	"(ii) in consultation with representa-
7	tives of State and local housing, economic
8	development, and land use agencies.
9	"(D) Enforcement.—Not later than 180
10	days after the date of submission of a plan
11	under this section—
12	"(i) the Secretary and the Adminis-
13	trator shall review the plan; and
14	"(ii) the Secretary shall approve a
15	plan developed by a State pursuant to sub-
16	paragraph (B) if—
17	"(I) the Secretary finds that a
18	State has developed, submitted, and
19	published the plan pursuant to this
20	section;
21	"(II) the Secretary, in consulta-
22	tion with the Administrator, deter-
23	mines that the plan is likely to achieve
24	the targets established by the State
25	under this subsection; and

1	"(III) the development of the
2	plan complies with the minimum re-
3	quirements established under clauses
4	(ii) and (iii) of subparagraph (B).
5	"(E) Planning finding.—Failure to
6	comply with the requirements under subpara-
7	graph (B) shall not impact the planning finding
8	under subsection (g)(7).".
9	(2) Title 49.—Section 5304 of title 49, United
10	States Code is amended—
11	(A) in subsection $(d)(1)(E)$ —
12	(i) by inserting "sustainability, and
13	livability, reduce surface transportation-re-
14	lated greenhouse gas emissions and reli-
15	ance on oil, adapt to the effects of climate
16	change," after "energy conservation,";
17	(ii) by inserting "and public health"
18	after "quality of life"; and
19	(iii) by inserting ", including housing
20	and land use patterns" after "development
21	patterns"; and
22	(B) in subsection (f)—
23	(i) in paragraph (2)(D)(i)—

1	(I) by striking ", as appropriate
2	in consultation" and inserting "in co-
3	operation";
4	(II) by inserting "State and local
5	agencies responsible for transpor-
6	tation, public transportation, air qual-
7	ity, and housing and in consultation
8	with" before "State, tribal"; and
9	(III) by inserting "public
10	health," after "conservation,";
11	(ii) in paragraph (3)(B)(iii), by insert-
12	ing "and through the website of the State,
13	including emission reduction targets and
14	strategies developed under paragraph (9)
15	and an analysis of the anticipated effects
16	of the targets and strategies" after "World
17	Wide Web''; and
18	(iii) by adding at the end the fol-
19	lowing:
20	"(9) Transportation greenhouse gas re-
21	DUCTION EFFORTS.—
22	"(A) IN GENERAL.—Within a State, the
23	transportation planning process under this sec-
24	tion, shall address transportation-related green-
25	house gas emissions by including emission re-

1	duction targets and strategies to meet those
2	targets.
3	"(B) ESTABLISHMENT OF TARGETS AND
4	CRITERIA.—
5	"(i) In general.—Not later than 2
6	years after the promulgation of the final
7	regulations required under [section 841 of
8	the Clean Air Act], each State shall de-
9	velop surface transportation-related green-
10	house gas emission reduction targets, as
11	well as strategies to meet those targets, in
12	consultation with State air agencies as
13	part of the transportation planning process
14	under this section.
15	"(ii) Minimum requirements.—
16	Each transportation plan developed by a
17	State under clause (i) shall, within the
18	plan, demonstrate progress in stabilizing
19	and reducing transportation-related green-
20	house gas emissions in the State so as to
21	contribute to the achievement of national
22	targets pursuant to section [841(a)(1) of
23	the Clean Air Act].
24	"(iii) Requirements for targets
25	AND STRATEGIES.—The targets and strat-

1	egies developed under this subparagraph
2	shall, at a minimum—
3	"(I) be based on the emission
4	models and related methodologies es-
5	tablished in the final regulations re-
6	quired under [section 841 of the
7	Clean Air Act];
8	"(II) inventory all sources of sur-
9	face transportation-related greenhouse
10	gas emissions;
11	"(III) apply to those modes of
12	surface transportation that are ad-
13	dressed in the planning process under
14	this section;
15	"(IV) be integrated and con-
16	sistent with statewide transportation
17	plans and statewide transportation
18	improvement programs; and
19	"(V) be selected through scenario
20	analysis (as defined in section 134(k)
21	of title 23), and include, pursuant to
22	the requirements of the transportation
23	planning process under this section,
24	transportation investment and man-
25	agement strategies that reduce green-

1	muting, flexible work schedules,
2	and satellite work centers;
3	"(ee) surface transportation
4	system operation improvements,
5	including intelligent transpor-
6	tation systems or other oper-
7	ational improvements to reduce
8	congestion and improve system
9	management;
10	"(ff) intercity passenger rail
11	improvements;
12	"(gg) intercity bus improve-
13	ments;
14	"(hh) freight rail improve-
15	ments;
16	"(ii) use of materials or
17	equipment associated with the
18	construction or maintenance of
19	transportation projects that re-
20	duce greenhouse gas emissions;
21	"(jj) public facilities for sup-
22	plying electricity to electric or
23	plug-in hybrid-electric vehicles; or
24	"(kk) any other effort that
25	demonstrates progress in reduc-

1	ing transportation-related green-
2	house gas emissions.
3	"(C) COORDINATION AND CONSULTATION
4	WITH PUBLIC AGENCIES.—Transportation
5	greenhouse gas targets and plans pursuant to
6	this section shall be developed—
7	"(i) in coordination with—
8	"(I) all metropolitan planning or-
9	ganizations covered by this section
10	within the State; and
11	"(II) transportation and air qual-
12	ity agencies within the State; and
13	"(ii) in consultation with representa-
14	tives of State and local housing, economic
15	development, and land use agencies.
16	"(D) Enforcement.—Not later than 180
17	days after the date of submission of a plan
18	under this section—
19	"(i) the Secretary and the Adminis-
20	trator shall review the plan; and
21	"(ii) the Secretary shall approve a
22	plan developed by a State pursuant to sub-
23	paragraph (B) if—
24	"(I) the Secretary finds that a
25	State has developed, submitted, and

1	published the plan pursuant to this
2	section;
3	"(II) the Secretary, in consulta-
4	tion with the Administrator, deter-
5	mines that the plan is likely to achieve
6	the targets established by the State
7	under this subsection; and
8	"(III) the development of the
9	plan complies with the minimum re-
10	quirements established under clauses
11	(ii) and (iii) of subparagraph (B).
12	"(E) Planning finding.—Failure to
13	comply with the requirements under subpara-
14	graph (B) shall not impact the planning finding
15	under subsection $(g)(7)$.".
16	(d) Applicability.—Section 304 of the Clean Air
17	Act (42 U.S.C. 7604) shall not apply to the planning pro-
18	visions of this section.
19	(e) LAND USE AUTHORITY.—Nothing in this section
20	or an amendment made by this section—
21	(1) infringes on the existing authority of local
22	governments to plan or control land use; or
23	(2) provides or transfers authority over land
24	use to any other entity.

SEC.	113.	TRANSPO	RTATION	GRANT PROC	TRAM.

2	(a) In General.—The Secretary of Transportation
3	(referred to in this section as the "Secretary") shall pro-
4	vide grants to States and metropolitan planning organiza-
5	tions to carry out the purposes of this section for each
6	fiscal year—
7	(1) to support the developing and updating of
8	transportation greenhouse gas reduction targets and
9	strategies; and
10	(2) to provide financial assistance to implement
11	plans approved pursuant to—
12	(A) sections $134(k)(6)$ and $135(f)(9)$ of
13	title 23, United States Code; and
14	(B) sections $5305(k)(6)$ and $5304(f)(9)$ of
15	title 49, United States Code.
16	(b) Planning Grants.—
17	(1) In general.—Subject to paragraph (2),
18	the Secretary shall allocate not more than
19	percent of the funds available pursuant to [section
20	131(b)] for a fiscal year for metropolitan planning
21	organizations to develop and update transportation
22	plans, including targets and strategies for green-
23	house gas emission reduction under—
24	(A) sections $134(k)(6)$ and $135(f)(9)$ of
25	title 23, United States Code; and

1	(B) sections $5305(k)(6)$ and $5304(f)(9)$ of
2	title 49, United States Code.
3	(2) Eligible organizations.—The Secretary
4	shall distribute the funds available in (1) to metro-
5	politan planning organizations (as defined in section
6	134(k)(7) of title 23, United States Code) in the
7	proportion that—
8	(A) the population within such a metropoli-
9	tan planning organization; bears to
10	(B) the total population of all such metro-
11	politan planning organizations.
12	(c) Performance Grants.—
13	(1) In General.—The Secretary shall dis-
14	tribute [percent] of the amounts available
15	pursuant to [section 131(b)] for a fiscal year as
16	grants to States and metropolitan planning organi-
17	zations.
18	(2) Criteria.—In providing grants under this
19	subsection, the Secretary, in consultation with the
20	Administrator, shall develop criteria for providing
21	the grants, taking into consideration, with respect to
22	areas to be covered by the grants—
23	(A) the quantity of total greenhouse gas
24	emissions to be reduced as a result of imple-
25	mentation of a plan, within a covered area, as

1	determined by methods established under [sec-
2	tion 841(a) of the Clean Air Act];
3	(B) the quantity of total greenhouse gas
4	emissions to be reduced per capita as a result
5	of implementation of a plan, within the covered
6	area, as determined by methods established
7	under [section 841(a) of the Clean Air Act];
8	(C) the cost-effectiveness of reducing
9	greenhouse gas emissions during the life of the
10	plan;
11	(D) progress toward achieving emission re-
12	ductions target established under—
13	(i) sections $134(k)(6)$ and $135(f)(9)$ of
14	title 23, United States Code; and
15	(ii) sections $5305(k)(6)$ and
16	5304(f)(9) of title 49, United States Code
17	(E) reductions in greenhouse gas emissions
18	previously achieved by States and metropolitan
19	planning organizations during the 5-year period
20	beginning on the date of enactment of this Act
21	(F) plans that increase transportation op-
22	tions and mobility, particularly for low-income
23	individuals, minorities, the elderly, households
24	without motor vehicles, cost-burdened house-
25	holds, and the disabled; and

1	(G) other factors, including innovative ap-
2	proaches, minimization of costs, and consider-
3	ation of economic development, revenue genera-
4	tion, consumer fuel cost-savings, and other eco-
5	nomic, environmental and health benefits, as
6	the Secretary determines to be appropriate.
7	(d) Requirement for Reduced Emissions.—A
8	performance grant under subsection (c) may be used only
9	to fund strategies that demonstrate a reduction in green-
10	house gas emissions that is sustainable over the life of the
11	applicable transportation plan.
12	(e) Cost-sharing.—The Federal share of the costs
13	of a project receiving Federal financial assistance under
14	this section shall be 80 percent.
15	(f) COMPLIANCE WITH APPLICABLE LAWS.—
16	(1) In general.—Subject to paragraph (2), a
17	project receiving funds under this section shall com-
18	ply with all applicable Federal laws (including regu-
19	lations), including—
20	(A) subchapter IV of chapter 31 of title
21	40, United States Code; and
22	(B) applicable requirements of titles 23
23	and 49, United States Code.
24	(2) Eligibility.—Project eligibility shall be
25	determined in accordance with this section.

1	(3) Determination of applicable modal
2	REQUIREMENTS.—The Secretary shall—
3	(A) have the discretion to designate the
4	specific modal requirements that shall apply to
5	a project; and
6	(B) be guided by the predominant modal
7	characteristics of the project in the event that
8	a project has cross-modal application.
9	(g) Additional Requirements.—
10	(1) In general.—As a condition on the receipt
11	of financial assistance under this section, the inter-
12	ests of public transportation employees affected by
13	the assistance shall be protected under arrangements
14	that the Secretary of Labor determines—
15	(A) to be fair and equitable; and
16	(B) to provide benefits equal to the bene-
17	fits established under section 5333(b) of title
18	49, United States Code.
19	(2) Wages and Benefits.—Laborers and me-
20	chanics employed on projects funded with amounts
21	made available under this section shall be paid
22	wages and benefits not less than those determined
23	by the Secretary of Labor under subchapter IV of
24	chapter 31 of title 40, United States Code, to be
25	prevailing in the same locality.

(h) MISCELLANEOUS.—

- (1) Road-use and congestion pricing measures.—All projects funded by amounts made available under this section shall be eligible to receive amounts collected through road-use and congestion pricing measures.
 - (2) LIMITATIONS.—The Administrator may not approve any transportation plan for a project that would be inconsistent with existing design, procurement, and construction guidelines established by the Department of Transportation.
 - (3) Subgrantes.—With the approval of the Secretary, recipients of funding under this section may enter into agreements providing for the transfer of funds to noneligible public entities (such as local governments, air quality agencies, zoning commissions, special districts and transit agencies) that have statutory responsibility or authority for actions necessary to implement the strategies pursuant to—
 - (A) sections 134(k)(6) and 135(f)(9) of title 23, United States Code; and
 - (B) sections 5305(k)(6) and 5304(f)(9) of title 49, United States Code.

1	SEC. 114. SMARTWAY TRANSPORTATION EFFICIENCY PRO-
2	GRAM.
3	Part B of title VIII of the Clean Air Act, as added
4	by section 111 of this Act, is amended by adding after
5	section 821 the following:
6	"SEC. 822. SMARTWAY TRANSPORTATION EFFICIENCY PRO-
7	GRAM.
8	"(a) In General.—There is established within the
9	Environmental Protection Agency a SmartWay Transpor-
10	tation Efficiency Program to quantify, demonstrate, and
11	promote the benefits of technologies, products, fuels, and
12	operational strategies that reduce petroleum consumption,
13	air pollution, and greenhouse gas emissions from the mo-
14	bile source sector.
15	"(b) General Duties.—Under the program estab-
16	lished under this section, the Administrator shall carry out
17	each of the following:
18	"(1) Development of measurement protocols to
19	evaluate the energy consumption and greenhouse gas
20	impacts from technologies and strategies in the mo-
21	bile source sector, including those for passenger
22	transport and goods movement.
23	"(2) Development of qualifying thresholds for
24	certifying, verifying, or designating energy-efficient,
25	low-greenhouse gas SmartWay technologies and

1 strategies for each mode of passenger transportation 2 and goods movement. 3 "(3) Development of partnership and recogni-4 tion programs to promote best practices and drive 5 demand for energy-efficient, low-greenhouse gas 6 transportation performance. "(4) Promotion of the availability of, and en-7 8 couragement of the adoption of, SmartWay certified 9 or verified technologies and strategies, and publica-10 tion of the availability of financial incentives, such 11 as assistance from loan programs and other Federal 12 and State incentives. 13 "(c) Smartway Transport Freight Partner-14 SHIP.—The Administrator shall establish a SmartWay 15 Transport Partnership program with shippers and carriers of goods to promote energy-efficient, low-greenhouse gas 16 17 transportation. In carrying out such partnership, the Ad-18 ministrator shall undertake each of the following: 19 "(1) Verification of the energy and greenhouse 20 gas performance of participating freight carriers, in-21 cluding those operating rail, trucking, marine, and 22 other goods movement operations. 23 "(2) Publication of a comprehensive energy and 24 greenhouse gas performance index of freight modes 25 (including rail, trucking, marine, and other modes of

1	transporting goods) and individual freight companies
2	so that shippers can choose to deliver their goods
3	more efficiently.
4	"(3) Development of tools for—
5	"(A) carriers to calculate their energy and
6	greenhouse gas performance; and
7	"(B) shippers to calculate the energy and
8	greenhouse gas impacts of moving their prod-
9	ucts and to evaluate the relative impacts from
10	transporting their goods by different modes and
11	corporate carriers.
12	"(4) Provision of recognition opportunities for
13	participating shipper and carrier companies dem-
14	onstrating advanced practices and achieving superior
15	levels of greenhouse gas performance.
16	"(d) Improving Freight Greenhouse Gas Per-
17	FORMANCE DATABASES.—The Administrator shall, in co-
18	ordination with the Secretary of Commerce and other ap-
19	propriate agencies, define and collect data on the physical
20	and operational characteristics of the Nation's truck popu-
21	lation, with special emphasis on data related to energy ef-
22	ficiency and greenhouse gas performance to inform the
23	performance index published under subsection $(c)(2)$ of
24	this section, and other means of goods transport as nec-

- 1 essary, at least every 5 years as part of the economic cen-
- 2 sus required under title 13, United States Code.
- 3 "(e) Establishment of Financing Program.—
- 4 The Administrator shall establish a SmartWay Financing
- 5 Program to competitively award funding to eligible entities
- 6 identified by the Administrator in accordance with the
- 7 program requirements in subsection (g).
- 8 "(f) Purposes.—Under the SmartWay Financing
- 9 Program, eligible entities shall—
- 10 "(1) use funds awarded by the Administrator to
- provide flexible loan and/or lease terms that increase
- approval rates or lower the costs of loans and/or
- leases in accordance with guidance developed by the
- 14 Administrator;
- 15 "(2) make such loans and/or leases available to
- public and private entities for the purpose of adopt-
- ing low-greenhouse gas technologies or strategies for
- 18 the mobile source sector that are designated by the
- 19 Administrator; and
- 20 "(3) use funds provided by the Administrator
- for electrification of freight transportation systems
- in major national goods movement corridors, giving
- priority to electrification of transportation systems
- in areas that are gateways for high volumes of inter-
- 25 national and national freight transport and require

1	substantial criteria pollutant emission reductions in
2	order to attain national ambient air quality stand-
3	ards.
4	"(g) Program Requirements.—The Administrator
5	shall determine program design elements and require-
6	ments, including—
7	"(1) the type of financial mechanism with
8	which to award funding, in the form of grants and/
9	or contracts;
10	"(2) the designation of eligible entities to re-
11	ceive funding, such as State, tribal, and local gov-
12	ernments, regional organizations comprised of gov-
13	ernmental units, nonprofit organizations, or for-prof-
14	it companies;
15	"(3) criteria for evaluating applications from el-
16	igible entities, including anticipated—
17	"(A) cost-effectiveness of loan or lease pro-
18	gram on a metric-ton-of-greenhouse gas-saved-
19	per-dollar basis; and
20	"(B) ability to promote the loan or lease
21	program and associated technologies and strate-
22	gies to the target audience; and
23	"(4) reporting requirements for entities that re-
24	ceive awards, including—

1	"(A) actual cost-effectiveness and green-
2	house gas savings from the loan or lease pro-
3	gram based on a methodology designated by the
4	Administrator;
5	"(B) the total number of applications and
6	number of approved applications; and
7	"(C) terms granted to loan and lease re-
8	cipients compared to prevailing market prac-
9	tices and/or rates.
10	"(h) Authorization of Appropriations.—Such
11	sums as necessary are authorized to be appropriated to
12	the Administrator to carry out this section.".
13	Subtitle B—Carbon Capture and
14	Sequestration
15	979 404 371 FF 977 4 777 977
	SEC. 121. NATIONAL STRATEGY.
16	(a) In General.—Not later than 1 year after the
17	(a) In General.—Not later than 1 year after the
17	(a) In General.—Not later than 1 year after the date of enactment of this Act, the Administrator, in con-
17 18	(a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Administrator, in consultation with the Secretary of Energy and the heads of
17 18 19	(a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Administrator, in consultation with the Secretary of Energy and the heads of such other relevant Federal agencies as the President may
17 18 19 20	(a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Administrator, in consultation with the Secretary of Energy and the heads of such other relevant Federal agencies as the President may designate, shall submit to Congress a report setting forth
17 18 19 20 21	(a) In General.—Not later than 1 year after the date of enactment of this Act, the Administrator, in consultation with the Secretary of Energy and the heads of such other relevant Federal agencies as the President may designate, shall submit to Congress a report setting forth a unified and comprehensive strategy to address the key
17 18 19 20 21 22	(a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Administrator, in consultation with the Secretary of Energy and the heads of such other relevant Federal agencies as the President may designate, shall submit to Congress a report setting forth a unified and comprehensive strategy to address the key legal, regulatory and other barriers to the commercial-

1 (1) identify those regulatory, legal, and other 2 gaps and barriers that could be addressed by a Fed-3 eral agency using existing statutory authority, those, if any, that require Federal legislation, and those 4 5 that would be best addressed at the State or re-6 gional level; 7 (2) identify regulatory implementation chal-8 lenges, including those related to approval of State 9 programs and delegation of authority for permitting; 10 and 11 (3) recommend rulemakings, Federal legisla-12 tion, or other actions that should be taken to further 13 evaluate and address such barriers. 14 SEC. 122. REGULATIONS FOR GEOLOGICAL SEQUESTRA-15 TION SITES. 16 (a) Coordinated Certification and Permitting 17 Process.—Title VIII of the Clean Air Act, as added by 18 section 421 of this Act, is amended by adding after section 19 812 (as added by section 125 of this division) the fol-20 lowing: 21 "SEC. 813. REGULATIONS FOR GEOLOGICAL SEQUESTRA-22 TION SITES. 23 "(a) Coordinated Process.—The Administrator shall establish a coordinated approach to certifying and 25 permitting geological sequestration, taking into consider-

1 ation all relevant statutory authorities. In establishing 2 such approach, the Administrator shall— 3 "(1) take into account, and reduce redundancy 4 with, the requirements of section 1421 of the Safe 5 Drinking Water Act (42 U.S.C. 300h), including the 6 rulemaking for geological sequestration wells de-7 scribed at 73 Fed. Reg. 43492–43541 (July 25, 8 2008); and 9 "(2) to the extent practicable, reduce the bur-10 den on certified entities and implementing authori-11 ties. 12 "(b) Regulations.—Not later than 2 years after 13 the date of enactment of this title, the Administrator shall promulgate regulations to protect human health and the 14 15 environment by minimizing the risk of escape to the atmosphere of carbon dioxide injected for purposes of geo-16 17 logical sequestration. 18 "(c) REQUIREMENTS.—The regulations under sub-19 section (b) shall include— 20 "(1) a process to obtain certification for geo-21 logical sequestration under this section; and 22 "(2) requirements for— 23 "(A) monitoring, record keeping, and re-24 porting for emissions associated with injection 25 into, and escape from, geological sequestration

1	sites, taking into account any requirements or
2	protocols developed under section 713;
3	"(B) public participation in the certifi
4	cation process that maximizes transparency;
5	"(C) the sharing of data between States
6	Indian tribes, and the Environmental Protec
7	tion Agency; and
8	"(D) other elements or safeguards nec
9	essary to achieve the purpose set forth in sub
10	section (b).
11	"(d) Report.—Not later than 2 years after the pro
12	mulgation of regulations under subsection (b), and at 3
13	year intervals thereafter, the Administrator shall deliver
14	to the Committee on Energy and Commerce of the House
15	of Representatives and the Committee on Environment
16	and Public Works of the Senate a report on geological se
17	questration in the United States, and, to the extent rel
18	evant, other countries in North America. Such report shall
19	include—
20	"(1) data regarding injection, emissions to the
21	atmosphere, if any, and performance of active and
22	closed geological sequestration sites, including those
23	where enhanced hydrocarbon recovery operations
24	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 logical sequestration practices; 5 "(3) recommendations on how such programs 6 and regulations should be improved or made more 7 effective; and "(4) other relevant information.". 8 9 (b) SAFE DRINKING WATER ACT STANDARDS.—Section 1421 of the Safe Drinking Water Act (42 U.S.C. 10 11 300h) is amended by inserting after subsection (d) the following: 12 13 "(e) Carbon Dioxide Geological Sequestra-TION WELLS.— 14 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 geological sequestra-19 tion 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

closure, and post-injection site care. Financial re-

sponsibility may be established for carbon dioxide geological sequestration wells in accordance with regulations promulgated by the Administrator by any one, or any combination, of the following: insurance, guarantee, trust, standby trust, surety bond, letter of credit, qualification as a self-insurer, or any other method satisfactory to the Administrator.".

8 SEC. 123. STUDIES AND REPORTS.

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- 9 (a) Study of Legal Framework for Geological 10 Sequestration Sites.—
 - (1) Establishment of task force.—As soon as practicable, but not later than 6 months after the date of enactment of this Act, the Administrator shall establish a task force to be composed of an equal number of subject matter experts, nongovernmental organizations with expertise in environmental policy, academic experts with expertise in environmental law, State officials with environmental expertise, representatives of State Attorneys General, and members of the private sector, to conduct a study of—
 - (A) existing Federal environmental statutes, State environmental statutes, and State common law that apply to geological sequestration 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	harm and damage to the environment or public
6	health at closed sites where carbon dioxide in-
7	jection has been used for enhanced hydrocarbon
8	recovery;
9	(C) the statutory framework, environ-
10	mental health and safety considerations, imple-
11	mentation issues, and financial implications of
12	potential models for Federal, State, or private
13	sector assumption of liabilities and financial re-
14	sponsibilities with respect to closed geological
15	sequestration sites;
16	(D) private sector mechanisms, including
17	insurance and bonding, that may be available to
18	manage environmental, health and safety risks
19	from closed geological sequestration sites; and
20	(E) the subsurface mineral rights, water
21	rights, or property rights issues associated with
22	geological sequestration of carbon dioxide.
23	(2) Report.—Not later than 18 months after
24	the date of enactment of this Act, the task force es-
25	tablished under paragraph (1) shall submit to Con-

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1	gress a report describing the results of the study
2	conducted under that paragraph including any con-
3	sensus recommendations of the task force.
4	(b) Environmental Statutes.—
5	(1) Study.—The Administrator shall conduct a
6	study examining how, and under what cir-
7	cumstances, the environmental statutes for which
8	the Environmental Protection Agency has responsi-
9	bility would apply to carbon dioxide injection and ge-
10	ological sequestration activities.
11	(2) Report.—Not later than 1 year after the
12	date of enactment of this Act, the Administrator
13	shall submit to Congress a report describing the re-
14	sults of the study conducted under paragraph (1) .
15	SEC. 124. DISTRIBUTION OF ASSISTANCE FOR COMMER-
16	CIAL DEPLOYMENT OF CARBON CAPTURE
17	AND SEQUESTRATION.
18	[PLACEHOLDER FOR AUTHORIZING LAN-
19	GUAGE].
20	SEC. 125. PERFORMANCE STANDARDS FOR COAL-FUELED
21	POWER PLANTS.
22	(a) In General.—Title VIII of the Clean Air Act

(as added by section 121 of division B) is amended by

24 adding the following new section after section 811:

79 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 is required to have a per-6 mit under section 503(a) and is authorized under 7 State or Federal law to derive at least 30 percent of 8 its annual heat input from coal, petroleum coke, or 9 any combination of these fuels. 10 "(2) Initially permitted.—The term ini-11 tially permitted' means that the owner or operator 12 has received a preconstruction approval or permit 13 under this Act, for the covered EGU as a new (not 14 a modified) source, but administrative review or ap-15 peal of such approval or permit has not been ex-16 hausted. A subsequent modification of any such ap-17 proval or permits, ongoing administrative or court 18 review, appeals, or challenges, or the existence or 19 tolling of any time to pursue further review, appeals, 20 or challenges shall not affect the date on which a 21 covered EGU is considered to be initially permitted 22 under this paragraph. 23 "(b) STANDARDS.—(1) A covered EGU that is ini-24 tially permitted on or after January 1, 2020, shall achieve

an emission limit that is a 65 percent reduction in emis-

sions of the carbon dioxide produced by the

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1	measured on an annual basis, or meet such more stringent
2	standard as the Administrator may establish pursuant to
3	subsection (c).
4	"(2) A covered EGU that is initially permitted after
5	January 1, 2009, and before January 1, 2020, shall, by
6	the applicable compliance date established under this
7	paragraph, achieve an emission limit that is a 50 percent
8	reduction in emissions of the carbon dioxide produced by
9	the unit, as measured on an annual basis. Compliance
10	with the requirement set forth in this paragraph shall be
11	required by the earliest of the following:
12	"(A) Four years after the date the Adminis-
13	trator has published pursuant to subsection (d) a re-
14	port that there are in commercial operation in the
15	United States electric generating units or other sta-
16	tionary sources equipped with carbon capture and
17	sequestration technology that, in the aggregate—
18	"(i) have a total of at least 4 gigawatts of
19	nameplate generating capacity of which—
20	"(I) at least 3 gigawatts must be elec-
21	tric generating units; and
22	"(II) up to 1 gigawatt may be indus-
23	trial applications, for which capture and
24	sequestration of 3,000,000 tons of carbon
25	dioxide per year on an aggregate

1 annualized basis shall be considered equiv-2 alent to 1 gigawatt; "(ii) include at least 2 electric generating 3 4 units, each with a nameplate generating capac-5 ity of 250 megawatts or greater, that capture, 6 inject, and sequester carbon dioxide into geo-7 logic formations other than oil and gas fields; 8 and 9 "(iii) are capturing and sequestering in the 10 aggregate at least 12,000,000 tons of carbon 11 dioxide per year, calculated on an aggregate 12 annualized basis. 13 "(B) January 1, 2025. 14 "(3) If the deadline for compliance with paragraph 15 (2) is January 1, 2025, the Administrator may extend the deadline for compliance by a covered EGU by up to 18 16 17 months if the Administrator makes a determination, based on a showing by the owner or operator of the unit, that 18 19 it will be technically infeasible for the unit to meet the 20 standard by the deadline. The owner or operator must 21 submit a request for such an extension by no later than 22 January 1, 2022, and the Administrator shall provide for 23 public notice and comment on the extension request. 24 "(c) Review and Revision of Standards.—Not later than 2025 and at 5-year intervals thereafter, the Ad-

- 1 ministrator shall review the standards for new covered
- 2 EGUs under this section and shall, by rule, reduce the
- 3 maximum carbon dioxide emission rate for new covered
- 4 EGUs to a rate which reflects the degree of emission limi-
- 5 tation achievable through the application of the best sys-
- 6 tem of emission reduction which (taking into account the
- 7 cost of achieving such reduction and any nonair quality
- 8 health and environmental impact and energy require-
- 9 ments) the Administrator determines has been adequately
- 10 demonstrated.
- 11 "(d) Reports.—Not later than 18 months after the
- 12 date of enactment of this title and semiannually there-
- 13 after, the Administrator shall publish a report on the
- 14 nameplate capacity of units (determined pursuant to sub-
- 15 section (b)(2)(A)) in commercial operation in the United
- 16 States equipped with carbon capture and sequestration
- 17 technology, including the information described in sub-
- 18 section (b)(2)(A) (including the cumulative generating ca-
- 19 pacity to which carbon capture and sequestration retrofit
- 20 projects meeting the criteria described in section
- 21 786(b)(1)(A)(ii) and (b)(1)(A)(iv)(II) has been applied
- 22 and the quantities of carbon dioxide captured and seques-
- 23 tered by such projects).
- 24 "(e) Regulations.—Not later than 2 years after the
- 25 date of enactment of this title, the Administrator shall

1	promulgate regulations to carry out the requirements of
2	this section.".
3	[SEC. 126. 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"
8	means the Secretary of Energy.
9	$\llbracket (2)$ 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
19	fuels.]
20	$\llbracket (5) \text{ Fossil Fuel.}$ —The term "fossil fuel"
21	means coal, petroleum, natural gas or any derivative
22	of coal, petroleum, or natural gas.]
23	[(6) Corporation.—The term "Corporation"
24	means the Carbon Storage Research Corporation es-
25	tablished in accordance with this section.

1 (7) Qualified industry organization.— 2 The term "qualified industry organization" means 3 the 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 opera-7 tors of distribution utilities delivering fossil fuel-8 based electricity who collectively represent at least 9 20 percent of the volume of fossil fuel-based elec-10 tricity delivered by distribution utilities to consumers 11 in the United States.] 12 (8) Retail consumer.—The term "retail 13 consumer" means an end-user of electricity. 14 (b) Carbon Storage Research Corporation.— 15 1 16 (1) Establishment.— 17 (A) Referendum.—Qualified industry 18 organizations may conduct, at their own ex-19 pense, a referendum among the owners or oper-20 ators of distribution utilities delivering fossil 21 fuel-based electricity for the creation of a Car-22 bon Storage Research Corporation. Such ref-23 erendum shall be conducted by an independent 24 auditing firm agreed to by the qualified indus-25 try organizations. Voting rights in such ref-

erendum shall be based on the quantity of fossil fuel-based electricity 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 date of enactment of this Act. If 40 percent or more of the State regu-

latory authorities submit to the independent auditing firm written notices of opposition, the
Corporation shall not be established notwithstanding the approval of the qualified industry
organizations as provided in subparagraph
(A).

[(2) TERMINATION.—The Corporation shall be authorized to collect assessments and conduct operations pursuant to this section for a 10-year period from the date 6 months after the date of enactment of this Act. After such 10-year period, the Corporation is no longer authorized to collect assessments and shall be dissolved on the date 15 years after such date of enactment, unless the period is extended by an Act of Congress.]

[(3) GOVERNANCE.—The Corporation shall operate as a division or affiliate of the Electric Power Research Institute (referred to in this section as "EPRI") and be managed by a Board of not more than 15 voting members responsible for its operations, including compliance with this section. EPRI, in consultation with the Edison Electric Institute, the American Public Power Association and the National Rural Electric Cooperative Association shall appoint the Board members under clauses (i), (ii),

1	and (iii) of subparagraph (A) from among can-
2	didates recommended by those organizations. At
3	least a majority of the Board members appointed by
4	EPRI shall be representatives of distribution utilities
5	subject to assessments under subsection (d).
6	 (A) Members.—The Board shall include
7	at least 1 representative of each of the fol-
8	lowing:]
9	[(i) Investor-owned utilities.]
10	[(ii) Utilities owned by a State agen-
11	cy, a municipality, and an Indian tribe.]
12	[(iii) Rural electric cooperatives.]
13	[(iv) Fossil fuel producers.]
14	(v) Nonprofit environmental organi-
15	zations.]
16	[(vi) Independent generators or
17	wholesale power providers.]
18	[(vii) Consumer groups.]
19	(viii) The National Energy Tech-
20	nology laboratory of the Department of
21	Energy.
22	(ix) The Environmental Protection
23	Agency.
24	[(B) Nonvoting members.—The Board
25	shall also include as additional nonvoting Mem-

bers the Secretary of Energy or his designee 1 2 and 2 representatives of State regulatory au-3 thorities as defined in section 3(17) of the Pub-4 lic Utility Regulatory Policies Act of 1978 (16 5 U.S.C. 2602(17)), each designated by the Na-6 tional Association of State Regulatory Utility 7 Commissioners from States that are not within 8 the same transmission interconnection. 9 $\Gamma(4)$ Compensation.—Corporation Board 10 members shall receive no compensation for their 11 services, nor shall Corporation Board members be 12 reimbursed for expenses relating to their service. 13 Terms.—Corporation Board members (5)14 shall serve terms of 4 years and may serve not more 15 than 2 full consecutive terms. Members filling unexpired terms may serve not more than a total of 8 16 17 consecutive years. Former members of the Corpora-18 tion Board may be reappointed to the Corporation 19 Board if they have not been members for a period 20 of 2 years. Initial appointments to the Corporation 21 Board shall be for terms of 1, 2, 3, and 4 years, 22 staggered to provide for the selection of 3 members 23 each year. 24 (6) Status of Corporation.—The Corpora-25 tion shall not be considered to be an agency, depart-

1 ment, or instrumentality of the United States, and 2 no officer or director or employee of the Corporation 3 shall be considered to be an officer or employee of 4 the United States Government, for purposes of title 5 5 or title 31 of the United States Code, or for any 6 other purpose, and no funds of the Corporation shall 7 be treated as public money for purposes of chapter 8 33 of title 31, United States Code, or for any other 9 purpose. 10 (c) Functions and Administration of the Cor-PORATION.—] 11 [(1) IN GENERAL.—The Corporation shall es-12 13 tablish and administer a program to accelerate the 14 commercial availability of carbon dioxide capture 15 and storage technologies and methods, including 16 technologies which capture and store, or capture and 17 convert, carbon dioxide. Under such program com-18 petitively awarded grants, contracts, and financial 19 assistance shall be provided and entered into with el-20 igible entities. Except as provided in paragraph (8), 21 the Corporation shall use all funds derived from as-22 sessments under subsection (d) to issue grants and 23 contracts to eligible entities. 24 (2) Purpose.—The purposes of the grants,

contracts, and assistance under this subsection shall

be to support commercial-scale demonstrations of carbon capture or storage technology projects capable of advancing the technologies to commercial readiness. Such projects should encompass a range of different coal and other fossil fuel varieties, be geographically diverse, involve diverse storage media, and employ capture or storage, or capture and conversion, technologies potentially suitable either for new or for retrofit applications. The Corporation shall seek, to the extent feasible, to support at least 5 commercial-scale demonstration projects integrating carbon capture and sequestration or conversion technologies.

[(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 and tribal research agencies, nonprofit organizations, or consortiums of 2 or more entities. Pilot-scale and similar small-scale projects are not eligible for support by the Corporation. Owners or developers of projects supported by the Corporation shall, where appropriate, share in the costs of such projects. Projects supported by the Corporation shall meet the

eligibility criteria of section 786(b) of the Clean Air Act (as added by [section 124 of this Act]).]

[(4) Grants for early movers.—Fifty percent of the funds raised under this section shall be provided in the form of grants to electric utilities that had, prior to the award of any grant under this section, committed resources to deploy a large scale electricity generation unit with integrated carbon capture and sequestration or conversion applied to a substantial portion of the unit's carbon dioxide emissions. Grant funds shall be provided to defray costs incurred by such electricity utilities for at least 5 such electricity generation units.]

[(5) 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 (j), the Secretary, and the Director of the National Energy

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Technology Laboratory to obtain advice and recommendations on plans, programs, and project selection criteria, the Board shall establish priorities for grants, contracts, and assistance; publish requests for proposals for grants, contracts, and assistance; and 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 section, 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. (6) Uses of grants, contracts, and as-

[(6) Uses of grants, contracts, and assistance.—A grant, contract, or other 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.
- Intellectual property.—The Board shall establish policies regarding the ownership of intellectual property developed as a result of Corporation grants and other forms of technology support.

 Such policies shall encourage individual ingenuity and invention.
 - [(8) Administrative expenses.—Up to 5 percent of the funds collected in any fiscal year under subsection (d) may be used for the administrative expenses of operating the Corporation (not including costs incurred in the determination and collection of the assessments pursuant to subsection (d)).]
 - [9] Programs and Budget.—Before August 1 each year, the Corporation, after consulting with the Technical Advisory Committee and the Secretary and the Director of the Department's National Energy Technology Laboratory and other interested parties to obtain advice and recommendations, shall publish for public review and comment its proposed 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 the next calendar year, including the probable costs of all programs, projects, and contracts and a recommended rate of assessment sufficient to cover such costs. The Secretary may recommend programs and activities the Secretary considers appropriate. The Corporation shall include in the first publication it issues under this paragraph a strategic plan or roadmap for the achievement of the purposes of the Corporation, as set forth in paragraph (2).

[(10) 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. The Corporation shall make its books and records available for review by the Secretary or the

Comptroller General of the United States.]

[11] 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 meetings includes only confidential matters pertaining to project selection, the award of grants or contracts, personnel matters, 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.]

[12] 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 regu-

l	latory authority, and upon request to the public. The
2	Secretary shall, not less than 60 days after receiving
3	such report, provide to the President and Congress
4	a report assessing the progress of the Corporation in
5	meeting the objectives of this section.

(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 electricity, and initially shall be not less than the following 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 Corpora-

tion is authorized to supplement assessmentsthrough 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.]

[(3) Reversion of unused funds.—If the Corporation does not disburse, dedicate or assign 75 percent or more of the available proceeds of the assessed fees in any calendar year 7 or more years following its establishment, due to an absence of qualified projects or similar circumstances, it shall reimburse the remaining undedicated or unassigned balance of such fees, less administrative and other expenses authorized by this section, to the distribution utilities upon which such fees were assessed, in proportion to their collected assessments.]

1	[(e) ERCOT.—]
2	[(1) Assessment, collection, and remit-
3	TANCE.—(A) Notwithstanding any other provision of
4	this section, within ERCOT, the assessment pro-
5	vided for in subsection (d) shall be—]
6	$\mathbf{I}(i)$ levied directly on qualified scheduling
7	entities, or their successor entities;
8	[(ii) charged consistent with other charges
9	imposed on qualified scheduling entities as a fee
10	on energy used by the load-serving entities;
11	and]
12	$\[$ (iii) collected and remitted by ERCOT to
13	the Corporation in the amounts and in the
14	same manner as set forth in subsection (d).
15	[(B) The assessment amounts referred to in
16	subparagraph (A) shall be—]
17	[(i) determined by the amount and types
18	of fossil fuel-based electricity delivered directly
19	to all retail customers in the prior calendar year
20	beginning with the year ending immediately
21	prior to the period described in subsection
22	(b)(2); and
23	[(ii) take into account the number of re-
24	newable energy credits retired by the load-serv-

1	ing entities represented by a qualified sched-
2	uling entity within the prior calendar year.
3	[(2) Administration expenses.—Up to 1
4	percent of the funds collected in any fiscal year by
5	ERCOT under the provisions of this subsection may
6	be used for the administrative expenses incurred in
7	the determination, collection and remittance of the
8	assessments to the Corporation.]
9	[(3) AUDIT.—ERCOT shall provide a copy of
10	its annual audit pertaining to the administration of
11	the provisions of this subsection to the Corpora-
12	tion.]
13	[(4) Definitions.—For the purposes of this
14	subsection:]
15	$\llbracket (A) brace$ The term "ERCOT" means the Elec-
16	tric Reliability Council of Texas.]
17	[(B) The term "load-serving entities" has
18	the meaning adopted by ERCOT Protocols and
19	in effect on the date of enactment of this Act.]
20	[(C) The term "qualified scheduling enti-
21	ties" has the meaning adopted by ERCOT Pro-
22	tocols and in effect on the date of enactment of
23	this Act.
24	${ \llbracket ({\mathbf D}) lap{ }}$ The term "renewable energy credit"
25	has the meaning as promulgated and adopted

1	by the Public Utility Commission of Texas pur-
2	suant to section 39.904(b) of the Public Utility
3	Regulatory Act of 1999, and in effect on the
4	date of enactment of this Act.
5	[(f) Determination of Fossil Fuel-based
6	ELECTRICITY DELIVERIES.—]
7	[(1) FINDINGS.—The Congress finds that:]
8	(A) The assessments under subsection (d)
9	are to be collected based on the amount of fossil
10	fuel-based electricity delivered by each distribu-
11	tion utility.]
12	[(B) Since many distribution utilities pur-
13	chase all or part of their retail consumer's elec-
14	tricity needs from other entities, it may not be
15	practical to determine the precise fuel mix for
16	the power sold by each individual distribution
17	utility.]
18	[(C) It may be necessary to use average
19	data, often on a regional basis with reference to
20	Regional Transmission Organization ("RTO")
21	or NERC regions, to make the determinations
22	necessary for making assessments.]
23	[(2) DOE PROPOSED RULE.—The Secretary,
24	acting in close consultation with the Energy Infor-
25	mation Administration, shall issue for notice and

comment a proposed rule to determine the level of fossil fuel electricity delivered to retail customers by each distribution utility in the United States during the most recent calendar year or other period determined to be most appropriate. Such proposed rule shall balance the need to be efficient, reasonably precise, and timely, taking into account the nature and cost of data currently available and the nature of markets and regulation in effect in various regions of the country. Different methodologies may be applied in different regions if appropriate to obtain the best balance of such factors.

[(3) Final Rule.—Within 6 months after the date of enactment of this Act, and after opportunity for comment, the Secretary shall issue a final rule under this subsection for determining the level and type of fossil fuel-based electricity delivered to retail customers by each distribution utility in the United States during the appropriate period. In issuing such rule, the Secretary may consider opportunities and costs to develop new data sources in the future and issue recommendations for the Energy Information Administration or other entities to collect such data. After notice and opportunity for comment the Secretary may, by rule, subsequently update and

- 1 modify the methodology for making such determina-2 tions.
 - [(4) Annual determinations.—Pursuant to the final rule issued under paragraph (3), the Secretary shall make annual determinations of the amounts and types for each such utility and publish such determinations in the Federal Register. Such determinations shall be used to conduct the referendum under subsection (b) and by the Corporation in applying any assessment under this subsection.]
 - [(5) Rehearing and Judicial Review.—The owner or operator of any distribution utility that believes that the Secretary has misapplied the methodology in the final rule in determining the amount and types of fossil fuel electricity delivered by such distribution utility may seek rehearing of such determination within 30 days of publication of the determination in the Federal Register. The Secretary shall decide such rehearing petitions within 30 days. The Secretary's determinations following rehearing shall be final and subject to judicial review in the United States Court of Appeals for the District of Columbia.

1 (g) Compliance With Corporation Assess-MENTS.—The Corporation may bring an action in the ap-2 3 propriate court of the United States to compel compliance 4 with an assessment levied by the Corporation under this 5 section. A successful action for compliance under this subsection may also require payment by the defendant of the 6 costs incurred by the Corporation in bringing such ac-8 tion. 9 (h) MIDCOURSE REVIEW.—Not later than 5 years 10 following establishment of the Corporation, the Comptroller General of the United States shall prepare an anal-11 ysis, and report to Congress, assessing the Corporation's 12 activities, including project selection and methods of disbursement of assessed fees, impacts on the prospects for 14 15 commercialization of carbon capture and storage technologies, adequacy of funding, and administration of 16 17 funds. The report shall also make such recommendations 18 as may be appropriate in each of these areas. The Cor-19 poration shall reimburse the Government Accountability 20 Office for the costs associated with performing this mid-21 course review. 22 (i) Recovery of Costs.— 23 (1) IN GENERAL.—A distribution utility whose 24 transmission, delivery, or sales of electric energy are 25 subject to any form of rate regulation shall not be

1 denied the opportunity to recover the full amount of 2 the prudently incurred costs associated with com-3 plying with this section, consistent with applicable 4 State or Federal law. 5 (2) Ratepayer rebates.—Regulatory au-6 thorities that approve cost recovery pursuant to 7 paragraph (1) may order rebates to ratepayers to 8 the extent that distribution utilities are reimbursed 9 undedicated or unassigned balances pursuant to sub-10 section (d)(3). 11 [(j) Technical Advisory Committee.—] 12 (1) Establishment.—There is established an 13 advisory committee, to be known as the "Technical 14 Advisory Committee". (2) Membership.—The Technical Advisory 15 16 Committee shall be comprised of not less than 7 17 members appointed by the Board from among aca-18 demic institutions, national laboratories, independent 19 research institutions, and other qualified institu-20 tions. No member of the Committee shall be affili-21 ated with EPRI or with any organization having 22 members serving on the Board. At least one member 23 of the Committee shall be appointed from among of-

ficers or employees of the Department of Energy

1	recommended to the Board by the Secretary of En-
2	ergy.]
3	[(3) Chairperson and vice chairperson.—
4	The Board shall designate one member of the Tech-
5	nical Advisory Committee to serve as Chairperson of
6	the Committee and one to serve as Vice Chairperson
7	of the Committee.
8	[(4) Compensation.—The Board shall provide
9	compensation to members of the Technical Advisory
10	Committee for travel and other incidental expenses
11	and such other compensation as the Board deter-
12	mines to be necessary.
13	[(5) Purpose.—The Technical Advisory Com-
14	mittee shall provide independent assessments and
15	technical evaluations, as well as make non-binding
16	recommendations to the Board, concerning Corpora-
17	tion activities, including but not limited to the fol-
18	lowing:]
19	(A) Reviewing and evaluating the Cor-
20	poration's plans and budgets described in sub-
21	section (c)(9), as well as any other appropriate
22	areas, which could include approaches to
23	prioritizing technologies, appropriateness of en-
24	gineering techniques, monitoring and

1	verification technologies for storage, geological
2	site selection, and cost control measures.]
3	(B) Making annual non-binding rec-
4	ommendations to the Board concerning any of
5	the matters referred to in subparagraph (A), as
6	well as what types of investments, scientific re-
7	search, or engineering practices would best fur-
8	ther the goals of the Corporation.
9	[(6) Public availability.—All reports, eval-
10	uations, and other materials of the Technical Advi-
11	sory Committee shall be made available to the public
12	by the Board, without charge, at time of receipt by
13	the Board.]
14	(k) Lobbying Restrictions.—No funds collected
15	by the Corporation shall be used in any manner for influ-
16	encing legislation or elections, except that the Corporation
17	may recommend to the Secretary and the Congress
18	changes in this section or other statutes that would fur-
19	ther the purposes of this section.
20	[(l) Davis-Bacon Compliance.—The Corporation
21	shall ensure that entities receiving grants, contracts, or
22	other financial support from the Corporation for the
23	project activities authorized by this section are in compli-

1	States Code (commonly known as the "Davis-Bacon
2	Act").]
3	Subtitle C—Nuclear and Advanced
4	Technologies
5	SEC. 131. FINDINGS AND POLICY.
6	(a) FINDINGS.—Congress finds that—
7	(1) in 2008, 104 nuclear power plants produced
8	19.6 percent of the electricity generated in the
9	United States, slightly less than the electricity gen-
10	erated by natural gas;
11	(2) nuclear energy is the largest provider of
12	clean, carbon-free, electricity, almost 8 times larger
13	than all renewable power production combined, ex-
14	cluding hydroelectric power;
15	(3) unlike other renewable sources, nuclear en-
16	ergy supplies consistent, base-load electricity, inde-
17	pendent of environmental conditions;
18	(4) by displacing fossil fuels that would other-
19	wise be used for electricity production, nuclear power
20	plants virtually eliminate emissions of greenhouse
21	gases and criteria pollutants associated with acid
22	rain, smog, or ozone;
23	(5) nuclear power generation continues to re-
24	quire robust efforts to address issues of safety,
25	waste and proliferation.

1	(6) even if every nuclear plant is granted a 20-
2	year extension, all currently operating nuclear plants
3	will be retired by 2055;
4	(7) long lead times for nuclear power plant con-
5	struction indicate that action to stimulate the nu-
6	clear power industry should not be delayed;
7	(8) the high upfront capital costs of nuclear
8	plant construction remain a substantial obstacle, de-
9	spite theoretical potential for significant cost reduc-
10	tion;
11	(9) translating theoretical cost reduction poten-
12	tial into actual reduced construction costs remains a
13	significant industry challenge that can be overcome
14	only through demonstrated performance;
15	(10) as of January 2009, 17 companies and
16	consortia have submitted applications to the Nuclear
17	Regulatory Commission for 26 new reactors in the
18	United States;
19	(11) those proposed reactors will use the latest
20	in nuclear technology for efficiency and safety, more
21	advanced than the technology of the 1960s and
22	1970s found in the reactors currently operating in
23	the United States;
24	(12) increased resources for the Nuclear Regu-
25	latory Commission and reform of the licensing proc-

1	ess have improved the safety and timeliness of the
2	regulatory environment;
3	(13) the United States has not built a new re-
4	actor since the 1970s and, as a result, will need to
5	revitalize and retool the institutions and infrastruc-
6	ture necessary to construct, maintain, and support
7	new reactors, including improvements in manufac-
8	turing of nuclear components and training for the
9	next generation nuclear workforce; and
10	(14) those new reactors will launch a new era
11	for the nuclear industry, and translate into tens of
12	thousands of jobs
13	(b) STATEMENT OF POLICY.—It is the policy of the
14	United States, given the importance of transitioning to a
15	clean energy, low-carbon economy, to facilitate the contin-
16	ued development and growth of a safe and clean nuclear
17	energy industry, through—
18	(1) reductions in financial and technical bar-
19	riers to construction and operation; and
20	(2) incentives for the development of a well-
21	trained workforce and the growth of safe domestic
22	nuclear and nuclear-related industries.
23	SEC. 132. NUCLEAR GRANTS AND PROGRAMS.
24	(a) Definition of Applicable Period.—In this
25	section, the term "applicable period" means—

1	(1) the 5-year period beginning on January 1
2	2012; and
3	(2) each 5-year period beginning on each Janu-
4	ary 1 thereafter.
5	(b) Use of Funds.—Of amounts made available
6	under for the calendar years in each applicable period—
7	(1) the Secretary of Energy shall use such
8	amounts for each applicable period as the Secretary
9	of Energy determines to be necessary to increase the
10	number and amounts of nuclear science talent ex-
11	pansion grants and nuclear science competitiveness
12	grants provided under section 5004 of the America
13	COMPETES Act (42 U.S.C. 16532); and
14	(2) the Secretary of Labor, in consultation with
15	nuclear energy entities and organized labor, [shall
16	use such amounts for each applicable period as the
17	Secretary of Labor determines to be necessary to
18	carry out programs] expanding workforce training
19	to meet the high demand for workers skilled in nu-
20	clear power plant construction and operation, includ-
21	ing programs for—
22	(A) electrical craft certification;
23	(B) preapprenticeship career technical edu-
24	cation for industrialized skilled crafts that are

1	useful in the construction of nuclear power
2	plants;
3	(C) community college and skill center
4	training for nuclear power plant technicians;
5	(D) training of construction management
6	personnel for nuclear power plant construction
7	projects; and
8	(E) regional grants for integrated nuclear
9	energy workforce development programs.
10	SEC. 133. NUCLEAR ENERGY RESEARCH AND DEVELOP-
11	MENT PROGRAMS.
12	(a) Nuclear Facility Long-term Operations
13	RESEARCH AND DEVELOPMENT PROGRAM.—
14	(1) Establishment.—As soon as practicable
15	after the date of enactment of this Act, the Sec-
16	retary of Energy (referred to in this section as the
17	"Secretary"), in consultation with the Chairman of
18	the Nuclear Regulatory Commission, shall establish
19	a research and development program—
20	(A) to address the reliability, availability,
21	productivity, component aging, safety, and secu-
22	rity of nuclear power plants;
23	(B) to improve the performance of nuclear
24	power plants;

1	(C) to sustain the health and safety of em-
2	ployees of nuclear power plants;
3	(D) to assess the feasibility of nuclear
4	power plants to continue to provide clean and
5	economic electricity safely, substantially beyond
6	the first license extension period of the nuclear
7	power plants, which will—
8	(i) significantly contribute to the en-
9	ergy security of the United States; and
10	(ii) help protect the environment of
11	the United States; and
12	(E) to support significant carbon reduc-
13	tions, lower overall costs that are required to
14	reduce carbon emissions, and increase energy
15	security.
16	(2) Conduct of Program.—
17	(A) In GENERAL.—In carrying out the
18	program established under paragraph (1), the
19	Secretary shall—
20	(i) build a fundamental scientific basis
21	to understand, predict, and measure
22	changes in materials, systems, structures,
23	equipment, and components as the mate-
24	rials, systems, structures, equipment, and

1	components age through continued oper-
2	ations in long-term service environments;
3	(ii) develop new safety analysis tools
4	and methods to enhance the performance
5	and safety of nuclear power plants;
6	(iii) develop advanced online moni-
7	toring, control, and diagnostics tech-
8	nologies to prevent equipment failures and
9	improve the safety of nuclear power plants;
10	(iv) establish a technical basis for ad-
11	vanced fuel designs (including silicon car-
12	bide fuel cladding) to increase the safety
13	margins of nuclear power plants; and
14	(v) examine issues, including—
15	(I) issues relating to material
16	degradation, plant aging, and tech-
17	nology upgrades; and
18	(II) any other issue that would
19	impact decisions to extend the lifespan
20	of nuclear power plants.
21	(B) Technical support.—In carrying
22	out the program established under paragraph
23	(1), the Secretary shall provide to the Chairman
24	of the Nuclear Regulatory Commission informa-
25	tion collected under the program—

1	(i) to help ensure informed decisions
2	regarding the extension of the life of nu-
3	clear power plants beyond a 60-year life-
4	span; and
5	(ii) for the licensing and long-term
6	management, and safe and economical op-
7	eration, of nuclear power plants.
8	(b) Spent Nuclear Waste Disposal Research
9	AND DEVELOPMENT PROGRAM.—
10	(1) Establishment.—As soon as practicable
11	after the date of enactment of this Act, the Sec-
12	retary shall establish a research and development
13	program to improve the understanding of nuclear
14	spent fuel management and the entire nuclear fuel
15	cycle life.
16	(2) Conduct of Program.—In carrying out
17	the program established under paragraph (1), the
18	Secretary shall carry out science-based research and
19	development activities through the development of
20	advanced technologies with the potential to produce
21	dramatic improvements in a range of nuclear spent
22	fuel management options including short-term and
23	long-term disposal, and proliferation-resistant nu-
24	clear spent fuel recycling.

1	(c) AUTHORIZATION OF APPROPRIATIONS.—There
2	are authorized to be appropriated such sums as are nec-
3	essary to carry out this section.
4	Subtitle D—Water Efficiency
5	SEC. 141. WATERSENSE.
6	(a) In General.—There is established within the
7	Environmental Protection Agency a WaterSense program
8	to identify and promote water-efficient products, build-
9	ings, landscapes, facilities, processes, and services, so as—
10	(1) to reduce water use;
11	(2) to reduce the strain on water, wastewater,
12	and stormwater infrastructure;
13	(3) to conserve energy used to pump, heat,
14	transport, and treat water; and
15	(4) to preserve water resources for future gen-
16	erations, through voluntary labeling of, or other
17	forms of communications about, products, buildings,
18	landscapes, facilities, processes, and services that
19	meet the highest water efficiency and performance
20	criteria.
21	(b) Duties.—The Administrator shall—
22	(1) establish—
23	(A) a WaterSense label to be used for cer-
24	tain items; and

1	(B) the procedure by which an item may
2	be certified to display the WaterSense label;
3	(2) promote WaterSense-labeled products,
4	buildings, landscapes, facilities, processes, and serv-
5	ices in the market place as the preferred tech-
6	nologies and services for—
7	(A) reducing water use; and
8	(B) ensuring product and service perform-
9	ance;
10	(3) work to enhance public awareness of the
11	WaterSense label through public outreach, edu-
12	cation, and other means;
13	(4) preserve the integrity of the WaterSense
14	label by—
15	(A) establishing and maintaining perform-
16	ance criteria so that products, buildings, land-
17	scapes, facilities, processes, and services labeled
18	with the WaterSense label perform as well or
19	better than less water-efficient counterparts;
20	(B) overseeing WaterSense certifications
21	made by third parties;
22	(C) conducting reviews of the use of the
23	WaterSense label in the marketplace and taking
24	corrective action in any case in which misuse of
25	the label is identified; and

1	(D) carrying out such other measures as
2	the Administrator determines to be appropriate
3	(5) regularly review and, if appropriate, update
4	WaterSense criteria for categories of products, build
5	ings, landscapes, facilities, processes, and services
6	at least once every 4 years;
7	(6) to the maximum extent practicable, regu
8	larly estimate and make available to the public the
9	production and relative market shares of, and the
10	savings of water, energy, and capital costs of water
11	wastewater, and stormwater infrastructure attrib-
12	utable to the use of WaterSense-labeled products
13	buildings, landscapes, facilities, processes, and serve
14	ices, at least annually;
15	(7) solicit comments from interested parties and
16	the public prior to establishing or revising a
17	WaterSense category, specification, installation cri-
18	terion, or other criterion (or prior to effective dates
19	for any such category, specification, installation cri-
20	terion, or other criterion);
21	(8) provide reasonable notice to interested par-
22	ties and the public of any changes (including effec-
23	tive dates), on the adoption of a new or revised cat
24	egory, specification, installation criterion, or other
25	criterion, along with—

1	(A) an explanation of the changes; and
2	(B) as appropriate, responses to comments
3	submitted by interested parties and the public;
4	(9) provide appropriate lead time (as deter-
5	mined by the Administrator) prior to the applicable
6	effective date for a new or significant revision to a
7	category, specification, installation criterion, or other
8	criterion, taking into account the timing require-
9	ments of the manufacturing, marketing, training,
10	and distribution process for the specific product,
11	building and landscape, or service category ad-
12	dressed;
13	(10) identify and, if appropriate, implement
14	other voluntary approaches in commercial, institu-
15	tional, residential, industrial, and municipal sectors
16	to encourage recycling and reuse technologies to im-
17	prove water efficiency or lower water use; and
18	(11) where appropriate, apply the WaterSense
19	label to water-using products that are labeled by the
20	Energy Star program implemented by the Adminis-
21	trator and the Secretary of Energy.
22	(c) Authorization of Appropriations.—There
23	are authorized to be appropriated to carry out this sec-
24	tion—
25	(1) \$7,500,000 for fiscal year 2010;

1	(2) \$10,000,000 for fiscal year 2011;
2	(3) \$20,000,000 for fiscal year 2012;
3	(4) \$50,000,000 for fiscal year 2013; and
4	(5) for each subsequent fiscal year, the applica-
5	ble amount during the preceding fiscal year, as ad-
6	justed to reflect changes for the 12-month period
7	ending the preceding November 30 in the Consumer
8	Price Index for All Urban Consumers published by
9	the Bureau of Labor Statistics of the Department of
10	Labor.
11	SEC. 142. FEDERAL PROCUREMENT OF WATER-EFFICIENT
12	PRODUCTS.
13	(a) Definitions.—In this section:
	(a) Definitions.—In this section:(1) Agency.—The term "Agency" has the
13	
13 14	(1) Agency.—The term "Agency" has the
13 14 15	(1) AGENCY.—The term "Agency" has the meaning given the term in section 7902(a) of title
13 14 15 16	(1) AGENCY.—The term "Agency" has the meaning given the term in section 7902(a) of title 5, United States Code.
13 14 15 16	 (1) AGENCY.—The term "Agency" has the meaning given the term in section 7902(a) of title 5, United States Code. (2) FEMP-DESIGNATED PRODUCT.—The term
113 114 115 116 117	 (1) AGENCY.—The term "Agency" has the meaning given the term in section 7902(a) of title 5, United States Code. (2) FEMP-DESIGNATED PRODUCT.—The term "FEMP-designated product" means a product that
113 114 115 116 117 118 119	 (1) AGENCY.—The term "Agency" has the meaning given the term in section 7902(a) of title 5, United States Code. (2) FEMP-DESIGNATED PRODUCT.—The term "FEMP-designated product" means a product that is designated under the Federal Energy Manage.
13 14 15 16 17 18 19 20	(1) AGENCY.—The term "Agency" has the meaning given the term in section 7902(a) of title 5, United States Code. (2) FEMP-DESIGNATED PRODUCT.—The term "FEMP-designated product" means a product that is designated under the Federal Energy Management Program of the Department of Energy as
13 14 15 16 17 18 19 20 21	(1) AGENCY.—The term "Agency" has the meaning given the term in section 7902(a) of title 5, United States Code. (2) FEMP-DESIGNATED PRODUCT.—The term "FEMP-designated product" means a product that is designated under the Federal Energy Management Program of the Department of Energy as being among the highest 25 percent of equivalent

1	"building", "landscape", "facility", "process", and
2	"service" do not include—
3	(A) any water-using product, building,
4	landscape, facility, process, or service designed
5	or procured for combat or combat-related mis-
6	sions; or
7	(B) any product, building, landscape, facil-
8	ity, process, or service already covered by the
9	Federal procurement regulations established
10	under section 553 of the National Energy Con-
11	servation Policy Act (42 U.S.C. 8259b).
12	(4) Watersense product, building, land-
13	SCAPE, FACILITY, PROCESS, OR SERVICE.—The term
14	"WaterSense product, building, landscape, facility,
15	process, or service" means a product, building, land-
16	scape, facility, process, or service that is labeled for
17	water efficiency under the WaterSense program.
18	(5) Watersense program.—The term
19	"WaterSense program" means the program estab-
20	lished by [section 141].
21	(b) Procurement of Water Efficient Prod-
22	UCTS.—
23	(1) Requirement.—
24	(A) In general.—To meet the require-
25	ments of an agency for a water-using product,

1	building, landscape, facility, process, or service,
2	the head of an Agency shall, except as provided
3	in paragraph (2), procure—
4	(i) a WaterSense product, building,
5	landscape, facility, process, or service; or
6	(ii) a FEMP-designated product.
7	(B) Sense of congress regarding in-
8	STALLATION PREFERENCES.—It is the sense of
9	Congress that a WaterSense irrigation system
10	should, to the maximum extent practicable, be
11	installed and audited by a WaterSense-certified
12	irrigation professional to ensure optimal per-
13	formance.
14	(2) Exceptions.—The head of an Agency shall
15	not be required to procure a WaterSense product,
16	building, landscape, facility, process, or service or
17	FEMP-designated product under paragraph (1) if
18	the head of the Agency finds in writing that—
19	(A) a WaterSense product, building, land-
20	scape, facility, process, or service or FEMP-des-
21	ignated product is not cost-effective over the life
22	of the product, building, landscape, facility,
23	process, or service, taking energy, water, and
24	wastewater service cost savings into account; or

1	(B) no WaterSense product, building, land-
2	scape, facility, process, or service or FEMP-des-
3	ignated product is reasonably available that
4	meets the functional requirements of the Agen-
5	cy.
6	(3) Procurement planning.—
7	(A) IN GENERAL.—The head of an Agency
8	shall incorporate criteria used for evaluating
9	WaterSense products, buildings, landscapes, fa-
10	cilities, processes, and services and FEMP-des-
11	ignated products into—
12	(i) the specifications for all procure-
13	ments involving water-using products,
14	buildings, landscapes, facilities, processes,
15	and systems, including guide specifications,
16	project specifications, and construction,
17	renovation, and services contracts that in-
18	clude provision of water-using products,
19	buildings, landscapes, facilities, processes,
20	and systems; and
21	(ii) the factors for the evaluation of
22	offers received for the procurement.
23	(B) Listing of water-efficient prod-
24	UCTS IN FEDERAL CATALOGS.—WaterSense
25	products, buildings, landscapes, facilities, proc-

- 123 1 esses, and systems and FEMP-designated prod-2 ucts shall be clearly identified and prominently 3 displayed in any inventory or listing of products by the General Services Administration or the 4 5 Defense Logistics Agency. 6 (C) Additional measures.—The head of 7 an Agency shall consider, to the maximum ex-8 tent practicable, additional measures for reduc-9 ing Agency water use, including water reuse 10 technologies, leak detection and repair, and use 11 of waterless products that perform similar func-12 tions to existing water-using products. 13 (c) Retrofit Programs.—The head of each Agency, working in coordination with the Administrator and 14 15 the heads of such other Agencies as the President may designate, shall develop standards and implementation 16 17 procedures for a building water efficiency retrofit pro-18 gram, which shall include the following elements: 19 EVALUATION OF PRODUCTS AND 20 TEMS.—Not later than 270 days after the date of 21 enactment of this Act, each Agency shall evaluate
- 22 water-consuming products and systems in buildings 23 operated by such Agency and identify opportunities 24 for retrofit and replacement of such products and 25 systems with high-efficiency equipment, such as

1 zero-water-consumption urinals, high-efficiency toi-2 lets, high-efficiency shower heads, and high-effi-3 ciency faucets, and other products that are certified 4 as Watersense products or FEMP-designated prod-5 ucts. 6 (2) Retrofit plan.—Not later than 360 days 7 after the date of enactment of this Act, each Agency 8 shall, in coordination with other appropriate Agen-9 cies and officials, prepare a water efficiency retrofit 10 plan that shall, to the maximum extent practicable, 11 maximize retrofitting of water-consuming products 12 and systems and replacement with high-efficiency 13 equipment described in paragraph (1). 14 (d) REGULATIONS.—Not later than 180 days after 15 the date of enactment of this Act, the Administrator, working in coordination with the Secretary of Energy and 16 17 the heads of such other Agencies as the President may 18 designate, shall issue guidelines to carry out this section. 19 SEC. 143. STATE RESIDENTIAL WATER EFFICIENCY AND 20 CONSERVATION INCENTIVES PROGRAM. 21 (a) Definitions.—In this section: 22 (1) ELIGIBLE ENTITY.—The term "eligible enti-23 ty" means a State government, local or county gov-24 ernment, tribal government, wastewater or sewerage 25 utility, municipal water authority, energy utility,

1	water utility, or nonprofit organization that meets
2	the requirements of subsection (b).
3	(2) Incentive Program.—The term "incentive
4	program" means a program for administering finan-
5	cial incentives for consumer purchase and installa-
6	tion of water-efficient products, buildings (including
7	New Water-Efficient Homes), landscapes, processes,
8	or services described in subsection (b)(1).
9	(3) Residential water-efficient product,
10	BUILDING, LANDSCAPE, PROCESS, OR SERVICE.—
11	(A) In general.—The term "residential
12	water-efficient product, building, landscape,
13	process, or service" means a product, building,
14	landscape, process, or service for a residence or
15	its landscape that is rated for water efficiency
16	and performance—
17	(i) by the WaterSense program; or
18	(ii) if a WaterSense specification does
19	not exist, by the Energy Star program or
20	an incentive program approved by the Ad-
21	ministrator.
22	(B) Inclusions.—The term "residential
23	water-efficient product, building, landscape,
24	process, or service" includes—
25	(i) faucets;

1	(ii) irrigation technologies and serv-
2	ices;
3	(iii) point-of-use water treatment de-
4	vices;
5	(iv) reuse and recycling technologies;
6	(v) toilets;
7	(vi) clothes washers;
8	(vii) dishwashers;
9	(viii) showerheads;
10	(ix) xeriscaping and other landscape
11	conversions that replace irrigated turf; and
12	(x) New Water Efficient Homes cer-
13	tified by the WaterSense program.
14	(4) Watersense program.—The term
15	"WaterSense program" means the program estab-
16	lished by [section 141].
17	(b) Eligible Entities.—An entity shall be eligible
18	to receive an allocation under subsection (c) if the entity—
19	(1) establishes (or has established) an incentive
20	program to provide financial incentives to residential
21	consumers for the purchase of residential water-effi-
22	cient products, buildings, landscapes, processes, or
23	services;

1	(2) submits an application for the allocation at
2	such time, in such form, and containing such infor-
3	mation as the Administrator may require; and
4	(3) provides assurances satisfactory to the Ad-
5	ministrator that the entity will use the allocation to
6	supplement, but not supplant, funds made available
7	to carry out the incentive program.
8	(c) Amount of Allocations.—For each fiscal year,
9	the Administrator shall determine the amount to allocate
10	to each eligible entity to carry out subsection (d), taking
11	into consideration—
12	(1) the population served by the eligible entity
13	during the most recent calendar year for which data
14	are available;
15	(2) the targeted population of the incentive pro-
16	gram of the eligible entity, such as general house-
17	holds, low-income households, or first-time home-
18	owners, and the probable effectiveness of the incen-
19	tive program for that population;
20	(3) for existing programs, the effectiveness of
21	the program in encouraging the adoption of water-
22	efficient products, buildings, landscapes, facilities,
23	processes, and services;
24	(4) any allocation to the eligible entity for a
25	preceding fiscal year that remains unused; and

1	(5) the per capita water demand of the popu-
2	lation served by the eligible entity during the most
3	recent calendar year for which data are available
4	and the accessibility of water supplies to such entity.
5	(d) USE OF ALLOCATED FUNDS.—Funds allocated to
6	an eligible entity under subsection (c) may be used to pay
7	up to 50 percent of the cost of establishing and carrying
8	out an incentive program.
9	(e) FIXTURE RECYCLING.—Eligible entities are en-
10	couraged to promote or implement fixture recycling pro-
11	grams to manage the disposal of older fixtures replaced
12	due to the incentive program under this section.
13	(f) Issuance of Incentives.—
14	(1) In general.—Financial incentives may be
15	provided to residential consumers that meet the re-
16	quirements of the applicable incentive program.
17	(2) Manner of issuance.—An eligible entity
18	may—
19	(A) issue all financial incentives directly to
20	residential consumers; or
21	(B) with approval of the Administrator,
22	delegate all or part of financial incentive admin-
23	istration to other organizations, including local
24	governments, municipal water authorities, water
25	utilities, and non-profit organizations.

1	(3) Amount.—The amount of a financial in-
2	centive shall be determined by the eligible entity
3	taking into consideration—
4	(A) the amount of any Federal or State
5	tax incentive available for the purchase of the
6	residential water-efficient product or service;
7	(B) the amount necessary to change con-
8	sumer behavior to purchase water-efficient
9	products and services; and
10	(C) the consumer expenditures for onsite
11	preparation, assembly, and original installation
12	of the product.
13	(g) Authorization of Appropriations.—There
14	are authorized to be appropriated to the Administrator to
15	carry out this section—
16	(1) \$100,000,000 for fiscal year 2010;
17	(2) \$150,000,000 for fiscal year 2011;
18	(3) \$200,000,000 for fiscal year 2012;
19	(4) \$150,000,000 for fiscal year 2013;
20	(5) \$100,000,000 for fiscal year 2014; and
21	(6) for each subsequent fiscal year, the applica-
22	ble amount during the preceding fiscal year, as ad-
23	justed to reflect changes for the 12-month period
24	ending the preceding November 30 in the Consumer
25	Price Index for All Urban Consumers published by

1	the Bureau of Labor Statistics of the Department of
2	Labor.
3	Subtitle E—Miscellaneous
4	SEC. 151. OFFICE OF CONSUMER ADVOCACY.
5	(a) Office.—
6	(1) Establishment.—There is an Office of
7	Consumer Advocacy established within the Commis-
8	sion to serve as an advocate for the public interest.
9	(2) DIRECTOR.—The Office shall be headed by
10	a Director to be appointed by the President, who is
11	admitted to the Federal Bar, with experience in pub-
12	lic utility proceedings, and by and with the advice
13	and consent of the Senate.
14	(3) Duties.—The Office may—
15	(A) represent, and appeal on behalf of, en-
16	ergy customers on matters concerning rates or
17	service of public utilities and natural gas com-
18	panies under the jurisdiction of the Commis-
19	sion—
20	(i) at hearings of the Commission;
21	(ii) in judicial proceedings in the
22	courts of the United States; and
23	(iii) at hearings or proceedings of
24	other Federal regulatory agencies and com-
25	missions;

1	(B) monitor and review energy customer
2	complaints and grievances on matters con-
3	cerning rates or service of public utilities and
4	natural gas companies under the jurisdiction of
5	the Commission;
6	(C) investigate independently, or within the
7	context of formal proceedings, the services pro-
8	vided by, the rates charged by, and the valu-
9	ation of the properties of, public utilities and
10	natural gas companies under the jurisdiction of
11	the Commission;
12	(D) develop means, such as public dissemi-
13	nation of information, consultative services, and
14	technical assistance, to ensure, to the maximum
15	extent practicable, that the interests of energy
16	consumers are adequately represented in the
17	course of any hearing or proceeding described
18	in subparagraph (A);
19	(E) collect data concerning rates or service
20	of public utilities and natural gas companies
21	under the jurisdiction of the Commission; and
22	(F) prepare and issue reports and rec-
23	ommendations.
24	(4) Compensation and powers.—The Direc-
25	tor may—

1	(A) employ and fix the compensation of
2	such staff personnel as is deemed necessary;
3	and
4	(B) procure temporary and intermittent
5	services as needed.
6	(5) Access to information.—Each depart-
7	ment, agency, and instrumentality of the Federal
8	Government is authorized and directed to furnish to
9	the Director such reports and other information as
10	he deems necessary to carry out his functions under
11	this section.
12	(b) Consumer Advocacy Advisory Committee.—
13	(1) Establishment.—The Director shall es-
14	tablish an advisory committee to be known as Con-
15	sumer Advocacy Advisory Committee (in this section
16	referred to as the "Advisory Committee") to review
17	rates, services, and disputes and to make rec-
18	ommendations to the Director.
19	(2) Composition.—The Director shall appoint
20	5 members to the Advisory Committee including—
21	(A) 2 individuals representing State Utility
22	Consumer Advocates; and
23	(B) 1 individual, from a nongovernmental
24	organization, representing consumers.

1	(3) Meetings.—The Advisory Committee shall
2	meet at such frequency as may be required to carry
3	out its duties.
4	(4) Reports.—The Director shall provide for
5	publication of recommendations of the Advisory
6	Committee on the public website established for the
7	Office.
8	(5) Duration.—Notwithstanding any other
9	provision of law, the Advisory Committee shall con-
10	tinue in operation during the period in which the Of-
11	fice exists.
12	(6) APPLICATION OF FACA.—Except as other-
13	wise specifically provided, the Advisory Committee
14	shall be subject to the Federal Advisory Committee
15	Act.
16	(c) Definitions.—In this section:
17	(1) Commission.—The term "Commission"
18	means the Federal Energy Regulatory Commission.
19	(2) Energy customer.—The term "energy
20	customer" means a residential customer or a small
21	commercial customer that receives products or serv-
22	ices from a public utility or natural gas company
23	under the jurisdiction of the Commission.
24	(3) Natural gas company.—The term "nat-
25	ural gas company" has the meaning given the term

- 1 in section 2 of the Natural Gas Act (15 U.S.C.
- 2 717a), as modified by section 601(a) of the Natural
- 3 Gas Policy Act of 1978 (15 U.S.C. 3431(a)).
- 4 (4) Office.—The term "Office" means the Of-
- 5 fice of Consumer Advocacy established by subsection
- 6 (a)(1).
- 7 (5) Public utility.—The term "public util-
- 8 ity" has the meaning given the term in section
- 9 201(e) of the Federal Power Act (16 U.S.C. 824(e)).
- 10 (6) SMALL COMMERCIAL CUSTOMER.—The term
- 11 "small commercial customer" means a commercial
- customer that has a peak demand of not more than
- 13 1,000 kilowatts per hour.
- 14 (d) AUTHORIZATION OF APPROPRIATIONS.—There
- 15 are authorized such sums as necessary to carry out this
- 16 section.
- 17 (e) Savings Clause.—Nothing in this section af-
- 18 fects the rights or obligations of State Utility Consumer
- 19 Advocates.
- 20 SEC. 152. CLEAN TECHNOLOGY BUSINESS COMPETITION
- 21 GRANT PROGRAM.
- 22 (a) IN GENERAL.—The Administrator may provide
- 23 grants to organizations to conduct business competitions
- 24 that provide incentives, training, and mentorship to entre-
- 25 preneurs and early stage start-up companies throughout

1	the United States to meet high-priority economic, environ-
2	mental, and energy goals in areas including air quality,
3	energy efficiency and renewable energy, transportation,
4	water quality and conservation, green buildings, and waste
5	management.
6	(b) Purposes.—
7	(1) In general.—The competitions described
8	in subsection (a) shall have the purposes of—
9	(A) accelerating the development and de-
10	ployment of clean technology businesses and
11	green jobs;
12	(B) stimulating green economic develop-
13	ment;
14	(C) providing business training and men-
15	toring to early stage clean technology compa-
16	nies; and
17	(D) strengthening the competitiveness of
18	United States clean technology industry in
19	world trade markets.
20	(2) Priority shall be given to busi-
21	ness competitions that—
22	(A) are led by the private sector;
23	(B) encourage regional and interregional
24	cooperation; and

1	(C) can demonstrate market-driven prac-
2	tices and the creation of cost-effective green
3	jobs through an annual publication of competi-
4	tion activities and directory of companies.
5	(c) Eligibility.—
6	(1) In general.—To be eligible for a grant
7	under this section, an organization shall be—
8	(A) an organization described in section
9	501(c)(3) of the Internal Revenue Code of 1986
10	and exempt from taxation under 501(a) of that
11	Code; or
12	(B) any sponsored entity of an organiza-
13	tion described in subparagraph (A) that is oper-
14	ated as a nonprofit entity.
15	(2) Priority.—In making grants under this
16	section, the Administrator shall give priority to orga-
17	nizations that can demonstrate broad funding sup-
18	port from private and other non-Federal funding
19	sources to leverage Federal investment.
20	(d) AUTHORIZATION OF APPROPRIATIONS.—There is
21	authorized to be appropriated to carry out this section
22	\$20,000,000.
23	SEC. 153. PRODUCT CARBON DISCLOSURE PROGRAM.
24	(a) EPA Study.—The Administrator shall conduct
25	a study to determine the feasibility of establishing a na-

- 1 tional program for measuring, reporting, publicly dis-
- 2 closing, and labeling products or materials sold in the
- 3 United States for their carbon content, and shall, not later
- 4 than 18 months after the date of enactment of this Act,
- 5 transmit a report to Congress which shall include the fol-
- 6 lowing:

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- 7 (1) A determination of whether a national prod-8 uct carbon disclosure program and labeling program 9 would be effective in achieving the intended goals of 10 achieving greenhouse gas reductions and an exam-11 ination of existing programs globally and their 12 strengths and weaknesses.
 - (2) Criteria for identifying and prioritizing sectors and products and processes that should be covered in such program or programs.
 - (3) An identification of products, processes, or sectors whose inclusion could have a substantial carbon impact (prioritizing industrial products such as iron and steel, aluminum, cement, chemicals, and paper products, and also including food, beverage, hygiene, cleaning, household cleaners, construction, metals, clothing, semiconductor, and consumer electronics).
 - (4) Suggested methodology and protocols for measuring the carbon content of the products across

- the entire carbon lifecycle of such products for use in a carbon disclosure program and labeling program.
 - (5) A review of existing greenhouse gas product accounting standards, methodologies, and practices including the Greenhouse Gas Protocol, ISO 14040/44, ISO 14067, and Publically Available Specification 2050, and including a review of the strengths and weaknesses of each.
 - (6) A survey of secondary databases including the Manufacturing Energy Consumption Survey, an evaluation of the quality of data for use in a product carbon disclosure program and product carbon labeling program, an identification of gaps in the data relative to the potential purposes of a national product carbon disclosure program and product carbon labeling program, and development of recommendations for addressing these data gaps.
 - (7) An assessment of the utility of comparing products and the appropriateness of product carbon standards.
 - (8) An evaluation of the information needed on a label for clear and accurate communication, including what pieces of quantitative and qualitative information need to be disclosed.

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1 (9) An evaluation of the appropriate boundaries 2 of the carbon lifecycle analysis for different sectors 3 and products. 4 (10) An analysis of whether default values 5 should be developed for products whose producer 6 does not participate in the program or does not have 7 data to support a disclosure or label and a deter-8 mination of the best ways to develop such default 9 values. 10 (11) A recommendation of certification and 11 verification options necessary to assure the quality 12 of the information and avoid greenwashing or the 13 use of insubstantial or meaningless environmental 14 claims to promote a product. 15 (12) An assessment of options for educating 16 consumers about product carbon content and the 17 product carbon disclosure program and product car-18 bon labeling program. 19 (13) An analysis of the costs and timelines as-20 sociated with establishing a national product carbon 21 disclosure program and product carbon labeling pro-22 gram, including options for a phased approach. 23 Costs should include those for businesses associated

with the measurement of carbon footprints and

those associated with creating a product carbon label

1	and managing and operating a product carbon label-
2	ing program, and options for minimizing these costs.
3	(14) An evaluation of incentives (such as finan-
4	cial incentives, brand reputation, and brand loyalty)
5	to determine whether reductions in emissions can be
6	accelerated through encouraging more efficient man-
7	ufacturing or by encouraging preferences for lower-
8	emissions products to substitute for higher-emissions
9	products whose level of performance is no better.
10	(b) Development of National Carbon Disclo-
11	SURE PROGRAM.—Upon conclusion of the study, and not
12	later than 3 years after the date of enactment of this Act,
13	the Administrator shall establish a national product car-
14	bon disclosure program, participation in which shall be
15	voluntary, and which may involve a product carbon label
16	with broad applicability to the wholesale and consumer
17	markets to enable and encourage knowledge about carbon
18	content by producers and consumers and to inform efforts
19	to reduce energy consumption (carbon dioxide equivalent
20	emissions) nationwide. In developing such a program, the
21	Administrator shall—
22	(1) consider the results of the study conducted
23	under subsection (a);
24	(2) consider existing and planned programs and
25	proposals and measurement standards (including the

1	Publicly Available Specification 2050, standards to
2	be developed by the World Resource Institute/World
3	Business Council for Sustainable Development, the
4	International Standards Organization, and the bill
5	AB19 pending in the California legislature as of the
6	date of enactment of this Act);
7	(3) consider the compatibility of a national
8	product carbon disclosure program with existing pro-
9	grams;
10	(4) utilize incentives and other means to spur
11	the adoption of product carbon disclosure and prod-
12	uct carbon labeling;
13	(5) develop protocols and parameters for a
14	product carbon disclosure program, including a
15	methodology and formula for assessing, verifying,
16	and potentially labeling a product's greenhouse gas
17	content, and for data quality requirements to allow
18	for product comparison;
19	(6) create a means to—
20	(A) document best practices;
21	(B) ensure clarity and consistency;
22	(C) work with suppliers, manufacturers,
23	and retailers to encourage participation;
24	(D) ensure that protocols are consistent
25	and comparable across like products; and

1	(E) evaluate the effectiveness of the pro-
2	gram;
3	(7) make publicly available information on
4	product carbon content to ensure transparency;
5	(8) provide for public outreach, including a con-
6	sumer education program to increase awareness;
7	(9) develop training and education programs to
8	help businesses learn how to measure and commu-
9	nicate their carbon footprint and easy tools and tem-
10	plates for businesses to use to reduce cost and time
11	to measure their products' carbon lifecycle;
12	(10) consult with the Secretary of Energy, the
13	Secretary of Commerce, the Federal Trade Commis-
14	sion, and other Federal agencies, as necessary;
15	(11) gather input from stakeholders through
16	consultations, public workshops, or hearings with
17	representatives of consumer product manufacturers.
18	consumer groups, and environmental groups;
19	(12) utilize systems for verification and product
20	certification that will ensure that claims manufactur-
21	ers make about their products are valid;
22	(13) create a process for reviewing the accuracy
23	of product carbon label information and protecting
24	the product carbon label in the case of a change in
25	the product's energy source, supply chain, ingredi-

ents, or other factors, and specify the frequency to 1 2 which data should be updated; and 3 (14) develop a standardized, easily understand-4 able carbon label, if appropriate, and create a proc-5 ess for responding to inaccuracies and misuses of 6 such a label. 7 (c) Report to Congress.—Not later than 5 years 8 after the program is established pursuant to subsection 9 (b), the Administrator shall report to Congress on the ef-10 fectiveness and impact of the program, the level of voluntary participation, and any recommendations for additional measures. 12 13 (d) Definitions.—In this section: 14 (1) The term "carbon content" means the 15 quantity of greenhouse gas emissions and the warm-16 ing impact of those emissions on the atmosphere ex-17 pressed in carbon dioxide equivalent associated with 18 a product's value chain. 19 (2) The term "carbon footprint" means the 20 level of greenhouse gas emissions produced by a par-21 ticular activity, service, or entity. (3) The term "carbon lifecycle" means the 22 23 greenhouse gas emissions that are released as part 24 of the processes of creating, producing, processing, 25 manufacturing, modifying, transporting, distrib-

1 uting, storing, using, recycling, or disposing of goods 2 and services. 3 (e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Administrator— 5 (1) to carry out the study required by sub-6 section (a), \$5,000,000; and 7 (2) to carry out the program required under 8 subsection (b), \$25,000,000 for each of fiscal years 9 2010 through 2025. 10 SEC. 154. STATE RECYCLING PROGRAMS. 11 (a) Establishment.—The Administrator shall es-12 tablish a State Recycling Program to provide funds [in accordance with section 2 of division B**] to States 13 14 for use in carrying out recycling programs. 15 (b) Use of Funding.— 16 (1) In General.—States receiving funding 17 pursuant to this section shall use the proceeds to 18 carry out recycling programs in accordance with this 19 section. 20 (2) County and municipal programs.—Not 21 less than \(\frac{1}{3}\) of the funding provided to a State 22 under this section shall be distributed by the State 23 to county and municipal recycling programs as de-24 scribed in subsection (c)(1), to be used exclusively to

1	support recycling purposes and associated source re-
2	duction purposes, including to provide incentives—
3	(A) for recycling-related technology that—
4	(i) reduces or avoids greenhouse gas
5	emissions;
6	(ii) increases collection rates; and
7	(iii) improves the quality of recyclable
8	material that is separated from solid
9	waste;
10	(B) for energy-efficiency projects for trans-
11	portation fleets and recycling equipment used to
12	collect and sort recyclable material separated
13	from solid waste;
14	(C) for recycling program-related expenses,
15	including—
16	(i) education and job training;
17	(ii) development and implementation
18	of variable rate (commonly referred to as
19	"pay-as-you-throw") recycling programs
20	and anaerobic digestion programs;
21	(iii) promotion of public space recy-
22	cling programs;
23	(iv) approaches for assuring compli-
24	ance with recycling requirements; and

1	(v) development or implementation of
2	best practices for municipal solid waste re-
3	duction programs; and
4	(D) to ensure that recyclable material is
5	not sent for disposal or incineration during fluc-
6	tuating markets.
7	(3) Recycling facilities.—Not less than ½
8	of the funding provided to a State under this section
9	shall be distributed by the State to eligible recycling
10	facilities as described in subsection $(c)(2)$ to be used
11	exclusively to support the recycling purposes and as-
12	sociated source reduction purposes of the facilities,
13	including to provide—
14	(A) incentives for the demonstration or de-
15	ployment of recycling-related technology and
16	equipment that reduce or avoid greenhouse gas
17	emissions;
18	(B) incentives to facilities that increase the
19	quantity and quality of recyclable material that
20	is recycled versus sent for disposal or inciner-
21	ation;
22	(C) funding for research, management,
23	and removal of impediments to recycling, in-
24	cluding—
25	(i) radioactive material; and

1	(ii) devices or materials that contain
2	polychlorinated biphenyls, mercury, or
3	chlorofluorocarbons;
4	(D) funding for research on, and develop-
5	ment and deployment of, new technologies to
6	more efficiently and effectively recycle items
7	such as automobile shredder residue, cathode
8	ray tubes, plastics, and tires; and
9	(E) incentives to recycle materials identi-
10	fied by the Administrator that are not being re-
11	cycled at a recycling facility.
12	(4) Manufacturing facilities.—Not less
13	than ½ of the funding provided to a State under
14	this section shall be distributed by the State to eligi-
15	ble manufacturing facilities as described in sub-
16	section (c)(3) to be used exclusively to support recy-
17	cling purposes, including to provide incentives for
18	the demonstration or deployment of—
19	(A) manufacturing-related technology and
20	equipment that would increase the use of recy-
21	clable material and avoid or reduce greenhouse
22	gas emissions;
23	(B) radiation detection equipment and the
24	costs associated with recovery of detected radi-
25	ated recyclable material;

1	(C) technologies that will detect and sepa-
2	rate contaminants, including mercury-, lead-,
3	and cadmium-containing devices;
4	(D) strategies and technologies to remove
5	impediments to recovering recyclable material;
6	and
7	(E) strategies and technologies to improve
8	the energy efficiency of technology and equip-
9	ment used to manufacture recyclable material.
10	(c) Eligibility Requirements.—
11	(1) County and municipality programs.—
12	Funds provided under subsection (b)(2) shall be pro-
13	vided on a competitive basis to county and municipal
14	recycling programs that—
15	(A) have within the solid waste manage-
16	ment plans of the programs a recycling man-
17	agement plan that includes an education out-
18	reach program for the individuals and entities
19	served by the program constituency that high-
20	lights the lifecycle benefits of recycling; and
21	(B) collect at least 5 recyclable materials,
22	such as—
23	(i) ferrous and nonferrous metal;
24	(ii) aluminum;
25	(iii) plastie;

I	(iv) tires and rubber;
2	(v) household electronic equipment;
3	(vi) glass;
4	(vii) scrap food;
5	(viii) recoverable fiber or paper; and
6	(ix) textiles;
7	(C) demonstrate, not later than 3 years
8	after the date of receipt of funds under this
9	subtitle, reasonable progress toward achieving—
10	(i) a collection rate goal of at least 30
11	percent of the total recyclable materials
12	available from the solid waste stream in
13	the requesting State, county, or municipal
14	program; or
15	(ii) a 10-percent increase of collected
16	recyclable materials compared to the total
17	solid waste stream in the requesting State
18	county, or municipal program;
19	(D)(i) own, operate, or contract to oper-
20	ate—
21	(I) a curbside recyclables collection
22	program;
23	(II) a redemption center or drop-off
24	facility for recyclables; and
25	(III) a materials recovery facility; and

1	(ii) have in place a quality, environmental,
2	health, and safety management system (such as
3	that of the International Standards Organiza-
4	tion or an equivalent) that includes goals to re-
5	duce the operational carbon baselines of the
6	programs; and
7	(E) have in effect a performance standard
8	that gives a purchasing preference to products
9	that are manufactured with quantities of recy-
10	clable material that meet or exceed sizeable
11	quantity and product standards as described in
12	[subsection (b)(2)].
13	(2) Recycling facility.—Funds provided
14	under subsection (b)(3) shall be provided on a com-
15	petitive basis to a recycling facility that—
16	(A) processes recyclable material into com-
17	mercial specification-grade commodities for use
18	as raw material feed stock at recovery facilities,
19	including for use as—
20	(i) a replacement or substitute for a
21	virgin raw material; or
22	(ii) a replacement or substitute for a
23	product made, in whole or in part, from a
24	virgin raw material;
25	(B) has a verifiable carbon baseline; and

1	(C) has an environmental, health and safe-
2	ty, and quality management system (such as
3	that of the International Standards Organiza-
4	tion or an equivalent) that includes goals to re-
5	duce the operational carbon baseline of the re-
6	cycling facility per unit of material processed.
7	(3) Manufacturing facility.—Funds pro-
8	vided under subsection (b)(4) shall be provided on a
9	competitive basis to a manufacturing facility that—
10	(A) can report on a verifiable carbon base-
11	line that is consistent with reporting require-
12	ments [under section 713 of the Clean Air
13	Act]; and
14	(B) has an environmental, health and safe-
15	ty, and quality management system (such as
16	that of the International Standards Organiza-
17	tion or an equivalent) that includes goals to re-
18	duce the operational carbon baseline of the
19	manufacturing facility per unit of material
20	processed.
21	(d) Reporting.—Each State, county, or munici-
22	pality receiving funding under this section shall include
23	in the [biennial] reports required [under section
24	
25	ministrator may prescribe—

1	(1) a list of entities receiving funding under
2	this section, including entities receiving such funding
3	from units of local government pursuant to sub-
4	section $(b)(2)$;
5	(2) the amount of funding received by each
6	such recipient;
7	(3) the specific purposes for which the funding
8	was conveyed to each such recipient; and
9	(4) documentation of the quantity of net recy-
10	clable material that was collected and processed and
11	greenhouse gas emissions that were reduced or
12	avoided accordingly, through use of the funding,
13	based on a lifecycle calculation developed by the Ad-
14	ministrator.
15	(e) METHODOLOGY AND DECISIONMAKING.—The Ad-
16	ministrator, as appropriate—
17	(1) shall develop and periodically update
18	lifecycle methods to quantify the relationship be-
19	tween waste management decisions, including recy-
20	cling and waste reduction, greenhouse gas reduc-
21	tions, and energy use reductions, for purposes that
22	include—
23	(A) helping to support decisions under
24	Federal, State, and municipal recycling and
25	waste management programs, including—

1	(i) estimating greenhouse gas and en-
2	ergy benefits of increasing collection or
3	adding new materials to recycling pro-
4	grams;
5	(ii) comparing the benefits of recy-
6	cling and waste reduction to other green-
7	house gas and energy use reduction strate-
8	gies;
9	(iii) optimizing waste management
10	strategies to maximize greenhouse gas re-
11	ductions and energy use reductions; and
12	(iv) public education;
13	(B) designing products to optimize waste
14	reduction and recycling opportunities and use of
15	recycled materials in the manufacturing proc-
16	ess; and
17	(C) supporting other analyses required
18	under this Act;
19	(2) may collect data to support the development
20	of the methods described in paragraph (1); and
21	(3) to improve national consistency and to fa-
22	cilitate decisionmaking under this [title], shall, in
23	consultation with appropriate State and local rep-
24	resentatives and municipal recycling programs, iden-
25	tify best practices to promote improvement in, and

1	support State efforts in improving, municipal recy-
2	cling and resource recovery programs.
3	SEC. 155. SUPPLEMENTAL AGRICULTURE GREENHOUSE
4	GAS REDUCTION AND RENEWABLE ENERGY
5	PROGRAM.
6	(a) Agricultural Greenhouse Gas Reduc-
7	TIONS.—
8	(1) In General.—The Secretary of Agriculture
9	(referred to in this section as the "Secretary") shall
10	establish a Greenhouse Gas Reduction Inventives
11	Program (referred to in this section as the "pro-
12	gram") to provide financial assistance to owners and
13	operators of agricultural land (including land on
14	which specialty crops are produced and private or
15	public land used for grazing) and forest land for
16	projects and activities that measurably increase car-
17	bon sequestration or reduce greenhouse gas emis-
18	sions.
19	(2) Priority.—In carrying out the program,
20	the Secretary shall give priority to projects or activi-
21	ties that—
22	(A) reduce greenhouse gas emissions or se-
23	quester carbon in agricultural operations where
24	there are limited recognized opportunities to

1	achieve such emission reductions or sequestra-
2	tion; and
3	(B) reduce greenhouse gas emissions or in-
4	crease sequestration of greenhouse gases, and
5	achieve significant other environmental benefits,
6	such as the improvements of water or air qual-
7	ity.
8	(3) Eligible projects and activities.—Eli-
9	gible projects and payments shall include those
10	that—
11	(A) reflect the comparable amount that the
12	owners or operators would receive in the offset
13	market if not for compliance with environ-
14	mental laws that preclude the owners and oper-
15	ators from being eligible for receiving an offset
16	credit under [section 737 of the Clean Air Act]
17	[If we're eliminating references to allowances/off-
18	sets in division A, perhaps these references
19	should be something like "a Federal law enacted
20	for the purpose of regulating greenhouse gas
21	$emissions"? bracket{1};$
22	(B) provide greenhouse gas emission bene-
23	fits, but do not receive an offset credit under
24	[section 737 of the Clean Air Act] or qualify
25	for [an early action allowance under section

1	794 of that Act] [receive an offset credit or
2	qualify for an early action allowance under a
3	Federal law enacted for the purpose of regu-
4	lating greenhouse gas emissions?], including
5	projects and activities that provide an oppor-
6	tunity to demonstrate and test new or uncertain
7	methods to reduce or sequester emissions;
8	(C) reward early adopters, including pro-
9	ducers that practice no-till agriculture, and en-
10	sure that individuals and entities that took ac-
11	tion prior to the implementation of the offset
12	program under title VII of the Clean Air Act
13	[use language suggested above?] are not placed
14	at a competitive disadvantage, including giving
15	special consideration to owners or operators lo-
16	cated in jurisdictions with more stringent envi-
17	ronmental laws (including regulations), compli-
18	ance with which precludes the owners or opera-
19	tors from participating such an offset market;
20	(D) prevent any conversion of land that
21	would result in an increase of greenhouse gas
22	emissions or a loss of carbon sequestration;
23	(E) provide incentives for supplemental
24	greenhouse gas emission reductions on private
25	forest land of the United States;

1	(F) prevent any conversion of land, includ-
2	ing native grassland, native prairie, rangeland
3	cropland, or forested land, that would increase
4	greenhouse gas emissions; or
5	(G) support action on Federal, State, or
6	tribal land.
7	(4) REQUIREMENTS.—Financial incentives and
8	support provided by the Secretary for a project or
9	activity under this section shall, to the maximum ex-
10	tent practicable—
11	(A) be directly proportional to the quantity
12	and duration of greenhouse gas emissions re-
13	duced or carbon sequestered (except with re-
14	spect to projects and activities that provide ad-
15	aptation benefits); and
16	(B) complement and leverage existing con-
17	servation, forestry, and energy program expend-
18	itures to provide measurable emission reduction
19	and sequestration benefits that otherwise may
20	not take place or continue to exist.
21	(5) Eligibility.—An owner or operator shall
22	not be prohibited from participating in the program
23	established under this section due to participation of
24	the owner or operator in other Federal or State con-
25	servation or agricultural assistance programs.

1	(6) FORMS OF ASSISTANCE.—The Secretary
2	may use any of the following to provide assistance
3	under this section:
4	(A) Conservation easements.
5	(B) Carbon sequestration and mitigation
6	contracts between the owner or operator and
7	the Secretary for the performance of projects or
8	activities that reduce greenhouse gas emissions
9	or sequester carbon.
10	(C) Financial incentives through timber
11	harvest contracts.
12	(D) Financial incentives through grazing
13	contracts.
14	(E) Grants.
15	(F) Such other forms of assistance as the
16	Secretary determines to be appropriate.
17	(7) Reversals.—The Secretary shall specify
18	methods to address intentional or unintentional re-
19	versal of carbon sequestration or greenhouse gas
20	emission reductions that occur during the term of a
21	contract or easement under this section.
22	(8) Accounting systems.—In carrying out
23	this section, the Secretary shall develop and imple-
24	ment—

1	(A) a national accounting system for car-
2	bon stocks, sequestration, and greenhouse gas
3	emissions that may be used to assess progress
4	in implementing this section at a national level;
5	and
6	(B) credible reporting and accounting sys-
7	tems to ensure that incentives provided under
8	this section are achieving stated objectives.
9	(9) Program measurement, monitoring
10	AND VERIFICATION.—The Secretary—
11	(A) shall establish and implement protocols
12	that provide reasonable monitoring and
13	verification of compliance with terms associated
14	with assistance provided under this section, in-
15	cluding field sampling of actual performance, to
16	develop annual estimates of emission reductions
17	achieved under the program;
18	(B) shall report annually to the Adminis-
19	trator the total number of tons of carbon diox-
20	ide sequestered or the total number of tons of
21	emissions avoided through incentives provided
22	under this section; and
23	(C) not later than 2 years after the date
24	of enactment of this Act, and at least every 18
25	months thereafter, submit to Congress and

1	make available to the public on the website of
2	the Department of Agriculture a report that in-
3	cludes—
4	(i) an estimate of annual and cumu-
5	lative reductions generated through the
6	program under this section, determined
7	using standardized measures (including
8	economic efficiency); and
9	(ii) a summary of any changes to the
10	program that will be made as a result of
11	program measurement, monitoring, and
12	verification conducted under [this para-
13	graph].
14	[10] In General.—In developing regulations
15	for climate mitigation contracts, the Secretary shall
16	specify requirements in accordance with this section
17	to address intentional or unintentional reversal of
18	carbon sequestration during the contract period.
19	(b) Research Program.—The Secretary shall es-
20	tablish by rule a program to conduct research to develop
21	additional projects and activities for crops to find addi-
22	tional techniques and methods to reduce greenhouse gas
23	emissions or sequester greenhouse gases that may or may
24	not meet criteria for Toffset credits established under title

1	VII of the Clean Air Act] [a Federal law enacted for the
2	purpose of regulating greenhouse gas emissions?].
3	SEC. 156. ECONOMIC DEVELOPMENT CLIMATE CHANGE
4	FUND.
5	(a) In General.—Title II of the Public Works and
6	Economic Development Act of 1965 (42 U.S.C. 3141 et
7	seq.) is amended by adding at the end the following:
8	"SEC. 219. ECONOMIC DEVELOPMENT CLIMATE CHANGE
9	FUND.
10	"(a) In General.—On the application of an eligible
11	recipient, the Secretary may provide technical assistance,
12	make grants, enter into contracts, or otherwise provide
13	amounts for projects—
14	"(1) to promote energy efficiency to enhance
15	economic competitiveness;
16	"(2) to increase the use of renewable energy re-
17	sources to support sustainable economic development
18	and job growth;
19	"(3) to support the development of conventional
20	energy resources to produce alternative transpor-
21	tation fuels, electricity and heat;
22	"(4) to develop energy efficient or environ-
23	mentally sustainable infrastructure;
24	"(5) to promote environmentally sustainable
25	economic development practices and models:

1	"(6) to support development of energy effi-
2	ciency and alternative energy development plans,
3	studies or analysis, including enhancement of new
4	and existing Comprehensive Economic Development
5	Strategies funded under this Act; and
6	"(7) to supplement other Federal grants, loans,
7	or loan guarantees for purposes described in para-
8	graphs (1) through (6).
9	"(b) FEDERAL SHARE.—The Federal share of the
10	cost of any project carried out under this section shall not
11	exceed 80 percent, except that the Federal share of a Fed-
12	eral grant, loan, or loan guarantee provided under sub-
13	section (a)(7) may be 100 percent.
14	"(c) Authorization of Appropriations.—There
15	is authorized to be appropriated to carry out this section
16	\$50,000,000 for each of fiscal years 2009 through 2013,
17	to remain available until expended.".
18	(b) Conforming Amendment.—The table of con-
19	tents contained in section 1(b) of the Public Works and
20	Economic Development Act of 1965 (42 U.S.C. 3141 et
21	seq.) is amended by inserting after the item relating to sec-

"Sec. 219. Economic Development Climate Change Fund.".

22 tion 218 the following:

1	SEC. 157. STUDY OF RISK-BASED PROGRAMS ADDRESSING
2	VULNERABLE AREAS.
3	(a) In General.—The Administrator, or the heads
4	of such other Federal agencies as the President may des-
5	ignate, shall conduct a study and, not later than 2 years
6	after the date of enactment of this Act, submit to Con-
7	gress a report regarding risk-based policies and programs
8	addressing vulnerable areas.
9	(b) Requirements.—The report shall
10	(1) review and assess Federal predisaster miti-
11	gation, emergency response, and flood insurance
12	policies and programs that affect areas vulnerable to
13	the impacts of climate change;
14	(2) describe strategies for better addressing
15	such vulnerabilities and provide implementation rec-
16	ommendations;
17	(3) assess whether the policies and programs
18	described in paragraph (1) support the State re-
19	sponse and adaptation goals and objectives identified
20	in [section];
21	(4) identify, and make recommendations to re-
22	solve, inconsistencies in Federal policies and pro-
23	grams in effect as of the date of enactment of this
24	Act that address areas vulnerable to climate change;
25	and

1	(5) identify annual cost savings to the Federal
2	Government associated with the implementation of
3	the strategies and recommendations contained in the
4	report.
5	Subtitle F—Energy Efficiency and
6	Renewable Energy
7	SEC. 161. RENEWABLE ENERGY.
8	(a) Definitions.—In this section:
9	(1) Renewable energy.—The term "renew-
10	able energy" means electric energy generated from
11	solar, wind, biomass, landfill gas, ocean (including
12	tidal, wave, current, and thermal), geothermal, mu-
13	nicipal solid waste, or new hydroelectric generation
14	capacity achieved from increased efficiency or addi-
15	tions of new capacity at an existing hydroelectric
16	project.
17	(2) Renewable Portfolio Standard.—The
18	term "'renewable portfolio standard" means a state
19	statute that requires electricity providers to obtain a
20	minimum percentage of their power from renewable
21	energy resources by a certain date.
22	(b) Grants.—The Administrator, in consultation

23 with the Secretaries of Energy, Interior, and Agriculture,

24 may provide grants for projects to increase the quantity

1	of energy a State uses from renewable sources under State
2	renewable portfolio standard laws.
3	(c) Eligibility.—The Administrator shall review for
4	approval projects applications that are—
5	(1) submitted by State and local governments,
6	Indian tribes, public utilities, regional energy co-
7	operatives, or individual energy producers from
8	states with a binding Renewable Portfolio Standard;
9	or
10	(2) submitted by State and local governments,
11	Indian tribes, public utilities, or regional energy co-
12	operatives from states with nonbinding goals for
13	adoption of renewable energy requirements.
14	(d) Priority.—The Administrator shall give priority
15	to project applications that are—
16	(1) submitted by States with a binding renew-
17	able portfolio standard;
18	(2) cost-effective in achieving greater renewable
19	energy production in each State.
20	(e) CERTIFICATION.—
21	(1) In General.—The Administrator shall no-
22	tify in writing the Governor of each eligible State as
23	described in section (c) at the time at which the Ad-
24	ministrator begins review of a project application re-
25	ceived from an eligible entity within the State.

1	(2) Certification.—The Governor shall cer-
2	tify in writing within 30 days of receipt of the Ad-
3	ministrator's notification described in subsection (1)
4	that the project application—
5	(A) will assist the State in reaching renew-
6	able portfolio standard targets under applicable
7	state laws; and
8	(B) has secured non-Federal funding
9	sources that, in conjunction with the requested
10	grant amount, will be sufficient to complete the
11	renewable energy project.
12	(f) Rulemaking.—
13	(1) In general.—Not later than 90 days after
14	the date of enactment of this Act, the Administrator
15	shall initiate rulemaking procedures necessary to im-
16	plement this section.
17	(2) Final Rules; acceptance of applica-
18	TIONS.—Not later than 90 days after the close of
19	the public comment period relating to the rule-
20	making described in paragraph (1), the Adminis-
21	trator shall—
22	(A) promulgate final regulations to carry
23	out this section; and
24	(B) begin accepting project applications for
25	review.

1 (g) REPORTING.—Not later than 180 days after the 2 date of enactment of this Act, and every 180 days there-3 after, the Administrator shall submit to the Committee on 4 Energy and Commerce of the House of Representatives 5 and the Committee on Environment and Public Works of the Senate a report specifying, with respect to the pro-6 7 gram under this section— 8 (1) the project applications received; 9 (2) the project applications approved; 10 (3) the amount of funding allocated per project; 11 and 12 (4) the cumulative benefits of the grant pro-13 gram. 14 (h) Grant Amount.—A grant provided under this 15 section may be in an amount that does not exceed 50 percent of the total cost of the renewable energy project to 16 17 be funded by the grant. 18 (i) AUTHORIZATION.—There are authorized to be ap-19 propriated such sums as are necessary to carry out this 20 section. 21 SEC. 162. ADVANCED BIOFUELS. 22 (a) Definitions.—In this section: (1) ADVANCED BIOFUEL.—The term "advanced 23

biofuel" shall have such meaning as is given the

1	term by the Administrator in regulations promul-
2	gated under subsection (c).
3	(2) Eligible entity.—The term "eligible enti-
4	ty" means an individual, corporate entity, unit of
5	State or local government, Indian tribe, farm cooper-
6	ative, institution of higher learning, rural electric co-
7	operative, or public utility.
8	(b) Grants.—The Administrator, in consultation
9	with the Secretary of Agriculture and the Secretary of En-
10	ergy, may provide grants to support research and develop-
11	ment of advanced biofuels.
12	(c) Regulations.—
13	(1) In general.—Not later than 18 months
14	after the date of enactment of this Act, the Adminis-
15	trator shall promulgate regulations to carry out this
16	section (including a definition of the term "advanced
17	biofuel" for the purpose of providing assistance
18	under this section).
19	(2) Requirements.—The regulations promul-
20	gated under paragraph (1) shall—
21	(A) provide that the Administrator shall
22	make grants available to eligible entities to sup-
23	port—
24	(i) research regarding the production
25	of advanced biofuels;

1	(ii) the development of new advanced
2	biofuel production and capacity-building
3	technologies;
4	(iii) the development and construction
5	of commercial-scale advanced biofuel pro-
6	duction facilities; and
7	(iv) the expanded production of ad-
8	vanced biofuels;
9	(B) provide that, to receive a grant under
10	this section, an eligible entity shall submit to
11	the Administrator—
12	(i) a project proposal with detailed
13	project information, as determined by the
14	Administrator; and
15	(ii) such records as the Administrator
16	may require as evidence of the production
17	of advanced biofuels or the importance and
18	necessity of advanced biofuels research and
19	new technologies; and
20	(C) include appropriate cost-sharing re-
21	quirements developed by the Administrator for
22	grant awards for authorized uses of funds
23	under this section.
24	(3) Priority.—The Administrator shall give
25	priority to eligible entities based on—

1	(A) technical and economic feasibility of a
2	project proposal;
3	(B) cost-effectiveness of a project proposal;
4	(C) the use of innovative technologies in a
5	project proposal;
6	(D) the availability of non-Federal re-
7	sources, including private resources, to fund the
8	project proposal; and
9	(E) whether the project proposed can be
10	replicated.
11	SEC. 163. ENERGY EFFICIENCY IN BUILDING CODES.
12	(a) Energy Efficiency Targets.—
13	(1) Rulemaking to establish targets.—
14	The Administrator, or such other agency head or
15	heads as may be designated by the President, in
16	consultation with the Director of the National Insti-
17	tute of Standards and Technology, shall promulgate
18	regulations establishing building code energy effi-
19	ciency targets for the national average percentage
20	improvement of buildings' energy performance. Such
21	regulations shall establish a national building code
22	energy efficiency target for residential buildings and
23	commercial buildings when built to a code meeting
24	the target, beginning not later than January 1, 2014

1	and applicable each calendar year through December
2	31, 2030.
3	(b) NATIONAL ENERGY EFFICIENCY BUILDING
4	Codes.—
5	(1) Rulemaking to establish national
6	CODES.—The Administrator, or such other agency
7	head or heads as may be designated by the Presi-
8	dent, shall promulgate regulations establishing na-
9	tional energy efficiency building codes for residential
10	and commercial buildings. Such regulations shall be
11	sufficient to meet the national building code energy
12	efficiency targets established under subsection (a) in
13	the most cost-effective manner, and may include pro-
14	visions for State adoption of the national building
15	code standards and certification of State programs
16	(c) Annual Reports.—The Administrator, or such
17	other agency head or heads as may be designated by the
18	President, shall annually submit to Congress, and publish
19	in the Federal Register, a report on—
20	(1) the status of national energy efficiency
21	building codes;
22	(2) the status of energy efficiency building code
23	adoption and compliance in the States;
24	(3) the implementation of and compliance with
25	regulations promulgated under this section;

1	(4) the status of Federal and State enforcement
2	of building codes; and
3	(5) impacts of action under this section, and
4	potential impacts of further action, on lifetime en-
5	ergy use by buildings, including resulting energy and
6	cost savings.
7	SEC. 164. RETROFIT FOR ENERGY AND ENVIRONMENTAL
8	PERFORMANCE.
9	(a) Definitions.—For purposes of this section:
10	(1) Assisted Housing.—The term "assisted
11	housing" means those properties receiving project-
12	based assistance pursuant to section 202 of the
13	Housing Act of 1959 (12 U.S.C. 1701q), section
14	811 of the Cranston-Gonzalez National Affordable
15	Housing Act (42 U.S.C. 8013), section 8 of the
16	United States Housing Act of 1937 (42 U.S.C.
17	1437f), or similar programs.
18	(2) Nonresidential building.—The term
19	"nonresidential building" means a building with a
20	primary use or purpose other than residential hous-
21	ing, including any building used for commercial of-
22	fices, schools, academic and other public and private
23	institutions, nonprofit organizations including faith-
24	based organizations, hospitals, hotels, and other non-
25	residential purposes. Such buildings shall include

- 1 mixed-use properties used for both residential and 2 nonresidential purposes in which more than half of 3 building floor space is nonresidential.
 - (3) Performance-based building Program.—The term "performance-based building retrofit program" means a program that determines building energy efficiency success based on actual measured savings after a retrofit is complete, as evidenced by energy invoices or evaluation protocols.
 - (4) Prescriptive building retrofit pro-GRAM.—The term "prescriptive building retrofit program" means a program that projects building retrofit energy efficiency success based on the known effectiveness of measures prescribed to be included in a retrofit.
 - (5) Public Housing.—The term "public housing" means properties receiving assistance under section 9 of the United States Housing Act of 1937 (42 U.S.C. 1437g).
 - (6) RECOMMISSIONING;
 RETROCOMMISSIONING.—The terms "recommissioning" and "retrocommissioning" have the meaning given those terms in section 543(f)(1) of the National Energy Conservation Policy Act (42 U.S.C. 8253(f)(1)).

- 1 (7) Residential building.—The term "resi-2 dential building" means a building whose primary 3 use is residential. Such buildings shall include sin-4 gle-family homes (both attached and detached), 5 owner-occupied units in larger buildings with their 6 own dedicated space-conditioning systems, apart-7 ment buildings, multi-unit condominium buildings, 8 public housing, assisted housing, and buildings used 9 for both residential and nonresidential purposes in 10 which more than half of building floor space is resi-11 dential.
- 12 (8) STATE ENERGY PROGRAM.—The term
 13 "State Energy Program" means the program under
 14 part D of title III of the Energy Policy and Con15 servation Act (42 U.S.C. 6321 et seq.).
- 15 16 (b) Establishment.—The Administrator shall develop and implement, in consultation with the Secretary 17 18 of Energy, standards for a national energy and environ-19 mental building retrofit policy for single-family and multi-20 family residences. The Administrator shall develop and 21 implement, in consultation with the Secretary of Energy 22 and the Director of Commercial High-Performance Green 23 Buildings, standards for a national energy and environ-24 mental building retrofit policy for nonresidential buildings. 25 The programs to implement the residential and nonresi-

1	dential policies based on the standards developed under
2	this section shall together be known as the Retrofit for
3	Energy and Environmental Performance (REEP) pro-
4	gram.
5	(c) Purpose.—The purpose of the REEP program
6	is to facilitate the retrofitting of existing buildings across
7	the United States to achieve maximum cost-effective en-
8	ergy efficiency improvements and significant improve-
9	ments in water use and other environmental attributes
10	(d) Federal Administration.—
11	(1) Existing programs.—In creating and op-
12	erating the REEP program—
13	(A) the Administrator shall make appro-
14	priate use of existing programs, including the
15	Energy Star program and in particular the En
16	vironmental Protection Agency Energy Star for
17	Buildings program; and
18	(B) the Administrator shall consult with
19	the Secretary of Energy regarding appropriate
20	use of existing programs, including delegating
21	authority to the Director of Commercial High-
22	Performance Green Buildings appointed under
23	section 421 of the Energy Independence and
24	Security Act of 2007 (42 U.S.C. 17081).

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(2) Consultation and coordination.—The Administrator shall consult with and coordinate with the and the Secretary of Energy and the Secretary of Housing and Urban Development in carrying out the REEP program with regard to retrofitting of public housing and assisted housing. As a result of such consultation, the Administrator shall establish standards to ensure that retrofits of public housing and assisted housing funded pursuant to this section are cost-effective, including opportunities to address the potential co-performance of repair and replacement needs that may be supported with other forms of Federal assistance. Owners of public housing or assisted housing receiving funding through the REEP program shall agree to continue to provide affordable housing consistent with the provisions of the authorizing legislation governing each program for an additional period commensurate with the funding received, as determined in accordance with guidelines established by the Secretary of Housing and Urban Development. (3) Assistance.—The Administrator shall pro-

(3) Assistance.—The Administrator shall provide consultation and assistance to State and local agencies for the establishment of revolving loan

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funds, loan guarantees, or other forms of financial assistance under this section.

(e) STATE AND LOCAL ADMINISTRATION.—

(1) Designation and Delegation.—A State may designate one or more agencies or entities, including those regulated by the State, to carry out the purposes of this section, but shall designate one entity or individual as the principal point of contact for the Administrator regarding the REEP Program. The designated State agency, agencies, or entities may delegate performance of appropriate elements of the REEP program, upon their request and subject to State law, to counties, municipalities, appropriate public agencies, and other divisions of local government, as well as to entities regulated by the State. In making any such designation or delegation, a State shall give priority to entities that administer existing comprehensive retrofit programs, including those under the supervision of State utility regulators. States shall maintain responsibility for meeting the standards and requirements of the REEP program. In any State that elects not to administer the REEP program, a unit of local government may propose to do so within its jurisdiction, and if the Administrator finds that such local gov-

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ernment is capable of administering the program, the Administrator may provide assistance to that local government, prorated according to the population of the local jurisdiction relative to the population of the State, for purposes of the REEP pro-

gram.

(2) Employment.—States and local government entities may administer a REEP program in a manner that authorizes public or regulated investor-owned utilities, building auditors and inspectors, contractors, nonprofit organizations, for-profit companies, and other entities to perform audits and retrofit services under this section. A State may provide incentives for retrofits without direct participation by the State or its agents, so long as the resulting savings are measured and verified. A State or local administrator of a REEP program shall seek to ensure that sufficient qualified entities are available to support retrofit activities so that building owners have a competitive choice among qualified auditors, raters, contractors, and providers of services related to retrofits. Nothing in this section is intended to deny the right of a building owner to choose the specific providers of retrofit services to engage for a retrofit project in that owner's building.

1	(3) Equal incentives for equal improve-
2	MENT.—In general, the States should strive to offer
3	the same levels of incentives for retrofits that meet
4	the same efficiency improvement goals, regardless of
5	whether the State, its agency or entity, or the build-
6	ing owner has conducted the retrofit achieving the
7	improvement, provided the improvement is measured
8	and verified.
9	(f) Elements of Reep Program.—The Adminis-
10	trator, in consultation with the Secretary of Energy, shall
11	establish goals, guidelines, practices, and standards for ac-
12	complishing the purpose stated in subsection (c), and shall
13	annually review and, as appropriate, revise such goals,
14	guidelines, practices, and standards. The program under
15	this section shall include the following:
16	(1) Residential Energy Services Network
17	(RESNET) or Building Performance Institute
18	(BPI) analyst certification of residential building en-
19	ergy and environment auditors, inspectors, and rat-
20	ers, or an equivalent certification system as deter-
21	mined by the Administrator.
22	(2) BPI certification or licensing by States of
23	residential building energy and environmental ret-
24	rofit contractors, or an equivalent certification or li-
25	censing system as determined by the Administrator.

- (3) Provision of BPI, RESNET, or other appropriate information on equipment and procedures, as determined by the Administrator, that contractors can use to test the energy and environmental efficiency of buildings effectively (such as infrared photography and pressurized testing, and tests for water use and indoor air quality).
 - (4) Provision of clear and effective materials to describe the testing and retrofit processes for typical buildings.
 - (5) Guidelines for offering and managing prescriptive building retrofit programs and performance-based building retrofit programs for residential and nonresidential buildings.
 - (6) Guidelines for applying recommissioning and retrocommissioning principles to improve a building's operations and maintenance procedures.
 - (7) A requirement that building retrofits conducted pursuant to a REEP program utilize, especially in all air-conditioned buildings, roofing materials with high solar energy reflectance, unless inappropriate due to green roof management, solar energy production, or for other reasons identified by the Administrator, in order to reduce energy consumption within the building, increase the albedo of

1	the building's roof, and decrease the heat island ef-
2	fect in the area of the building, without reduction of
3	otherwise applicable ceiling insulation standards.
4	(8) Determination of energy savings in a per-
5	formance-based building retrofit program through—
6	(A) for residential buildings, comparison of
7	before and after retrofit scores on the Home
8	Energy Rating System (HERS) Index, where
9	the final score is produced by an objective third
10	party;
11	(B) for nonresidential buildings, Environ-
12	mental Protection Agency Portfolio Manager
13	benchmarks; or
14	(C) for either residential or nonresidential
15	buildings, use of an Administrator-approved
16	simulation program by a contractor with the
17	appropriate certification, subject to appropriate
18	software standards and verification of at least
19	15 percent of all work done, or such other per-
20	centage as the Administrator may determine.
21	(9) Guidelines for utilizing the Energy Star
22	Portfolio Manager, the Home Energy Rating System
23	(HERS) rating system, Home Performance with En-
24	ergy Star program approvals, and any other tools
25	associated with the retrofit program.

1	(10) Requirements and guidelines for post-ret-
2	rofit inspection and confirmation of work and energy
3	savings.
4	(11) Detailed descriptions of funding options
5	for the benefit of State and local governments, along
6	with model forms, accounting aids, agreements, and
7	guides to best practices.
8	(12) Guidance on opportunities for—
9	(A) rating or certifying retrofitted build-
10	ings as Energy Star buildings, or as green
11	buildings under a recognized green building rat-
12	ing system;
13	(B) assigning Home Energy Rating Sys-
14	tem (HERS) or similar ratings; and
15	(C) completing any applicable building per-
16	formance labels.
17	(13) Sample materials for publicizing the pro-
18	gram to building owners, including public service an-
19	nouncements and advertisements.
20	(14) Processes for tracking the numbers and lo-
21	cations of buildings retrofitted under the REEP pro-
22	gram, with information on projected and actual sav-
23	ings of energy and its value over time.

1	(g) Requirements.—As a condition of receiving as
2	sistance for the REEP program pursuant to this Act, a
3	State or qualifying local government shall—
4	(1) adopt the standards for training, certifi
5	cation of contractors, certification of buildings, and
6	post-retrofit inspection as developed by the Adminis
7	trator for residential and nonresidential buildings
8	respectively, except as necessary to match local con
9	ditions, needs, efficiency opportunities, or other loca
10	factors, or to accord with State laws or regulations
11	and then only after the Administrator approves such
12	a variance;
13	(2) establish fiscal controls and accounting pro
14	cedures (which conform to generally accepted gov
15	ernment accounting principles) sufficient to ensure
16	proper accounting during appropriate accounting pe
17	riods for payments received and disbursements, and
18	for fund balances; and
19	(3) agree to make not less than 10 percent of
20	assistance received pursuant to [section 132(c)(2)]
21	for dedicated funding of its REEP program avail
22	able on a preferential basis for retrofit projects pro
23	posed for public housing and assisted housing, pro
24	vided that—

1	(A) none of such funds shall be used for
2	demolition of such housing;
3	(B) such retrofits not shall not be used to
4	justify any increase in rents charged to resi-
5	dents of such housing; and
6	(C) owners of such housing shall agree to
7	continue to provide affordable housing con-
8	sistent with the provisions of the authorizing
9	legislation governing each program for an addi-
10	tional period commensurate with the funding
11	received.
12	(4) the Administrator shall conduct or require
13	each State to have such independent financial audits
14	of REEP-related funding as the Administrator con-
15	siders necessary or appropriate to carry out the pur-
16	poses of this section.
17	(h) Options to Support Reep Program.—The as-
18	sistance provided [under this section] shall support the
19	implementation through State REEP programs of alter-
20	nate means of creating incentives for, or reducing financial
21	barriers to, improved energy and environmental perform-
22	ance in buildings, consistent with this section, including—
23	(1) implementing prescriptive building retrofit
24	programs and performance-based building retrofit
25	programs;

1	(2) providing credit enhancement, interest rate
2	subsidies, loan guarantees, or other credit support;
3	(3) providing initial capital for public revolving
4	fund financing of retrofits, with repayments by bene-
5	ficiary building owners over time through their tax
6	payments, calibrated to create net positive cash flow
7	to the building owner;
8	(4) providing funds to support utility-operated
9	retrofit programs with repayments over time
10	through utility rates, calibrated to create net positive
11	cash flow to the building owner, and transferable
12	from one building owner to the next with the build-
13	ing's utility services;
14	(5) providing funds to local government pro-
15	grams to provide REEP services and financial as-
16	sistance; and
17	(6) other means proposed by State and local
18	agencies, subject to the approval of the Adminis-
19	trator.
20	(i) Support for Program.—
21	(1) Initial award limits.—Except as pro-
22	vided in paragraph (2), State and local REEP pro-
23	grams may make per-building direct expenditures
24	for retrofit improvements, or their equivalent in indi-
25	rect or other forms of financial support, from funds

1	made available to carry out this section, in amounts
2	not to exceed the following amounts per unit:
3	(A) Residential building program.—
4	(i) AWARDS.—For residential build-
5	ings—
6	(I) support for a free or low-cost
7	detailed building energy audit that
8	prescribes measures sufficient to
9	achieve at least a 20 percent reduc-
10	tion in energy use, by providing an in-
11	centive equal to the documented cost
12	of such audit, but not more than
13	\$200, in addition to any earned by
14	achieving a 20 percent or greater effi-
15	ciency improvement;
16	(II) a total of \$1,000 for a com-
17	bination of measures, prescribed in an
18	audit conducted under subclause (I),
19	designed to reduce energy consump-
20	tion by more than 10 percent, and
21	\$2,000 for a combination of measures
22	prescribed in such an audit, designed
23	to reduce energy consumption by more
24	than 20 percent;

1	(III) \$3,000 for demonstrated
2	savings of 20 percent, pursuant to a
3	performance-based building retrofit
4	program; and
5	(IV) \$1,000 for each additional 5
6	percentage points of energy savings
7	achieved beyond savings for which
8	funding is provided under subclause
9	(Π) or $(\Pi\Pi)$.
10	Funding shall not be provided under
11	clauses (II) and (III) for the same energy
12	savings.
13	(ii) Maximum percentage.—Awards
14	under clause (i) shall not exceed 50 per-
15	cent of retrofit costs for each building. For
16	buildings with multiple residential units,
17	awards under clause (i) shall not be great-
18	er than 50 percent of the total cost of ret-
19	rofitting the building, prorated among indi-
20	vidual residential units on the basis of rel-
21	ative costs of the retrofit. In the case of
22	public housing and assisted housing, the
23	50 percent contribution matching the con-
24	tribution from REEP program funds may

1	come from any other source, including
2	other Federal funds.
3	(iii) Additional awards.—Addi-
4	tional awards may be provided for pur-
5	poses of increasing energy efficiency, for
6	buildings achieving at least 20 percent en-
7	ergy savings using funding provided under
8	clause (i), in the form of grants of not
9	more than \$600 for measures projected or
10	measured (using an appropriate method
11	approved by the Administrator) to achieve
12	at least 35 percent potable water savings
13	through equipment or systems with an es-
14	timated service life of not less than 7
15	years, and not more than an additional
16	\$20 may be provided for each additional
17	one percent of such savings, up to a max-
18	imum total grant of \$1,200.
19	(B) Nonresidential building pro-
20	GRAM.—
21	(i) Awards.—For nonresidential
22	buildings—
23	(I) support for a free or low-cost
24	detailed building energy audit that
25	prescribes, as part of a energy-reduc-

1	ing measures sufficient to achieve at
2	least a 20 percent reduction in energy
3	use, by providing an incentive equal to
4	the documented cost of such audit,
5	but not more than \$500, in addition
6	to any award earned by achieving a
7	20 percent or greater efficiency im-
8	provement;
9	(II) \$0.15 per square foot of ret-
10	rofit area for demonstrated energy use
11	reductions from 20 percent to 30 per-
12	cent;
13	(III) \$0.75 per square foot for
14	demonstrated energy use reductions
15	from 30 percent to 40 percent;
16	(IV) \$1.60 per square foot for
17	demonstrated energy use reductions
18	from 40 percent to 50 percent; and
19	(V) \$2.50 per square foot for
20	demonstrated energy use reductions
21	exceeding 50 percent.
22	(ii) Maximum percentage.—
23	Amounts provided under subclauses (II)
24	through (V) of clause (i) combined shall
25	not exceed 50 percent of the total retrofit

1	cost of a building. In nonresidential build-
2	ings with multiple units, such awards shall
3	be prorated among individual units on the
4	basis of relative costs of the retrofit.
5	(iii) Additional awards.—Addi-
6	tional awards may be provided, for build-
7	ings achieving at least 20 percent energy
8	savings using funding provided under
9	clause (i), as follows:
10	(I) Water.—For purposes of in-
11	creasing energy efficiency, grants may
12	be made for whole building potable
13	water use reduction (using an appro-
14	priate method approved by the Ad-
15	ministrator) for up to 50 percent of
16	the total retrofit cost, including
17	amounts up to—
18	(aa) \$24.00 per thousand
19	gallons per year of potable water
20	savings of 40 percent or more;
21	(bb) \$27.00 per thousand
22	gallons per year of potable water
23	savings of 50 percent or more;
24	and

1	(cc) \$30.00 per thousand
2	gallons per year of potable water
3	savings of 60 percent or more.
4	(II) Environmental improve-
5	MENTS.—Additional awards of up to
6	\$1,000 may be granted for the inclu-
7	sion of other environmental attributes
8	that the Administrator, in consulta-
9	tion with the Secretary, identifies as
10	contributing to energy efficiency. Such
11	attributes may include, but are not
12	limited to waste diversion and the use
13	of environmentally preferable mate-
14	rials (including salvaged, renewable,
15	or recycled materials, and materials
16	with no or low-VOC content). The Ad-
17	ministrator may recommend that
18	States develop such standards as are
19	necessary to account for local or re-
20	gional conditions that may affect the
21	feasibility or availability of identified
22	resources and attributes.
23	(iv) Indoor air quality minimum.—
24	Nonresidential buildings receiving incen-
25	tives under this section must satisfy at a

minimum the most recent version of ASHRAE Standard 62.1 for ventilation, or the equivalent as determined by the Administrator. A State may issue a waiver from this requirement to a building project on a showing that such compliance is infeasible due to the physical constraints of the building's existing ventilation system, or such other limitations as may be specified by the Administrator.

(C) Disaster damaged buildings.—Any source of funds, including Federal funds provided through the Robert T. Stafford Disaster Relief and Emergency Assistance Act, shall qualify as the building owner's 50 percent contribution, in order to match the contribution of REEP funds, so long as the REEP funds are only used to improve the energy efficiency of the buildings being reconstructed. In addition, the appropriate Federal agencies providing assistance to building owners through the Robert T. Stafford Disaster Relief and Emergency Assistance Act shall make information available, following a disaster, to building owners rebuilding disaster damaged buildings with assistance

1	from the Act, that REEP funds may be used
2	for energy efficiency improvements.
3	(D) HISTORIC BUILDINGS.—Notwith-
4	standing subparagraphs (A) and (B), a building
5	in or eligible for the National Register of His-
6	toric Places shall be eligible for awards under
7	this paragraph in amounts up to 120 percent of
8	the amounts set forth in subparagraphs (A) and
9	(B).
10	(E) Supplemental support.—State and
11	local governments may supplement the per-
12	building expenditures under this paragraph
13	with funding from other sources.
14	(2) Adjustment.—The Administrator may ad-
15	just the specific dollar amounts provided under para-
16	graph (1) in years subsequent to the second year
17	after the date of enactment of this Act, and every
18	2 years thereafter, as the Administrator determines
19	necessary to achieve optimum cost-effectiveness and
20	to maximize incentives to achieve energy efficiency
21	within the total building award amounts provided in
22	that paragraph, and shall publish and hold constant
23	such revised limits for at least 2 years.
24	(j) Report to Congress.—The Administrator shall
25	conduct an annual assessment of the achievements of the

- 1 REEP program in each State, shall prepare an annual re-
- 2 port of such achievements and any recommendations for
- 3 program modifications, and shall provide such report to
- 4 Congress at the end of each fiscal year during which fund-
- 5 ing or other resources were made available to the States
- 6 for the REEP Program.

7 Subtitle G—Emission Reductions

8 From Public Transportation Ve-

- 9 hicles
- 10 **SEC. 171. SHORT TITLE.**
- This subtitle may be cited as the "Green Taxis Act
- 12 of 2009".
- 13 SEC. 172. STATE FUEL ECONOMY REGULATION FOR TAXI-
- 14 CABS.
- 15 Section 32919 of title 49, United States Code, is
- 16 amended by adding at the end the following new sub-
- 17 section:
- 18 "(d) Taxicabs.—Notwithstanding subsection (a), a
- 19 State or political subdivision of a State may prescribe re-
- 20 quirements for fuel economy for taxicabs and other auto-
- 21 mobiles if such requirements are at least as stringent as
- 22 applicable Federal requirements and if such taxicabs and
- 23 other automobiles—

1	"(1) are automobiles that are capable of trans-
2	porting not more than 10 individuals, including the
3	driver;
4	"(2) are commercially available or are designed
5	and manufactured pursuant to a contract with such
6	State or political subdivision of such State;
7	"(3) are operated for hire pursuant to an oper-
8	ating or regulatory license, permit, or other author-
9	ization issued by such State or political subdivision
10	of such State;
11	"(4) provide local transportation for a fare de-
12	termined on the basis of the time or distance trav-
13	eled or a combination of time and distance traveled;
14	and
15	"(5) do not exclusively provide transportation to
16	and from airports.".
17	SEC. 173. STATE REGULATION OF MOTOR VEHICLE EMIS-
18	SIONS FOR TAXICABS.
19	Section 209 of the Clean Air Act (42 U.S.C. 7543)
20	is amended by adding at the end the following new sub-
21	section:
22	"(f) Taxicabs.—(1) Notwithstanding subsection (a),
23	a State or political subdivision thereof may adopt and en-
24	force standards for the control of emissions from new
25	motor vehicles that are taxicabs and other vehicles if such

1	standards will be, in the aggregate, at least as protective
2	of public health and welfare as applicable Federal stand-
3	ards and if such taxicabs and other vehicles—
4	"(A) are passenger motor vehicles that are
5	capable of transporting not more than 10 indi-
6	viduals, including the driver;
7	"(B) are commercially available or are de-
8	signed and manufactured pursuant to a con-
9	tract with such State or political subdivision
10	thereof;
11	"(C) are operated for hire pursuant to an
12	operating or regulatory license, permit, or other
13	authorization issued by such State or political
14	subdivision thereof;
15	"(D) provide local transportation for a fare
16	determined on the basis of the time or distance
17	traveled or a combination of time and distance
18	traveled; and
19	"(E) do not exclusively provide transpor-
20	tation to and from airports.
21	"(2) If each standard of a State or political subdivi-
22	sion thereof is at least as stringent as the comparable ap-
23	plicable Federal standard, such standard of such State or
24	political subdivision thereof shall be deemed at least as

1	protective of health and welfare as such Federal standards
2	for purposes of this subsection.".
3	Subtitle H—Clean Energy and
4	Natural Gas
5	SEC. 181. CLEAN ENERGY AND ACCELERATED EMISSION
6	REDUCTION PROGRAM.
7	(a) Establishment.—
8	(1) In general.—The Administrator shall es-
9	tablish a program to promote dispatchable power
10	generation projects that can accelerate the reduction
11	of power sector carbon dioxide and other greenhouse
12	gas emissions.
13	(2) Use of funds.—Funds provided under
14	this section shall be used by the Administrator to
15	make incentive payments to owners or operators of
16	eligible projects.
17	(b) REGULATIONS.—Not later than 90 days after the
18	date of enactment of this Act, the Administrator shall pro-
19	mulgate regulations providing for incentives, pursuant to
20	the requirements of this section.
21	(c) Goal.—Not later than 3 years after the date of
22	enactment of this Act, the Administrator shall provide in-
23	centives for eligible projects that generate 300,000

24 gigawatt-hours of electricity per year.

1	(d) Criteria for Eligible Projects.—To be eli-
2	gible for funding under this section a project must—
3	(1)(A) reduce emissions below the 2007 average
4	greenhouse gas emissions per megawatt-hour of the
5	United States electric power sector by the quantity
6	specified in subsection (f); and
7	(B) after calendar year 2015, reduce emissions
8	by at least 50 percent below the 2007 average green-
9	house gas emissions per megawatt-hour of the
10	United States electric power sector; and
11	(2) not receive an investment or production tax credit
12	in—
13	(A) the year in which the project is placed in
14	service; or
15	(B) calendar year 2009, notwithstanding the
16	year in which the project was placed in service.
17	(e) Priority.—The Administrator shall give priority
18	to eligible projects from the following categories:
19	(1) Power generation projects that replace or
20	retire power units with emission rates that exceed
21	the 2007 average greenhouse gas emissions per
22	megawatt-hour of the United States electric power
23	sector.

1	(2) Power generation projects designed to inte-
2	grate intermittent renewable power into the bulk-
3	power system.
4	(3) Energy storage projects used to support re-
5	newable energy.
6	(4) Power generation projects with carbon cap-
7	ture and sequestration that are not eligible under
8	[section 124].
9	(5) Projects that achieve the greatest reduction
10	in greenhouse gas emissions per dollar of incentive
11	payment.
12	(f) Emission Reduction Criteria.—For the pur-
13	poses of subsection (d), the applicable emission reduction
14	quantity shall be determined in accordance with the fol-
15	lowing table:
	Calendar years Percentage below 2007 average greenhouse gas emissions per MWh of United States electric power sector
	2010 through 2020 25 percent 2021 through 2025 40 percent 2026 through 2030 65 percent
16	(g) Authorization of Appropriations.—There
17	are authorized to be appropriated to the Administrator
18	such sums as are necessary to carry out this section for
19	each of fiscal years 2010 through 2030.
20	SEC. 182. ADVANCED NATURAL GAS TECHNOLOGIES.
21	(a) Definitions.—In this section:
22	(1) Corporation.—

1	(A) In General.—The term "corpora-
2	tion" means any corporation, joint-stock com-
3	pany, partnership, limited liability company, as-
4	sociation, business trust, or other organized
5	group of persons, regardless of incorporation.
6	(B) Exclusion.—The term "corporation"
7	does not include a municipality.
8	(2) Eligible entity.—
9	(A) IN GENERAL.—The term "eligible enti-
10	ty" means an entity that is eligible to receive a
11	grant under subsection (b).
12	(B) Inclusions.—The term "eligible enti-
13	ty" includes a corporation, an eligible research
14	entity, an industry entity, a municipality, a mu-
15	nicipal natural gas distribution system, and a
16	natural gas distribution company.
17	(3) Eligible research entity.—
18	(A) IN GENERAL.—The term "eligible re-
19	search entity" means an entity that is experi-
20	enced in planning, conducting, and imple-
21	menting natural gas research, development,
22	demonstration, and deployment projects.
23	(B) Inclusions.—The term "eligible re-
24	search entity" includes a research institution
25	and an institution of higher education.

1	(4) Industry entity.—
2	(A) IN GENERAL.—The term "industry en-
3	tity" means the persons and municipalities col-
4	lectively engaged in the delivery of natural gas
5	for consumption in the United States (such as
6	natural gas distribution companies and munic-
7	ipal natural gas distribution systems).
8	(B) Exclusion.—The term "industry en-
9	tity" does not include any natural gas cus-
10	tomer.
11	(5) Municipality.—The term "municipality"
12	means a city, county, or other political subdivision or
13	agency of a State.
14	(6) MUNICIPAL NATURAL GAS DISTRIBUTION
15	SYSTEM.—The term "municipal natural gas distribu-
16	tion system" means a municipality engaged in the
17	business of delivering natural gas for consumption to
18	residential, commercial, industrial, and other natural
19	gas customers.
20	(7) Natural gas.—
21	(A) In GENERAL.—The term "natural
22	gas" means a mixture of hydrocarbon and non-
23	hydrocarbon gases, primarily methane, that
24	have been produced from geological formations
25	or by any other means.

1 (B) Inclusion.—The term "natural gas" 2 includes renewable biogas. 3 (8) Natural gas distribution company.— The term "natural gas distribution company" means 4 5 a person engaged in the business of distributing nat-6 ural gas for consumption to residential, commercial, 7 industrial, or other natural gas customers. 8 (b) Grant Programs.— 9 (1) Natural gas electricity generation 10 GRANTS.—The Administrator, in consultation with 11 Secretary of Energy, may provide [to eligible enti-12 ties? research and development grants to support 13 the deployment of low greenhouse-gas-emitting end-14 use technologies, including carbon capture and se-15 questration technologies, for natural gas electricity 16 generation. 17 (2) Natural gas residential and commer-18 CIAL TECHNOLOGY GRANTS.—The Administrator 19 shall establish a program to provide to eligible enti-20 ties grants to advance the commercial demonstration 21 or early development of low greenhouse-gas-emitting 22 end-use technologies fueled by natural gas, including 23 carbon capture and storage, for residential and com-

mercial purposes, through research, development,

- demonstration, and deployment of those tech-
- 2 nologies.
- 3 (c) Reporting.—Not later than 180 days after the
- 4 date of enactment of this Act, and every 180 days there-
- 5 after, the Secretary of Energy shall submit to the Com-
- 6 mittee on Energy and Commerce of the House of Rep-
- 7 resentatives and the Senate Committees on Energy and
- 8 Natural Resources and Environment and Public Works of
- 9 the Senate a report that describes the status and results
- 10 of activities carried out under subsection (b).
- 11 (d) AUTHORIZATION.—There are authorized to be ap-
- 12 propriated such sums as are necessary to carry out this
- 13 section.

14 TITLE II—RESEARCH

15 Subtitle A—Energy Research

- 16 SEC. 201. ADVANCED ENERGY RESEARCH.
- 17 (a) In General.—The Administrator shall establish
- 18 a program to provide grants for advanced energy research.
- 19 (b) DISTRIBUTION.—The Administrator shall dis-
- 20 tribute grants on a competitive basis to institutions of
- 21 higher education, companies, research foundations, trade
- 22 and industry research collaborations, or consortia of such
- 23 entities, or other appropriate research and development
- 24 entities.

1	(c) Selection of Proposals.—In selecting pro-
2	posals for funding under this section, the Administrator
3	shall prioritize applications that—
4	(1) enhance the economic and energy security
5	of the United States through the development of en-
6	ergy technologies that result in—
7	(A) reductions of imports of energy from
8	foreign sources;
9	(B) reductions of energy-related emissions,
10	including greenhouse gases; and
11	(C) improvements in the energy efficiency
12	of all economic sectors; and
13	(2) ensure that the United States maintains a
14	technological lead in developing and deploying ad-
15	vanced energy technologies.
16	(d) Responsibilities.—The Administrator shall be
17	responsible for assessing the success of programs and ter-
18	minating programs carried out under this section that are
19	not achieving the goals of the programs.
20	(e) Assistance provided under this
21	section shall be used to supplement, and not to supplant,
22	any other Federal resources available to carry out activi-
23	ties described in this section.

1	(f) AUTHORIZATION.—There are authorized to be ap-
2	propriated such sums as are necessary to carry out this
3	section.
4	Subtitle B—Drinking Water Adap-
5	tation, Technology, Education,
6	and Research
7	SEC. 211. EFFECTS OF CLIMATE CHANGE ON DRINKING
8	WATER UTILITIES.
9	(a) FINDINGS.—Congress finds that—
10	(1) the consensus among climate scientists is
11	overwhelming that climate change is occurring more
12	rapidly than can be attributed to natural causes, and
13	that significant impacts to the water supply are al-
14	ready occurring;
15	(2) among the first and most critical of those
16	impacts will be change to patterns of precipitation
17	around the world, which will affect water availability
18	for the most basic drinking water and domestic
19	water needs of populations in many areas of the
20	United States;
21	(3) drinking water utilities throughout the
22	United States, as well as those in Europe, Australia,
23	and Asia, are concerned that extended changes in
24	precipitation will lead to extended droughts;

change impacts;

1	(4) supplying water is highly energy-intensive
2	and will become more so as climate change forces
3	more utilities to turn to alternative supplies;
4	(5) energy production consumes a significant
5	percentage of the fresh water resources of the
6	United States;
7	(6) since 2003, the drinking water industry of
8	the United States has sponsored, through a non-
9	profit water research foundation, various studies to
10	assess the impacts of climate change on drinking
11	water supplies;
12	(7) those studies demonstrate the need for a
13	comprehensive program of research into the full
14	range of impacts on drinking water utilities, includ-
15	ing impacts on water supplies, facilities, and cus-
16	tomers;
17	(8) that nonprofit water research foundation is
18	also coordinating internationally with other drinking
19	water utilities on shared research projects and has
20	hosted international workshops with counterpart Eu-
21	ropean and Asian water research organizations to
22	develop a unified research agenda for applied re-
23	search on adaptive strategies to address climate

1	(9) research data in existence as of the date of
2	enactment of this Act—
3	(A) summarize the best available scientific
4	evidence on climate change;
5	(B) identify the implications of climate
6	change for the water cycle and the availability
7	and quality of water resources; and
8	(C) provide general guidance on planning
9	and adaptation strategies for water utilities
10	and
11	(10) given uncertainties about specific climate
12	changes in particular areas, drinking water utilities
13	need to prepare for a wider range of likely possibili-
14	ties in managing and delivery of water.
15	(b) In General.—The Administrator, in cooperation
16	with the Secretary of Commerce, the Secretary of Energy
17	and the Secretary of the Interior, shall establish and pro-
18	vide funding for a program of directed and applied re-
19	search, to be conducted through a nonprofit drinking
20	water research foundation and sponsored by water utili-
21	ties, to assist the utilities in adapting to the effects of cli-
22	mate change.
23	(c) Research Areas.—The research conducted in
24	accordance with subsection (b) shall include research
25	into—

1	(1) water quality impacts and solutions, includ-
2	ing research—
3	(A) to address probable impacts on raw
4	water quality resulting from—
5	(i) erosion and turbidity from extreme
6	precipitation events;
7	(ii) watershed vegetation changes; and
8	(iii) increasing ranges of pathogens,
9	algae, and nuisance organisms resulting
10	from warmer temperatures; and
11	(B) on mitigating increasing damage to
12	watersheds and water quality by evaluating ex-
13	treme events, such as wildfires and hurricanes,
14	to learn and develop management approaches to
15	mitigate—
16	(i) permanent watershed damage;
17	(ii) quality and yield impacts on
18	source waters; and
19	(iii) increased costs of water treat-
20	ment;
21	(2) impacts on groundwater supplies from car-
22	bon sequestration, including research to evaluate po-
23	tential water quality consequences of carbon seques-
24	tration in various regional aquifers, soil conditions,
25	and mineral deposits;

1	(2) water quantity impacts and solutions in
	(3) water quantity impacts and solutions, in-
2	cluding research—
3	(A) to evaluate climate change impacts on
4	water resources throughout hydrological basins
5	of the United States;
6	(B) to improve the accuracy and resolution
7	of climate change models at a regional level;
8	(C) to identify and explore options for in-
9	creasing conjunctive use of aboveground and
10	underground storage of water; and
11	(D) to optimize operation of existing and
12	new reservoirs in diminished and erratic periods
13	of precipitation and runoff;
14	(4) infrastructure impacts and solutions for
15	water treatment and wastewater treatment facilities
16	and underground pipelines, including research—
17	(A) to evaluate and mitigate the impacts of
18	sea level rise on—
19	(i) near-shore facilities;
20	(ii) soil drying and subsidence;
21	(iii) reduced flows in water and waste-
22	water pipelines; and
23	(iv) extreme flows in wastewater sys-
24	tems; and

1	(B) on ways of increasing the resilience of
2	existing infrastructure, planning cost-effective
3	responses to adapt to climate change, and de-
4	veloping new design standards for future infra-
5	structure that include the use of energy con-
6	servation measures and renewable energy in
7	new construction to the maximum extent prac-
8	ticable;
9	(5) desalination, water reuse, and alternative
10	supply technologies, including research—
11	(A) to improve and optimize existing mem-
12	brane technologies, and to identify and develop
13	breakthrough technologies, to enable the use of
14	seawater, brackish groundwater, treated waste-
15	water, and other impaired sources;
16	(B) into new sources of water through
17	more cost-effective water treatment practices in
18	recycling and desalination; and
19	(C) to improve technologies for use in—
20	(i) managing and minimizing the vol-
21	ume of desalination and reuse concentrate
22	streams; and
23	(ii) minimizing the environmental im-
24	pacts of seawater intake at desalination fa-
25	cilities;

1	(6) energy efficiency and greenhouse gas mini-
2	mization, including research—
3	(A) on optimizing the energy efficiency of
4	water supply and wastewater operations and
5	improving water efficiency in energy production
6	and management; and
7	(B) to identify and develop renewable, car-
8	bon-neutral energy options for the water supply
9	and wastewater industry;
10	(7) regional and hydrological basin cooperative
11	water management solutions, including research
12	into—
13	(A) institutional mechanisms for greater
14	regional cooperation and use of water ex-
15	changes, banking, and transfers; and
16	(B) the economic benefits of sharing risks
17	of shortage across wider areas;
18	(8) utility management, decision support sys-
19	tems, and water management models, including re-
20	search—
21	(A) into improved decision support systems
22	and modeling tools for use by water utility
23	managers to assist with increased water supply
24	uncertainty and adaptation strategies posed by
25	climate change;

1	(B) to provide financial tools, including
2	new rate structures, to manage financial re-
3	sources and investments, because increased con-
4	servation practices may diminish revenue and
5	increase investments in infrastructure; and
6	(C) to develop improved systems and mod-
7	els for use in evaluating—
8	(i) successful alternative methods for
9	conservation and demand management;
10	and
11	(ii) climate change impacts on
12	groundwater resources;
13	(9) reducing greenhouse gas emissions and im-
14	proving energy demand management, including re-
15	search to improve energy efficiency in water collec-
16	tion, production, transmission, treatment, distribu-
17	tion, and disposal to provide more sustainability and
18	means to assist drinking water utilities in reducing
19	the production of greenhouse gas emissions in the
20	collection, production, transmission, treatment, dis-
21	tribution, and disposal of drinking water;
22	(10) water conservation and demand manage-
23	ment, including research—
24	(A) to develop strategic approaches to
25	water demand management that offer the low-

1	est-cost, noninfrastructural options to serve
2	growing populations or manage declining sup-
3	plies, primarily through—
4	(i) efficiencies in water use and re-
5	allocation of the saved water;
6	(ii) demand management tools;
7	(iii) economic incentives; and
8	(iv) water-saving technologies; and
9	(B) into efficiencies in water management
10	through integrated water resource management
11	that incorporates—
12	(i) supply-side and demand-side proc-
13	esses;
14	(ii) continuous adaptive management;
15	and
16	(iii) the inclusion of stakeholders in
17	decisionmaking processes; and
18	(11) communications, education, and public ac-
19	ceptance, including research—
20	(A) into improved strategies and ap-
21	proaches for communicating with customers, de-
22	cisionmakers, and other stakeholders about the
23	implications of climate change on water supply
24	and water management;

1	(B) to develop effective communication ap-
2	proaches—
3	(i) to gain public acceptance of alter-
4	native water supplies and new policies and
5	practices, including conservation and de-
6	mand management; and
7	(ii) to gain public recognition and ac-
8	ceptance of increased costs; and
9	(C) to create and maintain a clearinghouse
10	of climate change information for water utili-
11	ties, academic researchers, stakeholders, gov-
12	ernment agencies, and research organizations.
13	(d) Authorization of Appropriations.—There is
14	authorized to be appropriated to carry out this section
15	\$25,000,000 for each of fiscal years 2010 through 2020 .
16	TITLE III—TRANSITION AND
17	ADAPTATION
18	Subtitle A—Green Jobs and Worker
19	Transition
20	PART 1—GREEN JOBS
21	SEC. 301. CLEAN ENERGY CURRICULUM DEVELOPMENT
22	GRANTS.
23	(a) Authorization.—The Secretary of Education is
24	authorized to award grants, on a competitive basis, to eli-
25	gible partnerships to develop programs of study (con-

- 1 taining the information described in section 122(c)(1)(A)
- 2 of the Carl D. Perkins Career and Technical Education
- 3 Act of 2006 (20 U.S.C. 2342)), that are focused on emerg-
- 4 ing careers and jobs in the fields of clean energy, renew-
- 5 able energy, energy efficiency, climate change mitigation,
- 6 and climate change adaptation. The Secretary of Edu-
- 7 cation shall consult with the Secretary of Labor and the
- 8 Secretary of Energy prior to the issuance of a solicitation
- 9 for grant applications.
- 10 (b) Eligible Partnerships.—For purposes of this
- 11 section, an eligible partnership shall include—
- 12 (1) at least 1 local educational agency eligible
- for funding under section 131 of the Carl D. Per-
- kins Career and Technical Education Act of 2006
- 15 (20 U.S.C. 2351) or an area career and technical
- 16 education school or education service agency de-
- 17 scribed in such section;
- 18 (2) at least 1 postsecondary institution eligible
- for funding under section 132 of such Act (20
- 20 U.S.C. 2352); and
- 21 (3) representatives of the community including
- business, labor organizations, and industry that have
- experience in fields as described in subsection (a).
- 24 (c) Application.—An eligible partnership seeking a
- 25 grant under this section shall submit an application to the

1	Secretary at such time and in such manner as the Sec-
2	retary may require. Applications shall include—
3	(1) a description of the eligible partners and
4	partnership, the roles and responsibilities of each
5	partner, and a demonstration of each partner's ca-
6	pacity to support the program;
7	(2) a description of the career area or areas
8	within the fields as described in subsection (a) to be
9	developed, the reason for the choice, and evidence of
10	the labor market need to prepare students in that
11	area;
12	(3) a description of the new or existing program
13	of study and both secondary and postsecondary com-
14	ponents;
15	(4) a description of the students to be served by
16	the new program of study;
17	(5) a description of how the program of study
18	funded by the grant will be replicable and dissemi-
19	nated to schools outside of the partnership, including
20	urban and rural areas;
21	(6) a description of applied learning that will be
22	incorporated into the program of study and how it
23	will incorporate or reinforce academic learning;
24	(7) a description of how the program of study
25	will be delivered;

1	(8) a description of how the program will pro-
2	vide accessibility to students, especially economically
3	disadvantaged, low performing, and urban and rural
4	students;
5	(9) a description of how the program will ad-
6	dress placement of students in nontraditional fields
7	as described in section 3(20) of the Carl D. Perkins
8	Career and Technical Education Act of 2006 (20
9	U.S.C. 2302(20)); and
10	(10) a description of how the applicant proposes
11	to consult or has consulted with a labor organiza-
12	tion, labor management partnership, apprenticeship
13	program, or joint apprenticeship and training pro-
14	gram that provides education and training in the
15	field of study for which the applicant proposes to de-
16	velop a curriculum.
17	(d) Priority.—The Secretary shall give priority to
18	applications that—
19	(1) use online learning or other innovative
20	means to deliver the program of study to students,
21	educators, and instructors outside of the partner-
22	ship; and
23	(2) focus on low performing students and spe-
24	cial populations as defined in section 3(29) of the

- 1 Carl D. Perkins Career and Technical Education
- 2 Act of 2006 (20 U.S.C. 2302(29)).
- 3 (e) Peer Review.—The Secretary shall convene a
- 4 peer review process to review applications for grants under
- 5 this section and to make recommendations regarding the
- 6 selection of grantees. Members of the peer review com-
- 7 mittee shall include—
- 8 (1) educators who have experience imple-
- 9 menting curricula with comparable purposes; and
- 10 (2) business and industry experts in fields as
- described in subsection (a).
- 12 (f) Uses of Funds.—Grants awarded under this
- 13 section shall be used for the development, implementation,
- 14 and dissemination of programs of study (as described in
- 15 section 122(c)(1)(A) of the Carl D. Perkins Career and
- 16 Technical Education Act (20 U.S.C. 2342(c)(1)(A))) in
- 17 career areas related to clean energy, renewable energy, en-
- 18 ergy efficiency, climate change mitigation, and climate
- 19 change adaptation.
- 20 SEC. 302. DEVELOPMENT OF INFORMATION AND RE-
- 21 SOURCES CLEARINGHOUSE FOR VOCA-
- 22 TIONAL EDUCATION AND JOB TRAINING IN
- 23 RENEWABLE ENERGY SECTORS.
- 24 (a) Development of Clearinghouse.—Not later
- 25 than 18 months after the date of enactment of this Act,

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- the Secretary of Labor, in collaboration with the Secretary 1
- 2 of Energy and the Secretary of Education, shall develop
- 3 an internet based information and resources clearinghouse
- 4 to aid career and technical education and job training pro-
- 5 grams for the renewable energy sectors. In establishing
- 6 the clearinghouse, the Secretary shall—
- 7 (1) collect and provide information that ad-8 dresses the consequences of rapid changes in tech-9 nology and regional disparities for renewable energy 10 training programs and provides best practices for 11 training and education in light of such changes and 12 disparities;
 - (2) place an emphasis on facilitating collaboration between the renewable energy industry and job training programs and on identifying industry and technological trends and best practices, to better help job training programs maintain quality and relevance; and
- 19 (3) place an emphasis on assisting programs 20 that cater to high-demand middle-skill, trades, manufacturing, contracting, and consulting careers.
- 22 (b) Solicitation and Consultation.—In devel-23 oping the clearinghouse pursuant to subsection (a), the 24 Secretary shall solicit information and expertise from busi-25 nesses and organizations in the renewable energy sector

and from institutions of higher education, career and tech-1 2 nical schools, and community colleges that provide train-3 ing in the renewable energy sectors. The Secretary shall 4 solicit a comprehensive peer review of the clearinghouse 5 by such entities not less than once every 2 years. Nothing in this subsection should be interpreted to require the di-7 vulgence of proprietary or competitive information. 8 (c) Contents of Clearinghouse.— 9 (1) Separate section for each renewable 10 ENERGY SECTOR.—The clearinghouse shall contain 11 separate sections developed for each of the following 12 renewable energy sectors: 13 (A) Solar energy systems. 14 (B) Wind energy systems. 15 (C) Energy transmission systems. 16 (D) Geothermal systems of energy and 17 heating. 18 (E) Energy efficiency technical training. 19 (2) Additional requirements.—In addition 20 to the information required in subsection (a), each 21 section of the clearinghouse shall include information 22 on basic environmental science and processes needed 23 to understand renewable energy systems, Federal 24 government and industry resources, and points of

contact to aid institutions in the development of

- 1 placement programs for apprenticeships and post
- 2 graduation opportunities, and information and tips
- about a green workplace, energy efficiency, and rel-
- 4 evant environmental topics and information on avail-
- 5 able industry recognized certifications in each area.
- 6 (d) DISSEMINATION.—The clearinghouse shall be
- 7 made available via the Internet to the general public. No-
- 8 tice of the completed clearinghouse and any major revi-
- 9 sions thereto shall also be provided—
- 10 (1) to each Member of Congress; and
- 11 (2) on the websites of the Departments of Edu-
- cation, Energy, and Labor.
- 13 (e) Revision.—The Secretary of Labor shall revise
- 14 and update the clearinghouse on a regular basis to ensure
- 15 its relevance.
- 16 SEC. 303. GREEN CONSTRUCTION CAREERS DEMONSTRA-
- 17 TION PROJECT.
- 18 (a) Establishment and Authority.—The Sec-
- 19 retary of Labor, in consultation with the Secretary of En-
- 20 ergy, shall, not later than 180 days after the enactment
- 21 of this Act, establish a Green Construction Careers dem-
- 22 onstration project by rules, regulations, and guidance in
- 23 accordance with the provisions of this section. The purpose
- 24 of the demonstration project shall be to promote middle
- 25 class careers and quality employment practices in the

- 1 green construction sector among targeted workers and to
- 2 advance efficiency and performance on construction
- 3 projects related to this Act. In order to advance these pur-
- 4 poses, the Secretary shall identify projects, including resi-
- 5 dential retrofitting projects, funded directly by or assisted
- 6 in whole or in part by or through the Federal Government
- 7 pursuant to this Act or by any other entity established
- 8 in accordance with this Act, to which all of the following
- 9 shall apply.
- 10 (b) REQUIREMENTS.—The Secretaries may establish
- 11 such terms and conditions for the demonstration projects
- 12 as the Secretaries determine are necessary to meet the
- 13 purposes of subsection (a), including establishing min-
- 14 imum proportions of hours to be worked by targeted work-
- 15 ers on such projects. The Secretaries may require the con-
- 16 tractors and subcontractors performing construction serv-
- 17 ices on the project to comply with the terms and conditions
- 18 as a condition of receiving funding or assistance from the
- 19 Federal Government under this Act.
- 20 (c) EVALUATION.—The Secretaries shall evaluate the
- 21 demonstration projects against the purposes of this section
- 22 at the end of 3 years from initiation of the demonstration
- 23 project. If the Secretaries determine that the demonstra-
- 24 tion projects have been successful, the Secretaries may

- 1 identify further projects to which of the provisions of this
- 2 section shall apply.
- 3 (d) GAO REPORT.—The Comptroller General shall
- 4 prepare and submit a report to the Committee on Health,
- 5 Education, Labor, and Pensions and the Committee on
- 6 Energy and Natural Resources of the Senate and the
- 7 Committee on Education and Labor and the Committee
- 8 on Energy and Commerce of the House of Representatives
- 9 not later than 5 years after the date of enactment of this
- 10 Act, which shall advise the committees of the results of
- 11 the demonstration projects and make appropriate rec-
- 12 ommendations.
- (e) Definition and Designation of Targeted
- 14 Workers.—As used in this section, the term "targeted
- 15 worker" means an individual who resides in the same
- 16 labor market area (as defined in section 101(18) of the
- 17 Workforce Investment Act of 1998 (29 U.S.C. 2801(18)))
- 18 as the project and who—
- 19 (1) is a member of a targeted group, within the
- 20 meaning of section 51 of the Internal Revenue Code
- of 1986, other than an individual described in sub-
- section (d)(1)(C) of such section;
- 23 (2)(A) resides in a census tract in which not
- less than 20 percent of the households have incomes
- below the Federal poverty guidelines; or

1	(B) is a member of a family that received a
2	total family income that, during the 2-year period
3	prior to employment on the project or admission to
4	the pre-apprenticeship program, did not exceed 200
5	percent of the Federal poverty guidelines (exclusive
6	of unemployment compensation, child support pay-
7	ments, payments described in section 101(25)(A) of
8	the Workforce Investment Act (29 U.S.C.
9	2801(25)(A)), and old-age and survivors insurance
10	benefits received under section 202 of the Social Se-
11	curity Act (42 U.S.C. 402); or
12	(3) is a displaced homemaker, as such term is
13	defined in section 3(10) of the Carl D. Perkins Ca-
14	reer and Technical Education Act of 2006 (20
15	U.S.C. 2302(10)).
16	(f) Qualified Pre-apprenticeship Program.—A
17	qualified pre-apprenticeship program is a pre-apprentice-
18	ship program that has demonstrated an ability to recruit,
19	train, and prepare for admission to apprenticeship pro-
20	grams individuals who are targeted workers.
21	(g) Qualified Apprenticeship and Other
22	Training Programs.—
23	(1) Participation by each contractor re-
24	QUIRED.—Each contractor and subcontractor that
25	seeks to provide construction services on projects

identified by the Secretaries pursuant to subsection

(a) shall submit adequate assurances with its bid or proposal that it participates in a qualified apprenticeship or other training program, with a written arrangement with a qualified pre-apprenticeship program, for each craft or trade classification of worker that it intends to employ to perform work on the project.

- (2) Definition of Qualified apprentice ship or other training program.—
 - (A) In GENERAL.—For purposes of this section, the term "qualified apprenticeship or other training program" means an apprenticeship or other training program that qualifies as an employee welfare benefit plan, as defined in section 3(1) of the Employee Retirement Income Security Act of 1974 (29 U.S.C. 1002(1)).
 - (B) CERTIFICATION OF OTHER PROGRAMS IN CERTAIN LOCALITIES.—In the event that the Secretary of Labor certifies that a qualified apprenticeship or other training program (as defined in subparagraph (A)) for a craft or trade classification of workers that a prospective contractor or subcontractor intends to employ, is

not operated in the locality where the project 1 2 will be performed, an apprenticeship or other 3 training program that is not an employee welfare benefit plan (as defined in such section) 4 5 may be certified by the Secretary as a qualified 6 apprenticeship or other training program pro-7 vided it is registered with the Office of Appren-8 ticeship of the Department of Labor, or a State 9 apprenticeship agency recognized by the Office 10 of Apprenticeship for Federal purposes.

- 11 FACILITATING COMPLIANCE.—The Secretary (h) 12 may require Federal contracting agencies, recipients of 13 Federal assistance, and any other entity established in accordance with this Act to require contractors to enter into 14 15 an agreement in a manner comparable with the standards set forth in sections 3 and 4 of Executive Order 13502 16 17 in order to achieve the purposes of this section, including any requirements established by subsection (b). 18
- 19 (i) LIMITATION.—The requirements of this section 20 shall not apply to any project funded under this Act in 21 American Samoa, Guam, the Commonwealth of the North-22 ern Mariana Islands, the Commonwealth of Puerto Rico, 23 or the United States Virgin Islands, unless participation 24 is requested by the governor of such territories within 1 25 year of the promulgation of rules under this Act.

1	PART 2—CLIMATE CHANGE WORKER
2	ADJUSTMENT ASSISTANCE
3	SEC. 311. PETITIONS, ELIGIBILITY REQUIREMENTS, AND
4	DETERMINATIONS.
5	(a) Petitions.—
6	(1) Filing.—A petition for certification of eli-
7	gibility to apply for adjustment assistance for a
8	group of workers under this part may be filed by
9	any of the following:
10	(A) The group of workers.
11	(B) The certified or recognized union or
12	other duly authorized representative of such
13	workers.
14	(C) Employers of such workers, one-stop
15	operators or one-stop partners (as defined in
16	section 101 of the Workforce Investment Act of
17	1998 (29 U.S.C. 2801)), including State em-
18	ployment security agencies, or the State dis-
19	located worker unit established under title I of
20	such Act, on behalf of such workers.
21	The petition shall be filed simultaneously with the
22	Secretary of Labor and with the Governor of the
23	State in which such workers' employment site is lo-
24	cated.

1	(2) ACTION BY GOVERNORS.—Upon receipt of a
2	petition filed under paragraph (1), the Governor
3	shall—
4	(A) ensure that rapid response activities
5	and appropriate core and intensive services (as
6	described in section 134 of the Workforce In-
7	vestment Act of 1998 (29 U.S.C. 2864)) au-
8	thorized under other Federal laws are made
9	available to the workers covered by the petition
10	to the extent authorized under such laws; and
11	(B) assist the Secretary in the review of
12	the petition by verifying such information and
13	providing such other assistance as the Secretary
14	may request.
15	(3) ACTION BY THE SECRETARY.—Upon receipt
16	of the petition, the Secretary shall promptly publish
17	notice in the Federal Register and on the website of
18	the Department of Labor that the Secretary has re-
19	ceived the petition and initiated an investigation.
20	(4) Hearings.—If the petitioner, or any other
21	person found by the Secretary to have a substantial
22	interest in the proceedings, submits not later than
23	10 days after the date of the Secretary's publication
24	under paragraph (3) a request for a hearing, the
25	Secretary shall provide for a public hearing and af-

1	ford such interested persons an opportunity to be
2	present, to produce evidence, and to be heard.
3	(b) Eligibility.—
4	(1) In general.—A group of workers shall be
5	certified by the Secretary as eligible to apply for ad-
6	justment assistance under this part pursuant to a
7	petition filed under subsection (a) if—
8	(A) the group of workers is employed in—
9	(i) energy producing and transforming
10	industries;
11	(ii) industries dependent upon energy
12	industries;
13	(iii) energy-intensive manufacturing
14	industries;
15	(iv) consumer goods manufacturing;
16	or
17	(v) other industries whose employment
18	the Secretary determines has been ad-
19	versely affected by any requirement of title
20	VII of the Clean Air Act;
21	(B) the Secretary determines that a sig-
22	nificant number or proportion of the workers in
23	such workers' employment site have become to-
24	tally or partially separated, or are threatened to

1	become totally or partially separated from em-
2	ployment; and
3	(C) the sales, production, or delivery of
4	goods or services have decreased as a result of
5	any requirement of title VII of the Clean Air
6	Act, including—
7	(i) the shift from reliance upon fossil
8	fuels to other sources of energy, including
9	renewable energy, that results in the clos-
10	ing of a facility or layoff of employees at
11	a facility that mines, produces, processes,
12	or utilizes fossil fuels to generate elec-
13	tricity;
14	(ii) a substantial increase in the cost
15	of energy required for a manufacturing fa-
16	cility to produce items whose prices are
17	competitive in the marketplace, to the ex-
18	tent the cost is not offset by Callowance al-
19	location to the facility pursuant to title VII
20	of the Clean Air Act] [the allocation of al-
21	lowances to the facility under any Federal
22	law enacted for the purpose of regulating
23	greenhouse gas emissions?]; or
24	(iii) other documented occurrences
25	that the Secretary determines are indica-

1	tors of an adverse impact on an industry
2	described in subparagraph (A) as a result
3	of any requirement of title VII of the
4	Clean Air Act.
5	(2) Workers in public agencies.—A group
6	of workers in a public agency shall be certified by
7	the Secretary as eligible to apply for climate change
8	adjustment assistance pursuant to a petition filed if
9	the Secretary determines that a significant number
10	or proportion of the workers in the public agency
11	have become totally or partially separated from em-
12	ployment, or are threatened to become totally or
13	partially separated as a result of any requirement of
14	title VII of the Clean Air Act.
15	(3) Adversely affected service work-
16	ERS.—A group of workers shall be certified as eligi-
17	ble to apply for climate change adjustment assist-
18	ance pursuant to a petition filed if the Secretary de-
19	termines that—
20	(A) a significant number or proportion of
21	the service workers at an employment site
22	where a group of workers has been certified by
23	the Secretary as eligible to apply for adjustment
24	assistance under this part pursuant to para-
25	graph (1) have become totally or partially sepa-

1	rated from employment, or are threatened to
2	become totally or partially separated; and
3	(B) a loss of business in the firm providing
4	service workers to an employment site is di-
5	rectly attributable to one or more of the docu-
6	mented occurrences listed in paragraph (1)(C)
7	(c) AUTHORITY TO INVESTIGATE AND COLLECT IN-
8	FORMATION.—
9	(1) In General.—The Secretary shall, in de-
10	termining whether to certify a group of workers
11	under subsection (d), obtain information the Sec-
12	retary determines to be necessary to make the cer-
13	tification, through questionnaires and in such other
14	manner as the Secretary determines appropriate
15	from—
16	(A) the workers' employer;
17	(B) officials of certified or recognized
18	unions or other duly authorized representatives
19	of the group of workers; or
20	(C) one-stop operators or one-stop partners
21	(as defined in section 101 of the Workforce In-
22	vestment Act of 1998 (29 U.S.C. 2801)).
23	(2) Verification of information.—The Sec-
24	retary shall require an employer, union, or one-stop
25	operator or partner to certify all information ob-

- tained under paragraph (1) from the employer, union, or one-stop operator or partner (as the case may be) on which the Secretary relies in making a determination under subsection (d), unless the Secretary has a reasonable basis for determining that such information is accurate and complete without being certified.
- 8 (3) Protection of confidential informa-9 TION.—The Secretary may not release information 10 obtained under paragraph (1) that the Secretary 11 considers to be confidential business information un-12 less the employer submitting the confidential busi-13 ness information had notice, at the time of submis-14 sion, that the information would be released by the 15 Secretary, or the employer subsequently consents to 16 the release of the information. Nothing in this para-17 graph shall be construed to prohibit the Secretary 18 from providing such confidential business informa-19 tion to a court in camera or to another party under 20 a protective order issued by a court.
- 21 (d) Determination by the Secretary of 22 Labor.—
- 23 (1) IN GENERAL.—As soon as possible after the 24 date on which a petition is filed under subsection 25 (a), but in any event not later than 40 days after

that date, the Secretary, in consultation with the Secretary of Energy and the Administrator, as necessary, shall determine whether the petitioning group meets the requirements of subsection (b) and shall issue a certification of eligibility to apply for assistance under this part covering workers in any group which meets such requirements. Each certification shall specify the date on which the total or partial separation began or threatened to begin. Upon reaching a determination on a petition, the Secretary shall promptly publish a summary of the determination in the Federal Register and on the website of the Department of Labor, together with the Secretary's reasons for making such determination.

- (2) ONE YEAR LIMITATION.—A certification under this section shall not apply to any worker whose last total or partial separation from the employment site before the worker's application under section 312(a) occurred more than 1 year before the date of the petition on which such certification was granted.
- (3) REVOCATION OF CERTIFICATION.—Whenever the Secretary determines, with respect to any certification of eligibility of the workers of an em-

1	ployment site, that total or partial separations from
2	such site are no longer a result of the factors speci-
3	fied in subsection (b)(1), the Secretary shall termi-
4	nate such certification and promptly have notice of
5	such termination published in the Federal Register
6	and on the website of the Department of Labor, to-
7	gether with the Secretary's reasons for making such
8	determination. Such termination shall apply only
9	with respect to total or partial separations occurring
10	after the termination date specified by the Secretary.
11	(e) Industry Notification of Assistance.—
12	Upon receiving a notification of a determination under
13	subsection (d) with respect to a domestic industry the Sec-
14	retary of Labor shall notify the representatives of the do-
15	mestic industry affected by the determination, employers
16	publicly identified by name during the course of the pro-
17	ceeding relating to the determination, and any certified
18	or recognized union or, to the extent practicable, other
19	duly authorized representative of workers employed by
20	such representatives of the domestic industry, of—
21	(1) the adjustment allowances, training, and
22	other benefits available under this part;
23	(2) the manner in which to file a petition and
24	apply for such benefits;

1	(3) the availability of assistance in filing such
2	petitions;
3	(4) notify the Governor of each State in which
4	one or more employers in such industry are located
5	of the Secretary's determination and the identity of
6	the employers; and
7	(5) upon request, provide any assistance that is
8	necessary to file a petition under subsection (a).
9	(f) Benefit Information to Workers, Pro-
10	VIDERS OF TRAINING.—
11	(1) In general.—The Secretary shall provide
12	full information to workers about the adjustment al-
13	lowances, training, and other benefits available
14	under this part and about the petition and applica-
15	tion procedures, and the appropriate filing dates, for
16	such allowances, training and services. The Sec-
17	retary shall provide whatever assistance is necessary
18	to enable groups of workers to prepare petitions or
19	applications for program benefits. The Secretary
20	shall make every effort to insure that cooperating
21	State agencies fully comply with the agreements en-
22	tered into under section 312(a) and shall periodically
23	review such compliance. The Secretary shall inform
24	the State Board for Vocational Education or equiva-
25	lent agency, the one-stop operators or one-stop part-

1	ners (as defined in section 101 of the Workforce In-
2	vestment Act of 1998 (29 U.S.C. 2801)), and other
3	public or private agencies, institutions, and employ-
4	ers, as appropriate, of each certification issued
5	under subsection (d) and of projections, if available,
6	of the needs for training under as a result of such
7	certification.
8	(2) Notice by Mail.—The Secretary shall pro-
9	vide written notice through the mail of the benefits
10	available under this part to each worker whom the
11	Secretary has reason to believe is covered by a cer-
12	tification made under subsection (d)—
13	(A) at the time such certification is made,
14	if the worker was partially or totally separated
15	from the adversely affected employment before
16	such certification; or
17	(B) at the time of the total or partial sepa-
18	ration of the worker from the adversely affected
19	employment, if subparagraph (A) does not
20	apply.
21	(3) Newspapers; website.—The Secretary
22	shall publish notice of the benefits available under
23	this part to workers covered by each certification
24	made under subsection (d) in newspapers of general
25	circulation in the areas in which such workers reside

1	and shall make such information available on the
2	website of the Department of Labor.
3	SEC. 312. PROGRAM BENEFITS.
4	(a) CLIMATE CHANGE ADJUSTMENT ALLOWANCE.—
5	(1) Eligibility.—Payment of a climate change
6	adjustment allowance shall be made to an adversely
7	affected worker covered by a certification under sec-
8	tion 311(b) who files an application for such allow-
9	ance for any week of unemployment which begins on
10	or after the date of such certification, if the fol-
11	lowing conditions are met:
12	(A) Such worker's total or partial separa-
13	tion before the worker's application under this
14	part occurred—
15	(i) on or after the date, as specified in
16	the certification under which the worker is
17	covered, on which total or partial separa-
18	tion began or threatened to begin in the
19	adversely affected employment;
20	(ii) before the expiration of the 2-year
21	period beginning on the date on which the
22	determination under section 311(d) was
23	made; and

1	(iii) before the termination date, is
2	any, determined pursuant to section
3	311(d)(3).
4	(B) Such worker had, in the 52-week pe-
5	riod ending with the week in which such total
6	or partial separation occurred, at least 26
7	weeks of full-time employment or 1,040 hours
8	of part time employment in adversely affected
9	employment, or, if data with respect to weeks of
10	employment are not available, equivalent
11	amounts of employment computed under regu-
12	lations prescribed by the Secretary. For the
13	purposes of this paragraph, any week in which
14	such worker—
15	(i) is on employer-authorized leave for
16	purposes of vacation, sickness, injury, ma-
17	ternity, or inactive duty or active duty
18	military service for training;
19	(ii) does not work because of a dis-
20	ability that is compensable under a work-
21	men's compensation law or plan of a State
22	or the United States;
23	(iii) had his employment interrupted
24	in order to serve as a full-time representa-
25	tive of a labor organization in such firm; or

1	(iv) is on call-up for purposes of active
2	duty in a reserve status in the Armed
3	Forces of the United States, provided such
4	active duty is "Federal service" as defined
5	in section 8521(a)(1) of title 5, United
6	States Code,
7	shall be treated as a week of employment.
8	(C) Such worker is enrolled in a training
9	program approved by the Secretary under sub-
10	section $(b)(2)$.
11	(2) Ineligibility for certain other bene-
12	FITS.—An adversely affected worker receiving a pay-
13	ment under this section shall be ineligible to receive
14	any other form of unemployment insurance for the
15	period in which such worker is receiving a climate
16	change adjustment allowance under this section.
17	(3) Revocation.—If—
18	(A) the Secretary determines that—
19	(i) the adversely affected worker—
20	(I) has failed to begin participa-
21	tion in the training program the en-
22	rollment in which meets the require-
23	ment of paragraph (1)(C); or

1	(II) has ceased to participate in
2	such training program before com-
3	pleting such training program; and
4	(ii) there is no justifiable cause for
5	such failure or cessation; or
6	(B) the certification made with respect to
7	such worker under section 311(d) is revoked
8	under paragraph (3) of such section,
9	no adjustment allowance may be paid to the ad-
10	versely affected worker under this part for the week
11	in which such failure, cessation, or revocation oc-
12	curred, or any succeeding week, until the adversely
13	affected worker begins or resumes participation in a
14	training program approved by the Secretary under
15	subsection $(b)(2)$.
16	(4) Waivers of training requirements.—
17	The Secretary may issue a written statement to an
18	adversely affected worker waiving the requirement to
19	be enrolled in training described in subsection (b)(2)
20	if the Secretary determines that it is not feasible or
21	appropriate for the worker, because of 1 or more of
22	the following reasons:
23	(A) Recall.—The worker has been noti-
24	fied that the worker will be recalled by the em-
25	ployer from which the separation occurred.

1	(B) Marketable skills.—
2	(i) In general.—The worker pos
3	sesses marketable skills for suitable em
4	ployment (as determined pursuant to an
5	assessment of the worker, which may in
6	clude the profiling system under section
7	303(j) of the Social Security Act (42
8	U.S.C. 503(j)), carried out in accordance
9	with guidelines issued by the Secretary
10	and there is a reasonable expectation o
11	employment at equivalent wages in the
12	foreseeable future.
13	(ii) Marketable skills defined.—
14	For purposes of clause (i), the term "mar
15	ketable skills" may include the possession
16	of a postgraduate degree from an institu
17	tion of higher education (as defined in sec
18	tion 102 of the Higher Education Act o
19	1965 (20 U.S.C. 1002)) or an equivalen
20	institution, or the possession of an equiva-
21	lent postgraduate certification in a special
22	ized field.
23	(C) Retirement.—The worker is within 2
24	years of meeting all requirements for entitle
25	ment to either—

1	(i) old-age insurance benefits under
2	title II of the Social Security Act (42
3	U.S.C. 401 et seq.) (except for application
4	therefor); or
5	(ii) a private pension sponsored by an
6	employer or labor organization.
7	(D) Health.—The worker is unable to
8	participate in training due to the health of the
9	worker, except that a waiver under this sub-
10	paragraph shall not be construed to exempt a
11	worker from requirements relating to the avail-
12	ability for work, active search for work, or re-
13	fusal to accept work under Federal or State un-
14	employment compensation laws.
15	(E) ENROLLMENT UNAVAILABLE.—The
16	first available enrollment date for the training
17	of the worker is within 60 days after the date
18	of the determination made under this para-
19	graph, or, if later, there are extenuating cir-
20	cumstances for the delay in enrollment, as de-
21	termined pursuant to guidelines issued by the
22	Secretary.
23	(F) Training Not available.—Training
24	described in subsection (b)(2) is not reasonably
25	available to the worker from either govern-

- mental agencies or private sources (which may include area career and technical education schools, as defined in section 3 of the Carl D. Perkins Career and Technical Education Act of 2006 (20 U.S.C. 2302), and employers), no training that is suitable for the worker is avail-able at a reasonable cost, or no training funds are available.
 - (5) WEEKLY AMOUNTS.—The climate change adjustment allowance payable to an adversely affected worker for a week of unemployment shall be an amount equal to 70 percent of the average weekly wage of such worker, but in no case shall such amount exceed the average weekly wage for all workers in the State where the adversely affected worker resides.
 - (6) MAXIMUM DURATION OF BENEFITS.—An eligible worker may receive a climate change adjustment allowance under this subsection for a period of not longer than 156 weeks.

(b) Employment Services and Training.—

(1) Information and employment services.—The Secretary shall make available, directly or through agreements with the States under section 313(a) to adversely affected workers covered by a

1	certification under section 311(a) the following in-
2	formation and employment services:
3	(A) Comprehensive and specialized assess-
4	ment of skill levels and service needs, including
5	through—
6	(i) diagnostic testing and use of other
7	assessment tools; and
8	(ii) in-depth interviewing and evalua-
9	tion to identify employment barriers and
10	appropriate employment goals.
11	(B) Development of an individual employ-
12	ment plan to identify employment goals and ob-
13	jectives, and appropriate training to achieve
14	those goals and objectives.
15	(C) Information on training available in
16	local and regional areas, information on indi-
17	vidual counseling to determine which training is
18	suitable training, and information on how to
19	apply for such training.
20	(D) Information on training programs and
21	other services provided by a State pursuant to
22	title I of the Workforce Investment Act of 1998
23	(29 U.S.C. 2801 et seq.) and available in local
24	and regional areas, information on individual
25	counseling to determine which training is suit-

able training, and information on how to apply 1 2 for such training. 3 (E) Information on how to apply for financial aid, including referring workers to edu-4 5 cational opportunity centers described in section 6 402F of the Higher Education Act of 1965 (20) 7 U.S.C. 1070a–16), where applicable, and noti-8 fying workers that the workers may request fi-9 nancial aid administrators at institutions of 10 higher education (as defined in section 102 of 11 such Act (20 U.S.C. 1002)) to use the adminis-12 trators' discretion under section 479A of such 13 Act (20 U.S.C. 1087tt) to use current year in-14 come data, rather than preceding year income 15 data, for determining the amount of need of the 16 workers for Federal financial assistance under 17 title IV of such Act (20 U.S.C. 1070 et seq.). 18 (F) Short-term prevocational services, in-19 cluding development of learning skills, commu-20 nications skills, interviewing skills, punctuality, 21 personal maintenance skills, and professional 22 conduct to prepare individuals for employment 23 or training. 24 (G) Individual career counseling, including 25 job search and placement counseling, during the

1	period in which the individual is receiving a cli-
2	mate change adjustment allowance or training
3	under this part, and after receiving such train-
4	ing for purposes of job placement.
5	(H) Provision of employment statistics in-
6	formation, including the provision of accurate
7	information relating to local, regional, and na-
8	tional labor market areas, including—
9	(i) job vacancy listings in such labor
10	market areas;
11	(ii) information on jobs skills nec-
12	essary to obtain jobs identified in job va-
13	cancy listings described in subparagraph
14	(A);
15	(iii) information relating to local occu-
16	pations that are in demand and earnings
17	potential of such occupations; and
18	(iv) skills requirements for local occu-
19	pations described in subparagraph (C).
20	(I) Information relating to the availability
21	of supportive services, including services relat-
22	ing to child care, transportation, dependent
23	care, housing assistance, and need-related pay-
24	ments that are necessary to enable an indi-
25	vidual to participate in training.

1	(2) Training.—
2	(A) APPROVAL OF AND PAYMENT FOR
3	TRAINING.—If the Secretary determines, with
4	respect to an adversely affected worker that—
5	(i) there is no suitable employment
6	(which may include technical and profes-
7	sional employment) available for an ad-
8	versely affected worker;
9	(ii) the worker would benefit from ap-
10	propriate training;
11	(iii) there is a reasonable expectation
12	of employment following completion of
13	such training;
14	(iv) training approved by the Sec-
15	retary is reasonably available to the worker
16	from either governmental agencies or pri-
17	vate sources (including area career and
18	technical education schools, as defined in
19	section 3 of the Carl D. Perkins Career
20	and Technical Education Act of 2006 (20
21	U.S.C. 2302), and employers);
22	(v) the worker is qualified to under-
23	take and complete such training; and
24	(vi) such training is suitable for the
25	worker and available at a reasonable cost,

1	the Secretary shall approve such training for
2	the worker. Upon such approval, the worker
3	shall be entitled to have payment of the costs
4	of such training (subject to the limitations im-
5	posed by this section) paid on the worker's be-
6	half by the Secretary directly or through a
7	voucher system.
8	(B) DISTRIBUTION.—The Secretary shall
9	establish procedures for the distribution of the
10	funds to States to carry out the training pro-
11	grams approved under this paragraph, and shall
12	make an initial distribution of the funds made
13	available as soon as practicable after the begin-
14	ning of each fiscal year.
15	(C) Additional rules regarding ap-
16	PROVAL OF AND PAYMENT FOR TRAINING.—
17	(i) For purposes of applying subpara-
18	graph (A)(iii), a reasonable expectation of
19	employment does not require that employ-
20	ment opportunities for a worker be avail-
21	able, or offered, immediately upon the
22	completion of training approved under
23	such subparagraph.
24	(ii) If the costs of training an ad-
25	versely affected worker are paid by the

1	Secretary under subparagraph (A), no
2	other payment for such costs may be made
3	under any other provision of Federal law.
4	No payment may be made under subpara-
5	graph (A) of the costs of training an ad-
6	versely affected worker or an adversely af-
7	fected incumbent worker if such costs—
8	(I) have already been paid under
9	any other provision of Federal law; or
10	(II) are reimbursable under any
11	other provision of Federal law and a
12	portion of such costs have already
13	been paid under such other provision
14	of Federal law.
15	The provisions of this clause shall not
16	apply to, or take into account, any funds
17	provided under any other provision of Fed-
18	eral law which are used for any purpose
19	other than the direct payment of the costs
20	incurred in training a particular adversely
21	affected worker, even if such use has the
22	effect of indirectly paying or reducing any
23	portion of the costs involved in training the
24	adversely affected worker.

1	(D) TRAINING PROGRAMS.—The training
2	programs that may be approved under subpara-
3	graph (A) include—
4	(i) employer-based training, includ-
5	ing—
6	(I) on-the-job training if ap-
7	proved by the Secretary under sub-
8	section (c); and
9	(II) joint labor-management ap-
10	prenticeship programs;
11	(ii) any training program provided by
12	a State pursuant to title I of the Work-
13	force Investment Act of 1998 (29 U.S.C.
14	2801 et seq.);
15	(iii) any programs in career and tech-
16	nical education described in section 3(5) of
17	the Carl D. Perkins Career and Technical
18	Education Act of 2006 (20 U.S.C.
19	2302(5));
20	(iv) any program of remedial edu-
21	cation;
22	(v) any program of prerequisite edu-
23	cation or coursework required to enroll in
24	training that may be approved under this
25	paragraph;

1	(vi) any training program for which
2	all, or any portion, of the costs of training
3	the worker are paid—
4	(I) under any Federal or State
5	program other than this part; or
6	(II) from any source other than
7	this part;
8	(vii) any training program or
9	coursework at an accredited institution of
10	higher education (described in section 102
11	of the Higher Education Act of 1965 (20
12	U.S.C. 1002)), including a training pro-
13	gram or coursework for the purpose of—
14	(I) obtaining a degree or certifi-
15	cation; or
16	(II) completing a degree or cer-
17	tification that the worker had pre-
18	viously begun at an accredited institu-
19	tion of higher education; and
20	(viii) any other training program ap-
21	proved by the Secretary.
22	(3) Supplemental assistance.—The Sec-
23	retary may, as appropriate, authorize supplemental
24	assistance that is necessary to defray reasonable
25	transportation and subsistence expenses for separate

1	maintenance in a case in which training for a worker
2	is provided in a facility that is not within commuting
3	distance of the regular place of residence of the
4	worker.
5	(c) On-the-job Training Requirements.—
6	(1) In General.—The Secretary may approve
7	on-the-job training for any adversely affected worker
8	if—
9	(A) the Secretary determines that on-the-
10	job training—
11	(i) can reasonably be expected to lead
12	to suitable employment with the employer
13	offering the on-the-job training;
14	(ii) is compatible with the skills of the
15	worker;
16	(iii) includes a curriculum through
17	which the worker will gain the knowledge
18	or skills to become proficient in the job for
19	which the worker is being trained; and
20	(iv) can be measured by benchmarks
21	that indicate that the worker is gaining
22	such knowledge or skills; and
23	(B) the State determines that the on-the-
24	job training program meets the requirements of
25	clauses (iii) and (iv) of subparagraph (A).

1	(2) Monthly payments.—The Secretary shall
2	pay the costs of on-the-job training approved under
3	paragraph (1) in monthly installments.
4	(3) Contracts for on-the-job training.—
5	(A) IN GENERAL.—The Secretary shall en-
6	sure, in entering into a contract with an em-
7	ployer to provide on-the-job training to a work-
8	er under this subsection, that the skill require-
9	ments of the job for which the worker is being
10	trained, the academic and occupational skill
11	level of the worker, and the work experience of
12	the worker are taken into consideration.
13	(B) TERM OF CONTRACT.—Training under
14	any such contract shall be limited to the period
15	of time required for the worker receiving on-
16	the-job training to become proficient in the job
17	for which the worker is being trained, but may
18	not exceed 156 weeks in any case.
19	(4) Exclusion of Certain Employers.—The
20	Secretary shall not enter into a contract for on-the-
21	job training with an employer that exhibits a pattern
22	of failing to provide workers receiving on-the-job
23	training from the employer with—
24	(A) continued, long-term employment as
25	regular employees; and

I	(B) wages, benefits, and working condi-
2	tions that are equivalent to the wages, benefits,
3	and working conditions provided to regular em-
4	ployees who have worked a similar period of
5	time and are doing the same type of work as
6	workers receiving on-the-job training from the
7	employer.
8	(d) Administrative and Employment Services
9	Funding.—
10	(1) Administrative funding.—In addition to
11	any funds made available to a State to carry out this
12	section for a fiscal year, the State shall receive for
13	the fiscal year a payment in an amount that is equal
14	to 15 percent of the amount of such funds and
15	shall—
16	(A) use not more than 2/3 of such payment
17	for the administration of the climate change ad-
18	justment assistance for workers program under
19	this part, including for—
20	(i) processing waivers of training re-
21	quirements under subsection (a)(4); and
22	(ii) collecting, validating, and report-
23	ing data required under this part; and

1	(B) use not less than ½ of such payment
2	for information and employment services under
3	subsection (b)(1).
4	(2) Employment services funding.—
5	(A) In general.—In addition to any
6	funds made available to a State to carry out
7	subsection (b)(2) and the payment under para-
8	graph (1) for a fiscal year, the Secretary shall
9	provide to the State for the fiscal year a reason-
10	able payment for the purpose of providing em-
11	ployment and services under subsection $(b)(1)$.
12	(B) Voluntary return of funds.—A
13	State that receives a payment under subpara-
14	graph (A) may decline or otherwise return such
15	payment to the Secretary.
16	(e) Job Search Allowances.—The Secretary of
17	Labor may provide adversely affected workers a one-time
18	job search allowance in accordance with regulations pre-
19	scribed by the Secretary. Any job search allowance pro-
20	vided shall be available only under the following cir-
21	cumstances and conditions:
22	(1) The worker is no longer eligible for the cli-
23	mate change adjustment allowance under subsection
24	(a) and has completed the training program required
25	by subsection $(b)(1)(E)$.

1	(2) The Secretary determines that the worker
2	cannot reasonably be expected to secure suitable em-
3	ployment in the commuting area in which the worker
4	resides.
5	(3) An allowance granted shall provide reim-
6	bursement to the worker of all necessary job search
7	expenses as prescribed by the Secretary in regula-
8	tions. Such reimbursement under this subsection
9	may not exceed \$1,500 for any worker.
10	(f) Relocation Allowance Authorized.—
11	(1) IN GENERAL.—Any adversely affected work-
12	er covered by a certification issued under section
13	311 may file an application for a relocation allow-
14	ance with the Secretary, and the Secretary may
15	grant the relocation allowance, subject to the terms
16	and conditions of this subsection.
17	(2) Conditions for granting allowance.—
18	A relocation allowance may be granted if all of the
19	following terms and conditions are met:
20	(A) Assist an adversely affected
21	WORKER.—The relocation allowance will assist
22	an adversely affected worker in relocating with-
23	in the United States.
24	(B) Local employment not avail-
25	ABLE.—The Secretary determines that the

1	worker cannot reasonably be expected to secure
2	suitable employment in the commuting area in
3	which the worker resides.
4	(C) TOTAL SEPARATION.—The worker is
5	totally separated from employment at the time
6	relocation commences.
7	(D) Suitable employment obtained.—
8	The worker—
9	(i) has obtained suitable employment
10	affording a reasonable expectation of long-
11	term duration in the area in which the
12	worker wishes to relocate; or
13	(ii) has obtained a bona fide offer of
14	such employment.
15	(E) APPLICATION.—The worker filed an
16	application with the Secretary at such time and
17	in such manner as the Secretary shall specify
18	by regulation.
19	(3) Amount of allowance.—The relocation
20	allowance granted to a worker under paragraph (1)
21	includes—
22	(A) all reasonable and necessary expenses
23	(including, subsistence and transportation ex-
24	penses at levels not exceeding amounts pre-
25	scribed by the Secretary in regulations) in-

I	curred in transporting the worker, the worker's
2	family, and household effects; and
3	(B) a lump sum equivalent to 3 times the
4	worker's average weekly wage, up to a max
5	imum payment of \$1,500.
6	(4) Limitations.—A relocation allowance may
7	not be granted to a worker unless—
8	(A) the relocation occurs within 182 days
9	after the filing of the application for relocation
10	assistance; or
11	(B) the relocation occurs within 182 days
12	after the conclusion of training, if the worker
13	entered a training program approved by the
14	Secretary under subsection (b)(2).
15	(g) HEALTH INSURANCE CONTINUATION.—Not later
16	than 1 year after the date of enactment of this Act, the
17	Secretary of Labor shall prescribe regulations to provide
18	for the period in which an adversely affected worker is
19	participating in a training program described in sub
20	section (b)(2), 80 percent of the monthly premium of any
21	health insurance coverage that an adversely affected work
22	er was receiving from such worker's employer prior to the
23	separation from employment described in section 311(b)
24	to be paid to any health care insurance plan designated

1	by the adversely affected worker receiving an allowance
2	under this section.
3	SEC. 313. GENERAL PROVISIONS.
4	(a) AGREEMENTS WITH STATES.—
5	(1) In general.—The Secretary is authorized
6	on behalf of the United States to enter into an
7	agreement with any State, or with any State agency
8	(referred to in this section as "cooperating States"
9	and "cooperating State agencies" respectively).
10	Under such an agreement, the cooperating State or
11	cooperating State agency—
12	(A) as agent of the United States, shall re-
13	ceive applications for, and shall provide, pay-
14	ments on the basis provided in this part;
15	(B) in accordance with paragraph (6),
16	shall make available to adversely affected work-
17	ers covered by a certification under section
18	311(d) the employment services described in
19	section $312(b)(1)$;
20	(C) shall make any certifications required
21	under section 311(d); and
22	(D) shall otherwise cooperate with the Sec-
23	retary and with other State and Federal agen-
24	cies in providing payments and services under
25	this part.

1	Each agreement under this section shall provide the
2	terms and conditions upon which the agreement may
3	be amended, suspended, or terminated.
4	(2) FORM AND MANNER OF DATA.—Each
5	agreement under this section shall—
6	(A) provide the Secretary with the author-
7	ity to collect any data the Secretary determines
8	necessary to meet the requirements of this part
9	and
10	(B) specify the form and manner in which
11	any such data requested by the Secretary shall
12	be reported.
13	(3) Relationship to unemployment insur-
14	ANCE.—Each agreement under this section shall
15	provide that an adversely affected worker receiving
16	a climate change adjustment allowance under this
17	part shall not be eligible for unemployment insur-
18	ance otherwise payable to such worker under the
19	laws of the State.
20	(4) Review.—A determination by a cooper-
21	ating State agency with respect to entitlement to
22	program benefits under an agreement is subject to
23	review in the same manner and to the same extent
24	as determinations under the applicable State law
25	and only in that manner and to that extent

1	(5) Coordination.—Any agreement entered
2	into under this section shall provide for the coordi-
3	nation of the administration of the provisions for
4	employment services, training, and supplemental as-
5	sistance under section 312 and under title I of the
6	Workforce Investment Act of 1998 (29 U.S.C. 2801
7	et seq.) upon such terms and conditions as are es-
8	tablished by the Secretary in consultation with the
9	States and set forth in such agreement. Any agency
10	of the State jointly administering such provisions
11	under such agreement shall be considered to be a co-
12	operating State agency for purposes of this part.
13	(6) Responsibilities of cooperating agen-
14	CIES.—Each cooperating State agency shall, in car-
15	rying out paragraph (1)(B)—
16	(A) advise each worker who applies for un-
17	employment insurance of the benefits under this
18	part and the procedures and deadlines for ap-
19	plying for such benefits;
20	(B) facilitate the early filing of petitions
21	under section 311(a) for any workers that the
22	agency considers are likely to be eligible for
23	benefits under this part;
24	(C) advise each adversely affected worker
25	to apply for training under section 312(b) be-

1	fore, or at the same time, the worker applies for
2	climate change adjustment allowances under
3	section 312(a);
4	(D) perform outreach to, intake of, and
5	orientation for adversely affected workers and
6	adversely affected incumbent workers covered
7	by a certification under section 312(a) with re-
8	spect to assistance and benefits available under
9	this part;
10	(E) make employment services described in
11	section 312(b)(1) available to adversely affected
12	workers and adversely affected incumbent work-
13	ers covered by a certification under section
14	311(d) and, if funds provided to carry out this
15	part are insufficient to make such services
16	available, make arrangements to make such
17	services available through other Federal pro-
18	grams; and
19	(F) provide the benefits and reemployment
20	services under this part in a manner that is
21	necessary for the proper and efficient adminis-
22	tration of this part, including the use of state
23	agency personnel employed in accordance with a
24	merit system of personnel administration stand-
25	ards, including—

1	(i) making determinations of eligibility
2	for, and payment of, climate change read-
3	justment allowances and health care ben-
4	efit replacement amounts;
5	(ii) developing recommendations re-
6	garding payments as a bridge to retire-
7	ment and lump sum payments to pension
8	plans in accordance with this subsection;
9	and
10	(iii) the provision of reemployment
11	services to eligible workers, including refer-
12	ral to training services.
13	(7) Submission of Certain Information.—
14	In order to promote the coordination of workforce
15	investment activities in each State with activities
16	carried out under this part, any agreement entered
17	into under this section shall provide that the State
18	shall submit to the Secretary, in such form as the
19	Secretary may require, the description and informa-
20	tion described in paragraphs (8) and (14) of section
21	112(b) of the Workforce Investment Act of 1998 (29
22	U.S.C. 2822(b)) and a description of the State's
23	rapid response activities under section $134(a)(2)(A)$
24	of that Act (29 U.S.C. 2864(a)(2)(A)).
25	(8) Control measures.—

1	(A) IN GENERAL.—The Secretary shall re-
2	quire each cooperating State and cooperating
3	State agency to implement effective control
4	measures and to effectively oversee the oper-
5	ation and administration of the climate change
6	adjustment assistance program under this part,
7	including by means of monitoring the operation
8	of control measures to improve the accuracy
9	and timeliness of the data being collected and
10	reported.
11	(B) Definition.—For purposes of sub-
12	paragraph (A), the term "control measures"
13	means measures that—
14	(i) are internal to a system used by a
15	State to collect data; and
16	(ii) are designed to ensure the accu-
17	racy and verifiability of such data.
18	(9) Data reporting.—
19	(A) IN GENERAL.—Any agreement entered
20	into under this section shall require the cooper-
21	ating State or cooperating State agency to re-
22	port to the Secretary on a quarterly basis com-
23	prehensive performance accountability data, to
24	consist of—

1	(i) the core indicators of performance
2	described in subparagraph (B)(i);
3	(ii) the additional indicators of per-
4	formance described in subparagraph
5	(B)(ii), if any; and
6	(iii) a description of efforts made to
7	improve outcomes for workers under the
8	climate change adjustment assistance pro-
9	gram.
10	(B) Core indicators described.—
11	(i) In general.—The core indicators
12	of performance described in this subpara-
13	graph are—
14	(I) the percentage of workers re-
15	ceiving benefits under this part who
16	are employed during the second cal-
17	endar quarter following the calendar
18	quarter in which the workers cease re-
19	ceiving such benefits;
20	(II) the percentage of such work-
21	ers who are employed in each of the
22	third and fourth calendar quarters fol-
23	lowing the calendar quarter in which
24	the workers cease receiving such bene-
25	fits; and

1	(III) the earnings of such work-
2	ers in each of the third and fourth
3	calendar quarters following the cal-
4	endar quarter in which the workers
5	cease receiving such benefits.
6	(ii) Additional indicators.—The
7	Secretary and a cooperating State or co-
8	operating State agency may agree upon
9	additional indicators of performance for
10	the climate change adjustment assistance
11	program under this part, as appropriate.
12	(C) STANDARDS WITH RESPECT TO RELI-
13	ABILITY OF DATA.—In preparing the quarterly
14	report required by subparagraph (A), each co-
15	operating State or cooperating State agency
16	shall establish procedures that are consistent
17	with guidelines to be issued by the Secretary to
18	ensure that the data reported are valid and reli-
19	able.
20	(10) Verification of eligibility for pro-
21	GRAM BENEFITS.—
22	(A) IN GENERAL.—An agreement under
23	this section shall provide that the State shall
24	periodically redetermine that a worker receiving
25	benefits under this part who is not a citizen or

1 national of the United States remains in a sat-2 isfactory immigration status. Once satisfactory 3 immigration status has been initially verified 4 through the immigration status verification sys-5 tem described in section 1137(d) of the Social 6 Security Act (42 U.S.C. 1320b-7(d)) for pur-7 poses of establishing a worker's eligibility for 8 unemployment compensation, the State shall 9 reverify the worker's immigration status if the 10 documentation provided during initial 11 verification will expire during the period in 12 which that worker is potentially eligible to re-13 ceive benefits under this part. The State shall 14 conduct such redetermination in a timely man-15 ner, utilizing the immigration status verification 16 system described in section 1137(d) of the So-17 cial Security Act (42 U.S.C. 1320b-7(d)). 18 (B) PROCEDURES.—The Secretary shall 19 establish procedures to ensure the uniform ap-20 plication by the States of the requirements of 21 this paragraph. 22 (b) ADMINISTRATION ABSENT STATE AGREE-23 MENT.— 24 (1) In any State where there is no agreement 25 in force between a State or its agency under sub-

- section (a), the Secretary shall promulgate regulations for the performance of all necessary functions under section 312, including provision for a fair hearing for any worker whose application for payments is denied.
- 6 (2) A final determination under paragraph (1)
 7 with respect to entitlement to program benefits
 8 under section 312 is subject to review by the courts
 9 in the same manner and to the same extent as is
 10 provided by section 205(g) of the Social Security Act
 11 (42 U.S.C. 405(g)).
- 12 (c) Prohibition on Contracting With Private 13 Entities.—Neither the Secretary nor a State may con-14 tract with any private for-profit or nonprofit entity for the 15 administration of the climate change adjustment assist-16 ance program under this part.

17 (d) Payment to the States.—

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- (1) IN GENERAL.—The Secretary shall from time to time certify to the Secretary of the Treasury for payment to each cooperating State the sums necessary to enable such State as agent of the United States to make payments provided for by this part.
- (2) Restriction.—All money paid a State under this subsection shall be used solely for the purposes for which it is paid; and money so paid

- which is not used for such purposes shall be returned, at the time specified in the agreement under this section, to the Secretary of the Treasury.
 - (3) Bonds.—Any agreement under this section may require any officer or employee of the State certifying payments or disbursing funds under the agreement or otherwise participating in the performance of the agreement, to give a surety bond to the United States in such amount as the Secretary may deem necessary, and may provide for the payment of the cost of such bond from funds for carrying out the purposes of this part.

(e) Labor Standards.—

- (1) Prohibition on displacement.—An individual in an apprenticeship program or on-the-job training program under this part shall not displace (including a partial displacement, such as a reduction in the hours of non-overtime work, wages, or employment benefits) any employed employee.
- (2) Prohibition on impairment of contracts.—An apprenticeship program or on-the-job raining program under this Act shall not impair an existing contract for services or collective bargaining agreement, and no such activity that would be inconsistent with the terms of a collective bargaining

1	agreement shall be undertaken without the written
2	concurrence of the labor organization and employer
3	concerned.
4	(3) Additional standards.—The Secretary,
5	or a State acting under an agreement described in
6	subsection (a) may pay the costs of on-the-job train-
7	ing, notwithstanding any other provision of this sec-
8	tion, only if—
9	(A) in the case of training which would be
10	inconsistent with the terms of a collective bar-
11	gaining agreement, the written concurrence of
12	the labor organization concerned has been ob-
13	tained;
14	(B) the job for which such adversely af-
15	fected worker is being trained is not being cre-
16	ated in a promotional line that will infringe in
17	any way upon the promotional opportunities of
18	currently employed individuals;
19	(C) such training is not for the same occu-
20	pation from which the worker was separated
21	and with respect to which such worker's group
22	was certified pursuant to section 311(d);
23	(D) the employer is provided reimburse-
24	ment of not more than 50 percent of the wage
25	rate of the participant, for the cost of providing

1	the training and additional supervision related
2	to the training; and
3	(E) the employer has not received payment
4	under with respect to any other on-the-job
5	training provided by such employer which failed
6	to meet the requirements of subparagraphs (A)
7	through (D).
8	(f) Definitions.—As used in this part the following
9	definitions apply:
10	(1) The term "adversely affected employment"
11	means employment at an employment site, if work-
12	ers at such site are eligible to apply for adjustment
13	assistance under this part.
14	(2) The term "adversely affected worker"
15	means an individual who has been totally or partially
16	separated from employment and is eligible to apply
17	for adjustment assistance under this part.
18	(3) The term "average weekly wage" means $\frac{1}{13}$
19	of the total wages paid to an individual in the quar-
20	ter in which the individual's total wages were highest
21	among the first 4 of the last 5 completed calendar
22	quarters immediately before the quarter in which oc-
23	curs the week with respect to which the computation
24	is made. Such week shall be the week in which total
25	separation occurred, or, in cases where partial sepa-

1	ration is claimed, an appropriate week, as defined in
2	regulations prescribed by the Secretary.
3	(4) The term "average weekly hours" means
4	the average hours worked by the individual (exclud-
5	ing overtime) in the employment from which he has
6	been or claims to have been separated in the 52
7	weeks (excluding weeks during which the individual
8	was sick or on vacation) preceding the week speci-
9	fied in the last sentence of paragraph (4).
10	(5) The term "benefit period" means, with re-
11	spect to an individual—
12	(A) the benefit year and any ensuing pe-
13	riod, as determined under applicable State law,
14	during which the individual is eligible for reg-
15	ular compensation, additional compensation, or
16	extended compensation; or
17	(B) the equivalent to such a benefit year
18	or ensuing period provided for under the appli-
19	cable Federal unemployment insurance law.
20	(6) The term "consumer goods manufacturing"
21	means the electrical equipment, appliance, and com-
22	ponent manufacturing industry and transportation
23	equipment manufacturing.
24	(7) The term "employment site" means a single
25	facility or site of employment.

1	(8) The term "energy-intensive manufacturing
2	industries" means all industrial sectors, entities, or
3	groups of entities that meet the energy or green-
4	house gas intensity criteria in section
5	765(b)(2)(A)(i) of the Clean Air Act based on the
6	most recent data available.
7	(9) The term "energy producing and trans-
8	forming industries" means the coal mining industry,
9	oil and gas extraction, electricity power generation,
10	transmission and distribution, and natural gas dis-
11	tribution.
12	(10) The term "on-the-job training" means
13	training provided by an employer to an individual
14	who is employed by the employer.
15	(11) The terms "partial separation" and "par-
16	tially separated" refer, with respect to an individual
17	who has not been totally separated, that such indi-
18	vidual has had—
19	(A) his or her hours of work reduced to 80
20	percent or less of his average weekly hours in
21	adversely affected employment; and
22	(B) his or her wages reduced to 80 percent
23	or less of his average weekly wage in such ad-
24	versely affected employment.

1	(12) The term "public agency" means a depart-
2	ment or agency of a State or political subdivision of
3	a State or of the Federal Government.
4	(13) The term "Secretary" means the Secretary
5	of Labor.
6	(14) The term "service workers" means work-
7	ers supplying support or auxiliary services to an em-
8	ployment site.
9	(15) The term "State" includes the District of
10	Columbia and the Commonwealth of Puerto Rico:
11	and the term "United States" when used in the geo-
12	graphical sense includes such Commonwealth.
13	(16) The term "State agency" means the agen-
14	cy of the State which administers the State law.
15	(17) The term "State law" means the unem-
16	ployment insurance law of the State approved by the
17	Secretary of Labor under section 3304 of the Inter-
18	nal Revenue Code of 1986.
19	(18) The terms "total separation" and "totally
20	separated" refer to the layoff or severance of an in-
21	dividual from employment with an employer in which
22	adversely affected employment exists.
23	(19) The term "unemployment insurance"
24	means the unemployment compensation payable to
25	an individual under any State law or Federal unem-

1 ployment compensation law, including chapter 85 of 2 title 5, United States Code, and the Railroad Unem-3 ployment Insurance Act (45 U.S.C. 351 et seq.). The terms "regular compensation", "additional com-4 pensation", and "extended compensation" have the 5 6 same respective meanings that are given them in 7 section 205(2), (3), and (4) of the Federal-State Ex-8 tended Unemployment Compensation Act of 1970 9 (26 U.S.C. 3304 note; Public Law 91–373). (20) The term "week" means a week as defined 10 11 in the applicable State law. 12 (21) The term "week of unemployment" means 13 a week of total, part-total, or partial unemployment 14 as determined under the applicable State law or 15 Federal unemployment insurance law. 16 (g) Special Rule With Respect to Military 17 SERVICE.— 18 (1) IN GENERAL.—Notwithstanding any other 19 provision of this part, the Secretary may waive any 20 requirement of this part that the Secretary deter-21 mines is necessary to ensure that an adversely af-22 fected worker who is a member of a reserve compo-23 nent of the Armed Forces and serves a period of 24 duty described in paragraph (2) is eligible to receive

a climate change adjustment allowance, training,

1	and other benefits under this part in the same man-
2	ner and to the same extent as if the worker had not
3	served the period of duty.
4	(2) Period of Duty Described.—An ad-
5	versely affected worker serves a period of duty de-
6	scribed in this paragraph if, before completing train-
7	ing under this part, the worker—
8	(A) serves on active duty for a period of
9	more than 30 days under a call or order to ac-
10	tive duty of more than 30 days; or
11	(B) in the case of a member of the Army
12	National Guard of the United States or Air Na-
13	tional Guard of the United States, performs
14	full-time National Guard duty under section
15	502(f) of title 32, United States Code, for 30
16	consecutive days or more when authorized by
17	the President or the Secretary of Defense for
18	the purpose of responding to a national emer-
19	gency declared by the President and supported
20	by Federal funds.
21	(h) Fraud and Recovery of Overpayments.—
22	(1) Recovery of payments to which an in-
23	DIVIDUAL WAS NOT ENTITLED.—If the Secretary or
24	a court of competent jurisdiction determines that
25	any person has received any payment under this

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United States.

1	part to which the individual was not entitled, such
2	individual shall be liable to repay such amount to
3	the Secretary, as the case may be, except that the
4	Secretary shall waive such repayment if such agency
5	or the Secretary determines that—
6	(A) the payment was made without fault
7	on the part of such individual; and
8	(B) requiring such repayment would cause
9	a financial hardship for the individual (or the
10	individual's household, if applicable) when tak-
11	ing into consideration the income and resources
12	reasonably available to the individual (or house-
13	hold) and other ordinary living expenses of the
14	individual (or household).
15	(2) Means of recovery.—Unless an overpay-
16	ment is otherwise recovered, or waived under para-
17	graph (1), the Secretary shall recover the overpay-
18	ment by deductions from any sums payable to such
19	person under this part, under any Federal unem-
20	ployment compensation law or other Federal law ad-
21	ministered by the Secretary which provides for the
22	payment of assistance or an allowance with respect
23	to unemployment. Any amount recovered under this

section shall be returned to the Treasury of the

1	(3) Penalties for fraud.—Any person
2	who—
3	(A) makes a false statement of a material
4	fact knowing it to be false, or knowingly fails
5	to disclose a material fact, for the purpose of
6	obtaining or increasing for that person or for
7	any other person any payment authorized to be
8	furnished under this part; or
9	(B) makes a false statement of a material
10	fact knowing it to be false, or knowingly fails
11	to disclose a material fact, when providing in-
12	formation to the Secretary during an investiga-
13	tion of a petition under section 311(c);
14	shall be imprisoned for not more than one year, or fined
15	under title 18, United States Code, or both, and be ineli-
16	gible for any further payments under this part.
17	(i) REGULATIONS.—The Secretary shall prescribe
18	such regulations as may be necessary to carry out the pro-
19	visions of this part.
20	(j) Study on Older Workers.—The Secretary
21	shall conduct a study examine the circumstances of older
22	adversely affected workers and the ability of such workers
23	to access their retirement benefits. The Secretary shall
24	transmit a report to Congress not later than 2 years after
25	the date of enactment of this Act on the findings of the

1	study and the Secretary's recommendations on how to en-
2	sure that adversely affected workers within 2 years of re-
3	tirement are able to access their retirement benefits.
4	Subtitle B—Consumer Assistance
5	SEC. 321. STRATEGIC INTERAGENCY BOARD ON INTER-
6	NATIONAL CLIMATE INVESTMENT.
7	(a) Establishment.—
8	(1) In general.—Not later than 90 days after
9	the date of the enactment of this Act, the President
10	shall establish the "Strategic Interagency Board on
11	International Climate Investment" (referred to in
12	this subtitle as the "Board").
13	(2) Composition.—The Board shall be com-
14	posed of—
15	(A) the Secretary of State;
16	(B) the Administrator of United States
17	Agency for International Development;
18	(C) the Secretary of Energy;
19	(D) the Secretary of the Treasury;
20	(E) the Secretary of Commerce;
21	(F) the Administrator; and
22	(G) such other relevant officials [as the
23	President may designate.
24	(b) Duties.—The duties of the Board shall include
25	assessing, monitoring, and evaluating the progress and

1	contributions of relevant departments and agencies of the
2	Federal Government in supporting financing for inter-
3	national climate change activities.
4	SEC. 322. EMISSION REDUCTIONS FROM REDUCED DEFOR
5	ESTATION.
6	[Title VII of the Clean Air Act is amended by insert-
7	ing after Part D the following:
8	"PART V—SUPPLEMENTAL EMISSION
9	REDUCTIONS
10	"SEC. 751. DEFINITIONS.
11	"In this part:
12	"(1) Administrator.—The term 'Adminis-
13	trator' means the Administrator of the United
14	States Agency for International Development.
15	"(2) Deforestation.—The term 'deforest
16	ation' means a change in land use from a forest to
17	any other land use.
18	"(3) Degradation.—The term 'degradation'
19	with respect to a forest, is any reduction in the car-
20	bon stock of a forest due to the impact of human
21	land-use activities.
22	"(4) Emission reductions.—The term 'emis-
23	sion reductions' means greenhouse gas emission re-
24	ductions achieved from reduced or avoided deforest-
25	ation under this title.

1	"(5) Leakage Prevention activities.—The
2	term 'leakage prevention activities' means activities
3	in developing countries that are directed at pre-
4	serving existing forest carbon stocks, including for-
5	ested wetlands and peatlands, that might, absent
6	such activities, be lost through leakage.

7 "SEC. 752. PURPOSES.

8 "The purposes of this part are to provide United 9 States assistance to developing countries—

"(1) to develop, implement and improve nationally appropriate greenhouse gas mitigation policies and actions that reduce deforestation and forest degradation or conserve or restore forest ecosystems, in a measurable, reportable, and verifiable manner; and

"(2) in a manner that is consistent with and enhances the implementation of complementary United States policies that support the good governance of forests, biodiversity conservation, and environmentally sustainable development, while taking local communities, most vulnerable populations and communities, particularly forest-dependent communities and indigenous peoples into consideration.

1	"SEC. 753. EMISSION REDUCTIONS THROUGH REDUCED DE-
2	FORESTATION.
3	"(a) In General.—Not later than 2 years after the
4	date of the enactment of this part, the Administrator, in
5	consultation with the Administrator of the Environmental
6	Protection Agency, the Secretary of Agriculture, and the
7	head of any other appropriate agency, shall establish a
8	program to provide assistance to reduce greenhouse gas
9	emissions from deforestation in developing countries, in
10	accordance with this title.
11	"(b) Objectives.—The objectives of the program es-
12	tablished under this section shall be—
13	"(1) to reduce greenhouse gas emissions from
14	deforestation in developing countries by at least 720
15	million tons of carbon dioxide equivalent in 2020,
16	and a cumulative quantity of at least 6 billion tons
17	of carbon dioxide equivalent by December 31, 2025,
18	with additional reductions in subsequent years;
19	"(2) to assist developing countries in preparing
20	to participate in international markets for inter-
21	national offset credits for reduced emissions from
22	deforestation; and
23	"(3) to preserve existing forest carbon stocks in
24	countries where such forest carbon may be vulner-
25	able to international leakage.".

1	SEC. 323. ASSISTANCE FOR CLEAN TECHNOLOGY ACTIVI-
2	TIES.
3	(a) Purposes.—The purposes of this section are—
4	(1) to assist developing countries in activities
5	that reduce, sequester, or avoid greenhouse gas
6	emissions;
7	(2) to encourage those countries to shift toward
8	low-carbon development, and promote a successful
9	global agreement under the United Nations Frame-
10	work Convention on Climate Change, done at New
11	York on May 9, 1992 (or a successor agreement)
12	(referred to in this subtitle as the "Convention");
13	and
14	(3) to promote robust compliance with and en-
15	forcement of existing international legal require-
16	ments for the protection of intellectual property
17	rights.
18	(b) Establishment of International Clean En-
19	ERGY TECHNOLOGY PROGRAM.—
20	(1) Establishment.—The Secretary of State,
21	in consultation with an interagency group designated
22	by the President, shall establish an International
23	Clean Energy Technology Program in accordance
24	with this section.
25	(2) Distribution of Assistance.—The Sec-
26	retary of State or the head of such other Federal

1	agency as the President may designate, shall direct
2	the distribution of funding to carry out the Clean
3	Energy Technology Program—
4	(A) in the form of bilateral assistance pur-
5	suant to the requirements under [section 495]
6	(B) to multilateral funds or international
7	institutions pursuant to the Convention or an
8	agreement negotiated under the Convention; or
9	(C) through a combination of the mecha-
10	nisms identified under subparagraphs (A) and
11	(B).
12	(c) Determination of Qualifying Activities.—
13	Assistance under this [section?] may be provided only to
14	qualifying entities for clean technology activities (includ-
15	ing building relevant technical and institutional capacity)
16	that contribute to substantial, measurable, reportable, and
17	verifiable reductions, sequestration, or avoidance of green-
18	house gas emissions.
19	SEC. 324. INTERNATIONAL CLIMATE CHANGE ADAPTATION
20	PROGRAM.
21	(a) Purposes.—The purposes of this section are—
22	(1) to provide assistance to the most vulnerable
23	developing countries; and
24	(2) to support the development and implemen-
25	tation of climate change adaptation programs in a

1	way that protects and promotes interests of the
2	United States, to the extent those interests may be
3	advanced by minimizing, averting, or increasing re
4	silience to climate change impacts.
5	(b) International Climate Change Adaptation
6	Program.—
7	(1) Establishment.—The Secretary of State
8	in consultation with the Administrator of the United
9	States Agency for International Development, the
10	Secretary of the Treasury, and the Administrator
11	shall establish an International Climate Change Ad
12	aptation Program in accordance with this section.
13	(2) DISTRIBUTION OF ASSISTANCE.—The Sec
14	retary of State, or the head of such other Federa
15	agency as the President may designate, after con
16	sultation with the Secretary of the Treasury, the Ad
17	ministrator of the United States Agency for Inter-
18	national Development, and the Administrator, shall
19	direct the distribution of funding to carry out the
20	International Climate Change Adaptation Pro
21	gram—
22	(A) in the form of bilateral assistance pur
23	suant to the requirements under [section 495]

1	(B) to multilateral funds or international
2	institutions pursuant to the Convention or an
3	agreement negotiated under the Convention; or
4	(C) through a combination of the mecha-
5	nisms identified under subparagraphs (A) and
6	(B).
7	SEC. 325. EVALUATION AND REPORTS.
8	(a) Monitoring, Evaluation, and Enforce-
9	MENT.—The Board shall establish and implement a sys-
10	tem to monitor and evaluate the effectiveness and effi-
11	ciency of assistance provided under this [Act] [subtitle?]
12	by including evaluation criteria, such as performance indi-
13	cators.
14	(b) Reports and Review.—
15	(1) Annual Report.—Not later than 1 year
16	after the date of enactment of this Act, and annually
17	thereafter, the Board shall submit to the appropriate
18	committees of Congress a report that describes—
19	(A) the steps Federal agencies have taken,
20	and the progress made, toward accomplishing
21	the objectives of this section; and
22	(B) the ramifications of any potentially de-
23	stabilizing impacts climate change may have on
24	the interests of the United States.

1	(2) Reviews.—Not later than 3 years after the
2	date of enactment of this Act, and triennially there-
3	after, the Board, in cooperation with the National
4	Academy of Sciences and other appropriate research
5	and development institutions, shall—
6	(A) review the global needs and opportuni-
7	ties for climate change investment in developing
8	countries; and
9	(B) submit to Congress a report that de-
10	scribes the findings of the review.
11	SEC. 326. REPORT ON CLIMATE ACTIONS OF MAJOR
12	ECONOMIES.
12	De of tombo
13	(a) In General.—Not later than 180 days after the
13	(a) In General.—Not later than 180 days after the
13 14	(a) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, and every 180 days thereafter, the Secretary of State, in cooperation with the
13 14 15 16	(a) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, and every 180 days thereafter, the Secretary of State, in cooperation with the
13 14 15 16 17	(a) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, and every 180 days thereafter, the Secretary of State, in cooperation with the Board, shall prepare an interagency report on climate
13 14 15 16 17	(a) In General.—Not later than 180 days after the date of enactment of this Act, and every 180 days thereafter, the Secretary of State, in cooperation with the Board, shall prepare an interagency report on climate change and energy policy of the 5 countries that, of the countries that are not members of the Organisation for
13 14 15 16 17 18 19	(a) In General.—Not later than 180 days after the date of enactment of this Act, and every 180 days thereafter, the Secretary of State, in cooperation with the Board, shall prepare an interagency report on climate change and energy policy of the 5 countries that, of the countries that are not members of the Organisation for
13 14 15 16 17 18 19	(a) In General.—Not later than 180 days after the date of enactment of this Act, and every 180 days thereafter, the Secretary of State, in cooperation with the Board, shall prepare an interagency report on climate change and energy policy of the 5 countries that, of the countries that are not members of the Organisation for Economic Co-Operation and Development, emit the great-
13 14 15 16 17 18 19 20	(a) In General.—Not later than 180 days after the date of enactment of this Act, and every 180 days thereafter, the Secretary of State, in cooperation with the Board, shall prepare an interagency report on climate change and energy policy of the 5 countries that, of the countries that are not members of the Organisation for Economic Co-Operation and Development, emit the greatest annual quantity of greenhouse gases.
13 14 15 16 17 18 19 20 21	(a) In General.—Not later than 180 days after the date of enactment of this Act, and every 180 days thereafter, the Secretary of State, in cooperation with the Board, shall prepare an interagency report on climate change and energy policy of the 5 countries that, of the countries that are not members of the Organisation for Economic Co-Operation and Development, emit the greatest annual quantity of greenhouse gases. (b) Purposes.—The purposes of the report shall

1	the countries described in subsection (a) are taking
2	to reduce greenhouse gas emissions;
3	(2) to identify the means by which the United
4	States can assist those countries in achieving such
5	a reduction; and
6	(3) to assess the climate change and energy pol-
7	icy commitments and actions of those countries.
8	(c) Submission to Congress.—Not later than 15
9	months after the date of enactment of this Act, the Sec-
10	retary of State shall submit to the appropriate committees
11	of Congress the report prepared under this section.
12	Subtitle C—Adapting to Climate
1213	Subtitle C—Adapting to Climate Change
13	Change
13 14	Change PART 1—DOMESTIC ADAPTATION
131415	Change PART 1—DOMESTIC ADAPTATION Subpart A—National Climate Change Adaptation
13 14 15 16	Change PART 1—DOMESTIC ADAPTATION Subpart A—National Climate Change Adaptation Program
13 14 15 16 17	Change PART 1—DOMESTIC ADAPTATION Subpart A—National Climate Change Adaptation Program SEC. 341. NATIONAL CLIMATE CHANGE ADAPTATION PRO-
13 14 15 16 17 18	Change PART 1—DOMESTIC ADAPTATION Subpart A—National Climate Change Adaptation Program SEC. 341. NATIONAL CLIMATE CHANGE ADAPTATION PRO- GRAM.
13 14 15 16 17 18 19	Change PART 1—DOMESTIC ADAPTATION Subpart A—National Climate Change Adaptation Program SEC. 341. NATIONAL CLIMATE CHANGE ADAPTATION PRO- GRAM. The President shall establish within the United
13 14 15 16 17 18 19 20	Change PART 1—DOMESTIC ADAPTATION Subpart A—National Climate Change Adaptation Program SEC. 341. NATIONAL CLIMATE CHANGE ADAPTATION PRO- GRAM. The President shall establish within the United States Global Change Research Program a National Cli-

1	SEC	949	CTIMATE	SERVICES.
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2	The Secretary of Commerce, acting through the Ad-
3	ministrator of the National Oceanic and Atmospheric Ad-
4	ministration (NOAA), shall establish within NOAA a Na-
5	tional Climate Service to develop climate information,
6	data, forecasts, and warnings at national and regional
7	scales, and to distribute information related to climate im-
8	pacts to State, local, and tribal governments and the pub-
9	lic to facilitate the development and implementation of
10	strategies to reduce society's vulnerability to climate varia-
11	bility and change.
12	Subpart B—Public Health and Climate Change
13	SEC. 351. SENSE OF CONGRESS ON PUBLIC HEALTH AND
14	CLIMATE CHANGE.
14 15	CLIMATE CHANGE. It is the sense of the Congress that the Federal Gov-
15	It is the sense of the Congress that the Federal Gov-
15 16	It is the sense of the Congress that the Federal Government, in cooperation with international, State, tribal,
15 16 17	It is the sense of the Congress that the Federal Government, in cooperation with international, State, tribal, and local governments, Indian tribes, concerned public and
15 16 17 18	It is the sense of the Congress that the Federal Government, in cooperation with international, State, tribal, and local governments, Indian tribes, concerned public and private organizations, and citizens, should use all prac-
15 16 17 18 19	It is the sense of the Congress that the Federal Government, in cooperation with international, State, tribal, and local governments, Indian tribes, concerned public and private organizations, and citizens, should use all practicable means and measures—
15 16 17 18 19 20	It is the sense of the Congress that the Federal Government, in cooperation with international, State, tribal, and local governments, Indian tribes, concerned public and private organizations, and citizens, should use all practicable means and measures— (1) to assist the efforts of public health and
15 16 17 18 19 20 21	It is the sense of the Congress that the Federal Government, in cooperation with international, State, tribal, and local governments, Indian tribes, concerned public and private organizations, and citizens, should use all practicable means and measures— (1) to assist the efforts of public health and health care professionals, first responders, States,
15 16 17 18 19 20 21 22	It is the sense of the Congress that the Federal Government, in cooperation with international, State, tribal, and local governments, Indian tribes, concerned public and private organizations, and citizens, should use all practicable means and measures— (1) to assist the efforts of public health and health care professionals, first responders, States, Indian tribes, municipalities, and local communities

1	(A) that the Nation's health professionals
2	have sufficient information to prepare for and
3	respond to the adverse health impacts of cli-
4	mate change;
5	(B) the utility and value of scientific re-
6	search in advancing understanding of—
7	(i) the health impacts of climate
8	change; and
9	(ii) strategies to prepare for and re-
10	spond to the health impacts of climate
11	change;
12	(C) the identification of communities vul-
13	nerable to the health effects of climate change
14	and the development of strategic response plans
15	to be carried out by health professionals for
16	those communities;
17	(D) the improvement of health status and
18	health equity through efforts to prepare for and
19	respond to climate change; and
20	(E) the inclusion of health policy in the de-
21	velopment of climate change responses;
22	(3) to encourage further research, interdiscipli-
23	nary partnership, and collaboration among stake-
24	holders in order to—

1	(A) understand and monitor the health im-
2	pacts of climate change; and
3	(B) improve public health knowledge and
4	response strategies to climate change;
5	(4) to enhance preparedness activities, and pub-
6	lic health infrastructure, relating to climate change
7	and health;
8	(5) to encourage each and every American to
9	learn about the impacts of climate change on health
10	and
11	(6) to assist the efforts of developing nations to
12	incorporate measures to prepare health systems to
13	respond to the impacts of climate change.
14	SEC. 352. RELATIONSHIP TO OTHER LAWS.
15	Nothing in this subpart in any manner limits the au-
16	thority provided to or responsibility conferred on any Fed-
17	eral department or agency by any provision of any law
18	(including regulations) or authorizes any violation of any
19	provision of any law (including regulations), including any
20	health, energy, environmental, transportation, or any
21	other law or regulation.
22	SEC. 353. NATIONAL STRATEGIC ACTION PLAN.
23	(a) Requirement.—
24	(1) IN GENERAL.—The Secretary of Health and
25	Human Services, within 2 years after the date of the

1	enactment of this Act, on the basis of the best avail-
2	able science, and in consultation pursuant to para-
3	graph (2), shall publish a strategic action plan to as-
4	sist health professionals in preparing for and re-
5	sponding to the impacts of climate change on public
6	health in the United States and other nations, par-
7	ticularly developing nations.
8	(2) Consultation.—In developing or making
9	any revision to the national strategic action plan, the
10	Secretary shall—
11	(A) consult with the Director of the Cen-
12	ters for Disease Control and Prevention, the
13	Administrator of the Environmental Protection
14	Agency, the Director of the National Institutes
15	of Health, the Director of the Indian Health
16	Service, the Secretary of Energy, other appro-
17	priate Federal agencies, Indian tribes, State
18	and local governments, public health organiza-
19	tions, scientists, and other interested stake-
20	holders; and
21	(B) provide opportunity for public input.
22	(b) Contents.—
23	(1) In General.—The Secretary shall assist
24	health professionals in preparing for and responding

1	effectively and efficiently to the health effects of cli-
2	mate change through measures including—
3	(A) developing, improving, integrating, and
4	maintaining domestic and international disease
5	surveillance systems and monitoring capacity to
6	respond to health-related effects of climate
7	change, including on topics addressing—
8	(i) water, food, and vector borne infec-
9	tious diseases and climate change;
10	(ii) pulmonary effects, including re-
11	sponses to aeroallergens;
12	(iii) cardiovascular effects, including
13	impacts of temperature extremes;
14	(iv) air pollution health effects, includ-
15	ing heightened sensitivity to air pollution;
16	(v) hazardous algal blooms;
17	(vi) mental and behavioral health im-
18	pacts of climate change;
19	(vii) the health of refugees, displaced
20	persons, and vulnerable communities;
21	(viii) the implications for communities
22	vulnerable to health effects of climate
23	change, as well as strategies for responding
24	to climate change within these commu-
25	nities; and

1	(ix) local and community-based health
2	interventions for climate-related health im-
3	pacts;
4	(B) creating tools for predicting and moni-
5	toring the public health effects of climate
6	change on the international, national, regional,
7	State, tribal, and local levels, and providing
8	technical support to assist in their implementa-
9	tion;
10	(C) developing public health communica-
11	tions strategies and interventions for extreme
12	weather events and disaster response situations;
13	(D) identifying and prioritizing commu-
14	nities and populations vulnerable to the health
15	effects of climate change, and determining ac-
16	tions and communication strategies that should
17	be taken to inform and protect these commu-
18	nities and populations from the health effects of
19	climate change;
20	(E) developing health communication, pub-
21	lic education, and outreach programs aimed at
22	public health and health care professionals, as
23	well as the general public, to promote prepared-
24	ness and response strategies relating to climate
25	change and public health, including the identi-

1	fication of greenhouse gas reduction behaviors
2	that are health-promoting; and
3	(F) developing academic and regional cen-
4	ters of excellence devoted to—
5	(i) researching relationships between
6	climate change and health;
7	(ii) expanding and training the public
8	health workforce to strengthen the capacity
9	of such workforce to respond to and pre-
10	pare for the health effects of climate
11	change;
12	(iii) creating and supporting academic
13	fellowships focusing on the health effects
14	of climate change; and
15	(iv) training senior health ministry of-
16	ficials from developing nations to strength-
17	en the capacity of such nations to—
18	(I) prepare for and respond to
19	the health effects of climate change;
20	and
21	(II) build an international net-
22	work of public health professionals
23	with the necessary climate change
24	knowledge base;

1	(G) using techniques, including health im-
2	pact assessments, to assess various climate
3	change public health preparedness and response
4	strategies on international, national, State, re-
5	gional, tribal, and local levels, and make rec-
6	ommendations as to those strategies that best
7	protect the public health;
8	(H)(i) assisting in the development, imple-
9	mentation, and support of State, regional, trib-
10	al, and local preparedness, communication, and
11	response plans (including with respect to the
12	health departments of such entities) to antici-
13	pate and reduce the health threats of climate
14	change; and
15	(ii) pursuing collaborative efforts to de-
16	velop, integrate, and implement such plans;
17	(I) creating a program to advance research
18	as it relates to the effects of climate change or
19	public health across Federal agencies, including
20	research to—
21	(i) identify and assess climate change
22	health effects preparedness and response
23	strategies;
24	(ii) prioritize critical public health in-
25	frastructure projects related to potential

1	climate change impacts that affect public
2	health; and
3	(iii) coordinate preparedness for cli-
4	mate change health impacts, including the
5	development of modeling and forecasting
6	tools;
7	(J) providing technical assistance for the
8	development, implementation, and support of
9	preparedness and response plans to anticipate
10	and reduce the health threats of climate change
11	in developing nations; and
12	(K) carrying out other activities deter-
13	mined appropriate by the Secretary to plan for
14	and respond to the impacts of climate change
15	on public health.
16	(c) REVISION.—The Secretary shall revise the na-
17	tional strategic action plan not later than July 1, 2014
18	and every 4 years thereafter, to reflect new information
19	collected pursuant to implementation of the national stra-
20	tegic action plan and otherwise, including information
21	on—
22	(1) the status of critical environmental health
23	parameters and related human health impacts;
24	(2) the impacts of climate change on public
25	health; and

1	(3) advances in the development of strategies
2	for preparing for and responding to the impacts of
3	climate change on public health.
4	(d) Implementation.—
5	(1) Implementation through hhs.—The
6	Secretary shall exercise the Secretary's authority
7	under this subpart and other provisions of Federal
8	law to achieve the goals and measures of the na-
9	tional strategic action plan.
10	(2) Other public health programs and
11	INITIATIVES.—The Secretary and Federal officials of
12	other relevant Federal agencies shall administer
13	public health programs and initiatives authorized by
14	provisions of law other than this subpart, subject to
15	the requirements of such statutes, in a manner de-
16	signed to achieve the goals of the national strategic
17	action plan.
18	(3) Specific activities.—In furtherance of
19	the national strategic action plan, the Secretary
20	shall—
21	(A) conduct scientific research to assist
22	health professionals in preparing for and re-
23	sponding to the impacts of climate change on
24	public health; and
25	(B) provide funding for—

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1	(i) research on the health effects of
2	climate change; and
3	(ii) preparedness planning on the
4	international, national, State, tribal, re-
5	gional, and local levels to respond to or re-
6	duce the burden of health effects of climate
7	change; and
8	(C) carry out other activities determined
9	appropriate by the Secretary to prepare for and
10	respond to the impacts of climate change on
11	public health.
12	SEC. 354. ADVISORY BOARD.
13	(a) Establishment.—The Secretary shall establish
14	a permanent science advisory board comprised of not less
15	than 10 and not more than 20 members.
16	(b) Appointment of Members.—The Secretary
17	shall appoint the members of the science advisory board
18	from among individuals—
19	(1) who have expertise in public health and
20	human services, climate change, and other relevant
21	disciplines; and
22	(2) at least $\frac{1}{2}$ of whom are recommended by
23	the President of the National Academy of Sciences.
24	(c) Functions.—The science advisory board shall—

1	(1) provide scientific and technical advice and
2	recommendations to the Secretary on the domestic
3	and international impacts of climate change on pub-
4	lic health, populations and regions particularly vul-
5	nerable to the effects of climate change, and strate-
6	gies and mechanisms to prepare for and respond to
7	the impacts of climate change on public health; and
8	(2) advise the Secretary regarding the best
9	science available for purposes of issuing the national
10	strategic action plan.
11	SEC. 355. REPORTS.
12	(a) Needs Assessment.—
13	(1) IN GENERAL.—The Secretary shall seek to
14	enter into, by not later than 6 months after the date
15	of the enactment of this Act, an agreement with the
16	National Research Council and the Institute of Med-
17	icine to complete a report that—
18	(A) assesses the needs for health profes-
19	sionals to prepare for and respond to climate
20	change impacts on public health; and
21	(B) recommends programs to meet those
22	needs.
23	(2) Submission.—The agreement under para-
24	graph (1) shall require the completed report to be
25	submitted to the Congress and the Secretary and

1	made publicly available not later than 1 year after
2	the date of the agreement.
3	(b) CLIMATE CHANGE HEALTH PROTECTION AND
4	Promotion Reports.—
5	(1) In general.—The Secretary, in consulta-
6	tion with the advisory board established under sec-
7	tion 354, shall ensure the issuance of reports to aid
8	health professionals in preparing for and responding
9	to the adverse health effects of climate change
10	that—
11	(A) review scientific developments on
12	health impacts of climate change; and
13	(B) recommend changes to the national
14	strategic action plan.
15	(2) Submission.—The Secretary shall submit
16	the reports required by paragraph (1) to the Con-
17	gress and make such reports publicly available not
18	later than July 1, 2013, and every 4 years there-
19	after.
20	SEC. 356. DEFINITIONS.
21	In this subpart:
22	(1) HEALTH IMPACT ASSESSMENT.—The term
23	"health impact assessment" means a combination of
	procedures, methods, and tools by which a policy,
24	procedures, methods, and tools by which a policy,

1	effects on the health of a population, and the dis-
2	tribution of those effects within the population.
3	(2) NATIONAL STRATEGIC ACTION PLAN.—The
4	term "national strategic action plan" means the
5	plan issued and revised under section 353.
6	(3) Secretary.—Unless otherwise specified,
7	the term "Secretary" means the Secretary of Health
8	and Human Services.
9	Subpart C—Climate Change Safeguards for Natural
10	Resources Conservation
11	SEC. 361. PURPOSES.
12	The purposes of this subpart are—
13	(1) to establish an integrated Federal program
14	that responds to ongoing and expected impacts of
15	climate change, including, where applicable, ocean
16	acidification, drought, and wildfire, by protecting,
17	restoring, and conserving the natural resources of
18	the United States; and
19	(2) to provide financial support and incentives
20	for programs, strategies, and activities that respond
21	to threats of climate change, including, where appli-
22	cable, ocean acidification, drought, and wildfire, by
23	protecting, restoring, and conserving the natural re-
24	
24	sources of the United States.

1	SEC. 362. NATURAL RESOURCES CLIMATE CHANGE ADAP-
2	TATION POLICY.
3	It is the policy of the Federal Government, in co-
4	operation with State and local governments, Indian tribes,
5	and other interested stakeholders, to use all practicable
6	means to protect, restore, and conserve natural resources
7	so that natural resources become more resilient, adapt to,
8	and withstand the ongoing and expected impacts of cli-
9	mate change, including, where applicable, ocean acidifica-
10	tion, drought, and wildfire.
11	SEC. 363. DEFINITIONS.
12	In this subpart:
13	(1) ACCOUNT.—The term "Account" means the
14	Natural Resources Climate Change Adaption Ac-
15	count established by section 370(a).
16	(2) Administrators.—The term "Administra-
17	tors" means—
18	(A) the Administrator of the National Oce-
19	anic and Atmospheric Administration; and
20	(B) the Director of the United States Geo-
21	logical Survey.
22	(3) Board.—The term "Board" means the
23	Science Advisory Board established by section
24	367(f)(1).

1	(4) CENTER.—The term "Center" means the
2	National Climate Change and Wildlife Science Cen-
3	ter described by section 367(e)(1).
4	(5) COASTAL STATE.—The term "coastal
5	State" has the meaning given the term "coastal
6	state" in section 304 of the Coastal Zone Manage-
7	ment Act of 1972 (16 U.S.C. 1453).
8	(6) Corridors.—The term "corridors" means
9	areas that—
10	(A) provide connectivity, over different
11	time scales, of habitats or potential habitats;
12	and
13	(B) facilitate terrestrial, marine, estuarine,
14	and freshwater fish, wildlife, or plant movement
15	necessary for migration, gene flow, or dispersal,
16	or to respond to the ongoing and expected im-
17	pacts of climate change, including, where appli-
18	cable, ocean acidification, drought, and wildfire.
19	(7) ECOLOGICAL PROCESSES.—The term "eco-
20	logical processes" means biological, chemical, or
21	physical interaction between the biotic and abiotic
22	components of an ecosystem, including—
23	(A) nutrient cycling;
24	(B) pollination;
25	(C) predator-prey relationships;

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1	(D) soil formation;
2	(E) gene flow;
3	(F) disease epizootiology;
4	(G) larval dispersal and settlement;
5	(H) hydrological cycling;
6	(I) decomposition; and
7	(J) disturbance regimes, such as fire and
8	flooding.
9	(8) Habitat.—The term "habitat" means the
10	physical, chemical, and biological properties that
11	fish, wildlife, or plants use for growth, reproduction
12	survival, food, water, or cover (whether on land, in
13	water, or in an area or region).
14	(9) Indian tribe.—The term "Indian tribe"
15	has the meaning given the term in section 4 of the
16	Indian Self-Determination and Education Assistance
17	Act (25 U.S.C. 450b).
18	(10) Natural resources.—The term "nat-
19	ural resources" means land, wildlife, fish, air, water
20	estuaries, plants, habitats, and ecosystems of the
21	United States.
22	(11) NATURAL RESOURCES ADAPTATION.—The
23	term "natural resources adaptation" means the pro-
24	tection, restoration, and conservation of natural re-
25	sources so that natural resources become more resil-

1	ient, adapt to, and withstand the ongoing and ex-
2	pected impacts of climate change, including, where
3	applicable, ocean acidification, drought, and wildfire.
4	(12) Panel.—The term "Panel" means the
5	Natural Resources Climate Change Adaptation
6	Panel established under section 365(a).
7	(13) Resilience; resilient.—The terms "re-
8	silience" and "resilient" mean—
9	(A) the ability to resist or recover from
10	disturbance; and
11	(B) the ability to preserve diversity, pro-
12	ductivity, and sustainability.
13	(14) State.—The term "State" means—
14	(A) a State of the United States;
15	(B) the District of Columbia;
16	(C) American Samoa;
17	(D) Guam;
18	(E) the Commonwealth of the Northern
19	Mariana Islands;
20	(F) the Commonwealth of Puerto Rico;
21	and
22	(G) the United States Virgin Islands.
23	(15) Strategy.—The term "Strategy" means
24	the Natural Resources Climate Change Adaptation
25	Strategy developed under section 366(a).

1	SEC. 364. COUNCIL ON ENVIRONMENTAL QUALITY.
2	The Chair of the Council on Environmental Quality
3	shall—
4	(1) advise the President on implementing and
5	developing—
6	(A) the Natural Resources Climate Change
7	Adaptation Strategy required by section 366;
8	and
9	(B) the Federal natural resource agency
10	adaptation plans required by section 368;
11	(2) serve as the Chair of the Natural Resources
12	Climate Change Adaptation Panel established under
13	section 365; and
14	(3) coordinate Federal agency strategies, plans,
15	programs, and activities relating to protecting, re-
16	storing, and maintaining natural resources so that
17	natural resources become more resilient, adapt to,
18	and withstand the ongoing and expected impacts of
19	climate change.
20	SEC. 365. NATURAL RESOURCES CLIMATE CHANGE ADAP-
21	TATION PANEL.
22	(a) Establishment.—Not later than 90 days after
23	the date of enactment of this Act, the President shall es-
24	tablish a Natural Resources Climate Change Adaptation
25	Panel.

1	(b) Duties.—The Panel shall serve as a forum for
2	interagency consultation on, and the coordination of, the
3	development and implementation of the Natural Resources
4	Climate Change Adaptation Strategy required by section
5	366.
6	(c) Membership.—The Panel shall be composed
7	of—
8	(1) the Administrator of the National Oceanic
9	and Atmospheric Administration (or a designee);
10	(2) the Chief of the Forest Service (or a des-
11	ignee);
12	(3) the Director of the National Park Service
13	(or a designee);
14	(4) the Director of the United States Fish and
15	Wildlife Service (or a designee);
16	(5) the Director of the Bureau of Land Man-
17	agement (or a designee);
18	(6) the Director of the United States Geological
19	Survey (or a designee);
20	(7) the Commissioner of Reclamation (or a des-
21	ignee); and
22	(8) the Director of the Bureau of Indian Affairs
23	(or a designee);
24	(9) the Administrator of the Environmental
25	Protection Agency (or a designee);

1	(10) the Chief of Engineers (or a designee);
2	(11) the Chair of the Council on Environmental
3	Quality (or a designee); and
4	(12) the heads of such other Federal agencies
5	or departments with jurisdiction over natural re-
6	sources of the United States, as determined by the
7	President.
8	(d) Chairperson.—The Chair of the Council on En-
9	vironmental Quality shall serve as the Chairperson of the
10	Panel.
11	SEC. 366. NATURAL RESOURCES CLIMATE CHANGE ADAP-
12	TATION STRATEGY.
13	(a) In General.—Not later than 1 year after the
14	date of enactment of this Act, the Panel shall develop a
15	Natural Resources Climate Change Adaptation Strategy—
16	(1) to protect, restore, and conserve natural re-
17	sources so that natural resources become more resil-
18	ient, adapt to, and withstand the ongoing and ex-
19	pected impacts of climate change; and
20	(2) to identify opportunities to mitigate the on-
21	going and expected impacts of climate change.
22	(b) DEVELOPMENT.—In developing and revising the
23	Strategy, the Panel shall—
24	(1) base the strategy on the best available
	(1) base the strategy on the best available

I	(2) develop the strategy in close cooperation
2	with States and Indian tribes;
3	(3) coordinate with other Federal agencies, as
4	appropriate;
5	(4) consult with local governments, conservation
6	organizations, scientists, and other interested stake-
7	holders; and
8	(5) provide public notice and opportunity for
9	comment.
10	(c) REVISION.—After the Panel adopts the initial
11	Strategy, the Panel shall review and revise the Strategy
12	every 5 years to incorporate—
13	(1) new information regarding the ongoing and
14	expected impacts of climate change on natural re-
15	sources; and
16	(2) new advances in the development of strate-
17	gies that make natural resources more resilient or
18	able to adapt to the ongoing and expected impacts
19	of climate change.
20	(d) Contents.—The Strategy shall—
21	(1) assess the vulnerability of natural resources
22	to climate change, including short-term, medium-
23	term, long-term, cumulative, and synergistic im-
24	pacts;

1	(2) describe current research, observation, and
2	monitoring activities at the Federal, State, tribal,
3	and local level related to the ongoing and expected
4	impacts of climate change on natural resources;
5	(3) identify and prioritize research and data
6	needs;
7	(4) identify natural resources likely to have the
8	greatest need for protection, restoration, and con-
9	servation due to the ongoing and expanding impacts
10	of climate change;
11	(5) include specific protocols for integrating
12	natural resources adaptation strategies and activities
13	into the conservation and management of natural re-
14	sources by Federal departments and agencies to en-
15	sure consistency across agency jurisdictions;
16	(6) include specific actions that Federal depart-
17	ments and agencies shall take to protect, conserve,
18	and restore natural resources to become more resil-
19	ient, adapt to, and withstand the ongoing and ex-
20	pected impacts of climate change, including a
21	timeline to implement those actions;
22	(7) include specific mechanisms for ensuring
23	communication and coordination—
24	(A) among Federal departments and agen-
25	cies; and

1	(B) between Federal departments and
2	agencies and State natural resource agencies,
3	United States territories, Indian tribes, private
4	landowners, conservation organizations, and
5	other countries that share jurisdiction over nat-
6	ural resources with the United States;
7	(8) include specific actions to develop and im-
8	plement consistent natural resources inventory and
9	monitoring protocols through interagency coordina-
10	tion and collaboration; and
11	(9) include procedures for guiding the develop-
12	ment of detailed agency- and department-specific ad-
13	aptation plans required under section 368.
14	(e) Implementation.—Consistent with other laws
15	and Federal trust responsibilities concerning Indian land,
16	each Federal department or agency represented on the
17	Panel shall integrate the elements of the Strategy that re-
18	late to conservation, restoration, and management of nat-
19	ural resources into agency plans, environmental reviews,
20	programs, and activities.
21	SEC. 367. NATURAL RESOURCES ADAPTATION SCIENCE
22	AND INFORMATION.
23	(a) Coordination.—Not later than 90 days after
24	the date of enactment of this Act, the Administrators shall
25	establish coordinated procedures for developing and pro-

1	viding science and information necessary to address the
2	ongoing and expected impacts of climate change on nat-
3	ural resources.
4	(b) Oversight.—The National Climate Change and
5	Wildlife Science Center established under subsection (e)
6	and the National Climate Service of the National Oceanic
7	and Atmospheric Administration shall oversee develop-
8	ment of the procedures.
9	(c) Functions.—The Administrators shall—
10	(1) ensure that the procedures required under
11	subsection (a) avoid duplication; and
12	(2) ensure that the National Oceanic and At-
13	mospheric Administration and the United States Ge-
14	ological Survey—
15	(A) provide technical assistance to Federa
16	departments and agencies, State and local gov-
17	ernments, Indian tribes, and interested private
18	landowners that are pursuing the goals of ad-
19	dressing the ongoing and expected impacts of
20	climate change on natural resources;
21	(B) conduct and sponsor research to de-
22	velop strategies that increase the ability of nat-
23	ural resources to become more resilient, adapt
24	to, and withstand the ongoing and expected im-
25	pacts of climate change:

1	(C) provide Federal departments and agen-
2	cies, State and local governments, Indian tribes
3	and interested private landowners with research
4	products, decision and monitoring tools, and in-
5	formation to develop strategies that increase
6	the ability of natural resources to become more
7	resilient, adapt to, and withstand the ongoing
8	and expected impacts of climate change; and
9	(D) assist Federal departments and agen-
10	cies in the development of adaptation plans re-
11	quired by section 368.
12	(d) Survey.—Not later than 1 year after the date
13	of enactment of this Act, and every 5 years thereafter
14	the Secretary of Commerce and the Secretary of the Inte-
15	rior shall conduct a climate change impact survey that—
1 (
16	(1) identifies natural resources considered likely
17	(1) identifies natural resources considered likely to be adversely affected by climate change;
	•
17	to be adversely affected by climate change;
17 18	to be adversely affected by climate change; (2) includes baseline monitoring and ongoing
17 18 19 20	to be adversely affected by climate change; (2) includes baseline monitoring and ongoing trend analysis;
17 18 19	to be adversely affected by climate change; (2) includes baseline monitoring and ongoing trend analysis; (3) with input from stakeholders, identifies and
17 18 19 20 21	to be adversely affected by climate change; (2) includes baseline monitoring and ongoing trend analysis; (3) with input from stakeholders, identifies and prioritizes necessary monitoring and research that is

1	(4) identifies the decision tools necessary to de-
2	velop strategies that increase the ability of natural
3	resources to become more resilient, adapt to, and
4	withstand the ongoing and expected impacts of cli-
5	mate change.
6	(e) National Climate Change and Wildlife
7	SCIENCE CENTER.—
8	(1) ESTABLISHMENT.—The Secretary of the In-
9	terior shall establish the National Climate Change
10	and Wildlife Center within the United States Geo-
11	logical Survey.
12	(2) Functions.—In collaboration with Federal
13	and State natural resources agencies and depart-
14	ments, Indian tribes, universities, and other partner
15	organizations, the Center shall—
16	(A) assess and synthesize current physical
17	and biological knowledge;
18	(B) prioritize scientific gaps in such knowl-
19	edge in order to forecast the ecological impacts
20	of climate change, including, where applicable,
21	ocean acidification, drought, and wildfire on
22	fish and wildlife at the ecosystem, habitat, com-
23	munity, population, and species levels;
24	(C) develop and improve tools to identify,
25	evaluate, and link scientific approaches and

1	models that forecast the impacts of climate
2	change, including, where applicable, ocean acidi-
3	fication, drought, and wildfire on fish, wildlife,
4	plants, and associated habitats, including—
5	(i) monitoring;
6	(ii) predictive models;
7	(iii) vulnerability analyses;
8	(iv) risk assessments; and
9	(v) decision support systems that help
10	managers make informed decisions;
11	(D) develop and evaluate tools to adapt-
12	ively manage and monitor the effects of climate
13	change (including tools for the collection of
14	data) on fish and wildlife on the national, re-
15	gional, and local level; and
16	(E) develop capacities for sharing stand-
17	ardized data and the synthesis of the data de-
18	scribed in subparagraph (D).
19	(f) Science Advisory Board.—
20	(1) Establishment.—Not later than 180 days
21	after the date of enactment of this Act, the Sec-
22	retary of Commerce and the Secretary of the Inte-
23	rior shall establish and appoint the members of the
24	Science Advisory Board.

1	(2) MEMBERSHIP.—The Board shall be com-
2	prised of not fewer than 10 and not more than 20
3	members—
4	(A) who have expertise in fish, wildlife,
5	plant, aquatic, and coastal and marine biology,
6	ecology, climate change, including, where appli-
7	cable, ocean acidification, drought, and wildfire,
8	and other relevant scientific disciplines;
9	(B) who represent a balanced membership
10	among Federal, State, tribal, and local rep-
11	resentatives, universities, and conservation or-
12	ganizations; and
13	(C) at least $\frac{1}{2}$ of whom are recommended
14	by the President of the National Academy of
15	Sciences.
16	(3) Duties.—The Board shall—
17	(A) advise the Secretary of Commerce and
18	the Secretary of the Interior on the state of the
19	science regarding—
20	(i) the ongoing and expected impacts
21	of climate change, including, where appli-
22	cable, ocean acidification, drought, and
23	wildfire on natural resources; and
24	(ii) scientific strategies and mecha-
25	nisms for protecting, restoring, and con-

1	serving natural resources so natural re-
2	sources become more resilient, adapt to,
3	and withstand the ongoing and expected
4	impacts of climate change, including,
5	where applicable, ocean acidification,
6	drought, and wildfire; and
7	(B) identify and recommend priorities for
8	ongoing research needs on the issues described
9	in subparagraph (A).
10	(4) Collaboration.—The Board shall collabo-
11	rate with climate change and ecosystem research en-
12	tities in other Federal agencies and departments.
13	(5) AVAILABILITY TO PUBLIC.—The advice and
14	recommendations of the Board shall be made avail-
15	able to the public.
16	SEC. 368. FEDERAL NATURAL RESOURCE AGENCY ADAPTA-
17	TION PLANS.
18	(a) Development.—Not later than 1 year after the
19	date of development of the Strategy, each department or
20	agency with representation on the Panel shall—
21	(1) complete an adaptation plan for that de-
22	partment or agency that—
23	(A) implements the Strategy and is con-
	(11) implements the strategy and is con-

1	change adaptation policy required by section
2	362;
3	(B) details the ongoing and expanding ac-
4	tions of the department or agency, and any
5	changes in decisionmaking processes necessary
6	to increase the ability of resources under the ju-
7	risdiction of the department or agency and, to
8	the maximum extent practicable, resources
9	under the jurisdiction of other departments and
10	agencies that may be significantly affected by
11	decisions of the department or agency, to be-
12	come more resilient, adapt to, and withstand
13	the ongoing and expected impacts of climate
14	change, including, where applicable, ocean acidi-
15	fication, drought, and wildfire; and
16	(C) includes a timeline for implementation;
17	(2) provide opportunities for public review and
18	comment on the adaptation plan, and in the case of
19	a plan by the Bureau of Indian Affairs, review by
20	Indian tribes; and
21	(3) submit the plan to the President for ap-
22	proval.
23	(b) Review by President and Submission to
24	Congress.—

1	(1) Review by president.—The President
2	shall—
3	(A) approve an adaptation plan submitted
4	under subsection (a)(3) if the plan meets the
5	requirements of subsection (c) and is consistent
6	with the Strategy; and
7	(B) decide whether to approve the plan
8	within 60 days of submission.
9	(2) DISAPPROVAL.—If the President dis-
10	approves an adaptation plan, the President shall di-
11	rect the department or agency to submit a revised
12	plan within 60 days of that disapproval.
13	(3) Submission to congress.—Not later than
14	30 days after the date of approval of an adaptation
15	plan by the President, the department or agency
16	shall submit the plan to—
17	(A) the Committee on Natural Resources
18	of the House of Representatives;
19	(B) the Committee on Energy and Natural
20	Resources of the Senate;
21	(C) the Committee on Environment and
22	Public Works of the Senate; and
23	(D) any other committees of the House of
24	Representatives or the Senate with principal ju-
25	risdiction over the department or agency.

1	(c) Requirements.—Each adaptation plan shall—
2	(1) establish programs for assessing the ongo-
3	ing and expected impacts of climate change, includ-
4	ing, where applicable, ocean acidification, drought
5	and wildfire on natural resources under the jurisdic-
6	tion of the department or agency preparing the plan
7	including—
8	(A) assessment of cumulative and syner-
9	gistic effects; and
10	(B) programs that identify and monitor
11	natural resources likely to be adversely affected
12	and that have need for conservation;
13	(2) identify and prioritize—
14	(A) the strategies of the department or
15	agency preparing the plan;
16	(B) the specific conservation actions that
17	address the ongoing and expected impacts of
18	climate change, including, where applicable
19	ocean acidification, drought, and wildfire or
20	natural resources under jurisdiction of the de-
21	partment or agency preparing the plan;
22	(C) strategies to protect, restore, and con-
23	serve such resources to become more resilient
24	adapt to, and better withstand those impacts
25	including—

1	(i) protection, restoration, and con-
2	servation of terrestrial, marine, estuarine,
3	and freshwater habitats and ecosystems;
4	(ii) establishment of terrestrial, ma-
5	rine, estuarine, and freshwater habitat
6	linkages and corridors;
7	(iii) restoration and conservation of
8	ecological processes;
9	(iv) protection of a broad diversity of
10	native species of fish, wildlife, and plant
11	populations across the ranges of those spe-
12	cies; and
13	(v) protection of fish, wildlife, and
14	plant health, recognizing that climate can
15	alter the distribution and ecology of
16	parasites, pathogens, and vectors;
17	(3) describe how the department or agency
18	will—
19	(A) integrate the strategies and conserva-
20	tion activities into plans, programs, activities,
21	and actions of the department or agency relat-
22	ing to the conservation and management of nat-
23	ural resources; and
24	(B) establish new plans, programs, activi-
25	ties, and actions, if necessary;

1	(4) establish methods—
2	(A) to assess the effectiveness of strategies
3	and conservation actions the department or
4	agency takes to protect, restore, and conserve
5	natural resources so natural resources become
6	more resilient, adapt to, and withstand the on-
7	going and expected impacts of climate change;
8	and
9	(B) to update those strategies and actions
10	to respond to new information and changing
11	conditions;
12	(5) describe current and proposed mechanisms
13	to enhance cooperation and coordination of natural
14	resources adaptation efforts with other Federal
15	agencies, State and local governments, Indian tribes,
16	and nongovernmental stakeholders;
17	(6) include written guidance to resource man-
18	agers that—
19	(A) explains how managers are expected to
20	address the ongoing and expected effects of cli-
21	mate change, including, where applicable, ocean
22	acidification, drought, and wildfire;
23	(B) identifies how managers shall obtain
24	any necessary site-specific information; and

1	(C) reflects best practices shared among
2	relevant agencies, but recognizes the unique
3	missions, objectives, and responsibilities of each
4	agency;
5	(7) identify and assess data and information
6	gaps necessary to develop natural resources adapta-
7	tion plans and strategies; and
8	(8) consider strategies that engage youth and
9	young adults (including youth and young adults
10	working in full-time or part-time youth service or
11	conservation corps programs) to provide the youth
12	and young adults with opportunities for meaningful
13	conservation and community service and to encour-
14	age opportunities for employment in the private sec-
15	tor through partnerships with employers.
16	(d) Implementation.—
17	(1) In general.—Upon approval by the Presi-
18	dent, each department or agency with representation
19	on the Panel shall, consistent with existing author-
20	ity, implement the adaptation plan of the depart-
21	ment or agency through existing and new plans,
22	policies, programs, activities, and actions.
23	(2) Consideration of impacts.—
24	(A) In general.—To the maximum ex-
25	tent practicable and consistent with existing au-

1	thority, natural resource management decisions
2	made by the department or agency shall—
3	(i) consider the ongoing and expected
4	impacts of climate change, including,
5	where applicable, ocean acidification,
6	drought, and wildfire on natural resources;
7	and
8	(ii) choose alternatives that will avoid
9	and minimize those impacts and promote
10	resilience.
11	(B) Guidance.—The Council on Environ-
12	mental Quality shall provide guidance for Fed-
13	eral departments and agencies considering those
14	impacts and choosing alternatives that will
15	avoid and minimize those impacts and promote
16	resilience.
17	(e) REVISION AND REVIEW.—Not less than every 5
18	years, each department or agency shall review and revise
19	the adaptation plan of the department or agency to incor-
20	porate the best available science, and other information,
21	regarding the ongoing and expected impacts of climate
22	change on natural resources.

1	SEC. 369	o. STATE	NATURAL	RESOURCES	ADAPTATION
2		PLAN	S.		
3	(a) I	Requirem	ient.—In o	order to be elig	gible for funds
4	under see	etion 370,	not later th	nan 1 year afte	er the develop-
5	ment of t	the Strates	gy, each Sta	te shall prepai	re a State nat-
6	ural resc	ources ada	ptation pla	n detailing cu	errent and fu-
7	ture effo	rts of the	State to a	ddress the on	going and ex-
8	pected in	npacts of e	elimate char	nge on natural	resources and
9	coastal a	reas within	n the jurisd	action of the St	cate.
10	(b) 2	REVIEW O	R Approva	L.—	
11		(1) In G	ENERAL.—	The Secretary	of the Inte-
12	rior	and, as a	applicable,	the Secretary	of Commerce
13	shal	l review ea	ach State a	daptation plan	, and approve
14	the	plan if the	e plan—		
15		(A)	meets the	requirements	of subsection
16		(c); and			
17		(B)	is consisten	t with the Str	ategy.
18		(2) APP	ROVAL OR	DISAPPROVA	L.—The Sec-
19	reta	ry of the	Interior a	nd, as applica	able, the Sec-
20	reta	ry of Com	nmerce shal	l approve or d	lisapprove the
21	plan	by writte	en notice no	ot later than 1	80 days after
22	the	date of s	submission	of the plan	(or a revised
23	plan	n).			
24		(3) Resi	UBMISSION.	—Not later t	than 90 days
25	afte	r the date	of resubmi	ssion of an ac	laptation plan
26	that	has been	disapprove	d under paras	eraph (2) the

1	Secretary of the Interior and, as applicable, the Sec-
2	retary of Commerce, shall approve or disapprove the
3	plan by written notice.
4	(c) Contents.—A State natural resources adapta-
5	tion plan shall—
6	(1) include strategies for addressing the ongo-
7	ing and expected impacts of climate change, includ-
8	ing, where applicable, ocean acidification, drought,
9	and wildfire on terrestrial, marine, estuarine, and
10	freshwater fish, wildlife, plants, habitats, ecosystems,
11	wildlife health, and ecological processes that—
12	(A) describe the ongoing and expected im-
13	pacts of climate change, including, where appli-
14	cable, ocean acidification, drought, and wildfire
15	on the diversity and health of fish, wildlife and
16	plant populations, habitats, ecosystems, and as-
17	sociated ecological processes;
18	(B) establish programs for monitoring the
19	ongoing and expected impacts of climate
20	change, including, where applicable, ocean acidi-
21	fication, drought, and wildfire on fish, wildlife,
22	and plant populations, habitats, ecosystems,
23	and associated ecological processes;
24	(C) describe and prioritize proposed con-
25	servation actions that increase the ability of

1	fish, wildlife, plant populations, habitats, eco-
2	systems, and associated ecological processes to
3	become more resilient, adapt to, and better
4	withstand those impacts;
5	(D) consider strategies that engage youth
6	and young adults (including youth and young
7	adults working in full-time or part-time youth
8	service or conservation corps programs) to pro-
9	vide the youth and young adults with opportu-
10	nities for meaningful conservation and commu-
11	nity service and to encourage opportunities for
12	employment in the private sector through part-
13	nerships with employers;
14	(E) integrate protection and restoration of
15	resource resilience into agency decision making
16	and specific conservation actions;
17	(F) include a time frame for implementing
18	conservation actions for fish, wildlife, and plant
19	populations, habitats, ecosystems, and associ-
20	ated ecological processes;
21	(G) establish methods—
22	(i) for assessing the effectiveness of
23	strategies and conservation actions taken
24	to increase the ability of fish, wildlife, and
25	plant populations, habitats, ecosystems,

1	and associated ecological processes to be-
2	come more resilient, adapt to, and better
3	withstand the ongoing and expected im-
4	pacts of climate changes, including, where
5	applicable, ocean acidification, drought,
6	and wildfire; and
7	(ii) for updating strategies and ac-
8	tions to respond appropriately to new in-
9	formation or changing conditions;
10	(H) are incorporated into a revision of the
11	State wildlife action plan (also known as the
12	State comprehensive wildlife strategy) that has
13	been—
14	(i) submitted to the United States
15	Fish and Wildlife Service; and
16	(ii) approved, or is pending approval,
17	by the United States Fish and Wildlife
18	Service; and
19	(I) are developed—
20	(i) with the participation of the State
21	fish and wildlife agency, the State coastal
22	agency, the State agency responsible for
23	administration of Land and Water Con-
24	servation Fund grants, the State Forest
25	Legacy program coordinator, and other

1	State agencies considered appropriate by
2	the Governor of the State;
3	(ii) in coordination with the Secretary
4	of the Interior, and where applicable, the
5	Secretary of Commerce; and
6	(iii) in coordination with other States
7	that share jurisdiction over natural re-
8	sources with the State; and
9	(2) in the case of a coastal State, include strat-
10	egies for addressing the ongoing and expected im-
11	pacts of climate change, including, where applicable,
12	ocean acidification, drought, and wildfire on a coast-
13	al zone that—
14	(A) identify natural resources likely to be
15	impacted by climate change, and describe the
16	impacts;
17	(B) identify and prioritize continuing re-
18	search and data collection needed to address
19	the impacts, including—
20	(i) acquisition of high-resolution
21	coastal elevation and nearshore bathymetry
22	data;
23	(ii) historic shoreline position maps,
24	erosion rates, and inventories of shoreline
25	features and structures;

1	(III) measures and models of relative
2	rates of sea level rise or lake level changes.
3	including effects on flooding, storm surge
4	inundation, and coastal geological proc-
5	esses;
6	(iv) measures and models of habitat
7	loss, including projected losses of coastal
8	wetlands and potentials for inland migra-
9	tion of natural shoreline habitats;
10	(v) measures and models of ocean and
11	coastal species and ecosystem migrations
12	and changes in species population dynam-
13	ies;
14	(vi) changes in storm frequency, in-
15	tensity, or rainfall patterns;
16	(vii) measures and models of saltwater
17	intrusion into coastal rivers and aquifers;
18	(viii) changes in chemical or physical
19	characteristics of marine and estuarine
20	systems, including the presence, extent
21	and timing of hypoxic and anoxic condi-
22	tions;
23	(ix) measures and models of increased
24	harmful algal blooms; and

1	(x) measures and models of the
2	spread of invasive species;
3	(C) identify and prioritize adaptation strat-
4	egies to protect, restore, and conserve natural
5	resources to enable natural resources to become
6	more resilient, adapt to, and withstand the on-
7	going and expected impacts of climate change,
8	including, where applicable, ocean acidification,
9	drought, and wildfire, including—
10	(i) protection, maintenance, and res-
11	toration of ecologically important coastal
12	lands, coastal and ocean ecosystems, and
13	species biodiversity and the establishment
14	of habitat buffer zones, migration cor-
15	ridors, and climate refugia; and
16	(ii) improved planning, siting policies,
17	and hazard mitigation strategies;
18	(D) establish programs—
19	(i) for the long-term monitoring of the
20	ongoing and expected impacts of climate
21	change, including, where applicable, ocean
22	acidification, drought, and wildfire on the
23	ocean and coastal zone; and
24	(ii) assess and adjust, when necessary,
25	the adaptive management strategies;

1	(E) establish performance measures that—
2	(i) assess the effectiveness of adapta
3	tion strategies intended to improve resil
4	ience and the ability of natural resource
5	to adapt to and withstand the ongoing and
6	expected impacts of climate change, includ
7	ing, where applicable, ocean acidification
8	drought, and wildfire;
9	(ii) assess the effectiveness of adapta
10	tion strategies intended to minimize those
11	impacts on the coastal zone; and
12	(iii) update the strategies to respond
13	to new information or changing conditions
14	and
15	(F) are developed—
16	(i) with the participation of the State
17	coastal agency and other appropriate State
18	agencies; and
19	(ii) in coordination with the Secretar
20	of Commerce and other appropriate Fed
21	eral agencies.
22	(d) Public Input.—In developing the adaptation
23	plan, a State shall provide for solicitation and consider
24	ation of public input and independent scientific input.

1	(e) Coordination With Other Plans.—The State
2	adaptation plan shall review research and information
3	and, where appropriate, integrate the goals and measures
4	set forth in other natural resources conservation strate-
5	gies, including—
6	(1) the National Fish Habitat Action Plan;
7	(2) plans under the North American Wetlands
8	Conservation Act (16 U.S.C. 4401 et seq.);
9	(3) the Federal, State, and local partnership
10	known as "Partners in Flight";
11	(4) federally approved coastal zone management
12	plans under the Coastal Zone Management Act of
13	1972 (16 U.S.C. 1451 et seq.);
14	(5) federally approved regional fishery manage-
15	ment plants and habitat conservation activities
16	under the Magnuson-Stevens Fishery Conservation
17	and Management Act (16 U.S.C. 1801 et seq.);
18	(6) the National Coral Reef Action Plan;
19	(7) recovery plans for threatened species and
20	endangered species under section 4(f) of the Endan-
21	gered Species Act of 1973 (16 U.S.C. 1533(f));
22	(8) habitat conservation plans under section 10
23	of that Act (16 U.S.C. 1539);
24	(9) other Federal, State, and tribal plans for
25	imperiled species:

1	(10) State or tribal hazard mitigation plans;
2	(11) State or tribal water management plans;
3	and
4	(12) other State-based strategies that com-
5	prehensively implement adaptation activities to re-
6	mediate the ongoing and expected effects of climate
7	change, including, where applicable, ocean acidifica-
8	tion, drought, and wildfire, on terrestrial, marine,
9	and freshwater fish, wildlife, plants, and other nat-
10	ural resources.
11	(f) UPDATING.—Each State plan shall be updated at
12	least every 5 years.
13	(g) Funding.—
14	(1) In general.—Funds allocated to States
15	under section 370 shall be used only for activities
16	consistent with a State natural resources adaptation
17	plan approved by the Secretary of the Interior and,
18	as appropriate, the Secretary of Commerce.
19	(2) Funding prior to the approval of a
20	STATE PLAN.—Until the earlier of the date that is
21	3 years after the date of enactment of this Act or
22	the date on which a State adaptation plan is ap-
23	proved, a State shall be eligible to receive funding
24	under section 370 for adaptation activities that
25	are—

1	(A) consistent with the comprehensive
2	wildlife strategy of the State and, where appro-
3	priate, other natural resources conservation
4	strategies; and
5	(B) in accordance with a work plan devel-
6	oped in coordination with—
7	(i) the Secretary of the Interior; and
8	(ii) the Secretary of Commerce.
9	(3) Coastal state.—In developing a work
10	plan under paragraph (2)(B), a coastal State shall
11	coordinate with the Secretary of Commerce only for
12	those portions of the strategy relating to activities
13	affecting the coastal zone.
14	(4) Pending approval.—During the period
15	for which approval by the applicable Secretary is
16	pending, the State may continue to receive funds
17	under section 370 pursuant to the work plan de-
18	scribed in paragraph (2)(B).
19	SEC. 370. NATURAL RESOURCES CLIMATE CHANGE ADAP-
20	TATION FUND.
21	(a) Distribution of Amounts.—
22	(1) States.—Of the amounts made available
23	for each fiscal year to carry out this subpart, 38.5
24	percent shall be provided to States to carry out nat-
25	ural resources adaptation activities in accordance

1	with adaptation plans approved under section 369,
2	and shall be distributed as follows:
3	(A) 32.5 percent shall be available to State
4	wildlife agencies in accordance with the appor-
5	tionment formula established under the second
6	subsection (c) (relating to the apportionment of
7	the Wildlife Conservation and Restoration Ac-
8	count) of section 4 of the Pittman-Robertson
9	Wildlife Restoration Act (16 U.S.C. 669c); and
10	(B) 6 percent shall be available to State
11	coastal agencies pursuant to the formula estab-
12	lished by the Secretary of Commerce under sec-
13	tion 306(c) of the Coastal Management Act of
14	1972 (16 U.S.C. 1455(c)).
15	(2) NATURAL RESOURCE ADAPTATION.—Of the
16	amounts made available for each fiscal year to carry
17	out this subpart—
18	(A) 17 percent shall be allocated to the
19	Secretary of the Interior for use in funding—
20	(i) natural resources adaptation activi-
21	ties carried out—
22	(I) under endangered species, mi-
23	gratory species, and other fish and
24	wildlife programs administered by the
25	National Park Service, the United

1	States Fish and Wildlife Service, the
2	Bureau of Indian Affairs, and the Bu-
3	reau of Land Management;
4	(II) on wildlife refuges, National
5	Park Service land, and other public
6	land under the jurisdiction of the
7	United States Fish and Wildlife Serv-
8	ice, the Bureau of Land Management,
9	the Bureau of Indian Affairs, or the
10	National Park Service; and
11	(III) within Federal water man-
12	aged by the Bureau of Reclamation
13	and the National Park Service; and
14	(ii) the implementation of the Na-
15	tional Fish and Wildlife Habitat and Cor-
16	ridors Identification Program required by
17	section 371;
18	(B) 5 percent shall be allocated to the Sec-
19	retary of the Interior for natural resources ad-
20	aptation activities carried out under cooperative
21	grant programs, including—
22	(i) the cooperative endangered species
23	conservation fund authorized under section
24	6 of the Endangered Species Act of 1973
25	(16 U.S.C. 1535);

1	(ii) programs under the North Amer-
2	ican Wetlands Conservation Act (16
3	U.S.C. 4401 et seq.);
4	(iii) the Neotropical Migratory Bird
5	Conservation Fund established by section
6	9(a) of the Neotropical Migratory Bird
7	Conservation Act (16 U.S.C. 6108(a));
8	(iv) the Coastal Program of the
9	United States Fish and Wildlife Service;
10	(v) the National Fish Habitat Action
11	Plan;
12	(vi) the Partners for Fish and Wildlife
13	Program;
14	(vii) the Landowner Incentive Pro-
15	gram;
16	(viii) the Wildlife Without Borders
17	Program of the United States Fish and
18	Wildlife Service; and
19	(ix) the Migratory Species Program
20	and Park Flight Migratory Bird Program
21	of the National Park Service; and
22	(C) 3 percent shall be allocated to the Sec-
23	retary of the Interior to provide financial assist-
24	ance to Indian tribes to carry out natural re-
25	sources adaptation activities through the Tribal

1	Wildlife Grants Program of the United States
2	Fish and Wildlife Service.
3	(3) Land and water conservation.—
4	(A) Deposits.—
5	(i) In general.—Of the amounts
6	made available for each fiscal year to carry
7	out this subpart, 12 percent shall be de-
8	posited in the Land and Water Conserva-
9	tion Fund established under section 2 of
10	the Land and Water Conservation Fund
11	Act of 1965 (16 U.S.C. 460 <i>l</i> –5).
12	(ii) Use of deposits.—Deposits in
13	the Land and Water Conservation Fund
14	under this paragraph shall—
15	(I) be supplemental to authoriza-
16	tions provided under section 3 of the
17	Land and Water Conservation Fund
18	Act of 1965 (16 U.S.C. 460 <i>l</i> -6),
19	which shall remain available for non-
20	adaptation needs; and
21	(II) be available to carry out this
22	subpart without further appropriation
23	or fiscal year limitation.

1	(B) DISTRIBUTION OF AMOUNTS.—Of the
2	amounts deposited under this paragraph in the
3	Land and Water Conservation Fund—
4	(i) for the purposes of carrying out
5	the natural resources adaptation activities
6	through the acquisition of land and inter-
7	ests in land under section 6 of the Land
8	and Water Conservation Fund Act of 1965
9	(16 U.S.C. 460l–8), $\frac{1}{6}$ shall be allocated
10	to the Secretary of the Interior and made
11	available on a competitive basis—
12	(I) to States, in accordance with
13	the natural resources adaptation plans
14	of States, and to Indian tribes;
15	(II) notwithstanding section 5 of
16	that Act (16 U.S.C. 460 <i>l</i> -7); and
17	(III) in addition to any funds
18	provided pursuant to annual appro-
19	priations Acts, the Energy Policy Act
20	of 2005 (42 U.S.C. 15801 et seq.), or
21	any other authorization for non-
22	adaptation needs;
23	(ii) ½ shall be allocated to the Sec-
24	retary of the Interior to carry out natural
25	resources adaptation activities through the

1	acquisition of lands and interests in land
2	under section 7 of the Land and Water
3	Conservation Fund Act of 1965 (16 U.S.C
4	460 <i>l</i> –9);
5	(iii) ½ shall be allocated to the Sec
6	retary of Agriculture and made available to
7	the States and Indian tribes to carry our
8	natural resources adaptation activities
9	through the acquisition of land and inter
10	ests in land under section 7 of the Cooper
11	ative Forestry Assistance Act of 1978 (16
12	U.S.C. 2103c); and
13	(iv) ½ shall be allocated to the Sec
14	retary of Agriculture to carry out natura
15	resources adaptation activities through the
16	acquisition of land and interests in land
17	under section 7 of the Land and Water
18	Conservation Fund Act of 1965 (16 U.S.C
19	460l-9).
20	(C) Expenditure of funds.—In allo
21	cating funds under subparagraph (B), the Sec
22	retary of the Interior and the Secretary of Agri
23	culture shall take into consideration factors in
24	cluding—

1	(i) the availability of non-Federal con-
2	tributions from State, local, or private
3	sources;
4	(ii) opportunities to protect fish and
5	wildlife corridors or otherwise to link or
6	consolidate fragmented habitats;
7	(iii) opportunities to reduce the risk of
8	catastrophic wildfires, drought, extreme
9	flooding, or other climate-related events
10	that are harmful to fish and wildlife and
11	people; and
12	(iv) the potential for conservation of
13	species or habitat types at serious risk due
14	to climate change, including, where appli-
15	cable, ocean acidification, drought, and
16	wildfire, or other stressors.
17	(4) National forest and grassland adap-
18	TATION.—Of the amounts made available for each
19	fiscal year to carry out this subpart, 5 percent shall
20	be allocated to the Forest Service, through the Sec-
21	retary of Agriculture—
22	(A) to fund natural resources adaptation
23	activities carried out in national forests and na-
24	tional grasslands under the jurisdiction of the
25	Forest Service; and

1	(B) to carry out natural resource adapta-
2	tion activities on State and private forest land
3	carried out under the Cooperative Forestry As-
4	sistance Act of 1978 (16 U.S.C. 2101 et seq.).
5	(5) Coastal and marine system adapta-
6	TION.—Of the amounts made available for each fis-
7	cal year to carry out this subpart, 7 percent shall be
8	allocated to the Secretary of Commerce to fund nat-
9	ural resources adaptation activities that protect,
10	maintain, and restore coastal, estuarine, and marine
11	resources, habitats, and ecosystems, including such
12	activities carried out under—
13	(A) the coastal and estuarine land con-
14	servation program administered by the National
15	Oceanic and Atmospheric Administration;
16	(B) the community-based restoration pro-
17	gram for fishery and coastal habitats estab-
18	lished under section 117 of the Magnuson-Ste-
19	vens Fishery Conservation and Management
20	Reauthorization Act of 2006 (16 U.S.C.
21	1891a);
22	(C) the Coastal Zone Management Act of
23	1972 (16 U.S.C. 1451 et seq.) that are specifi-
24	cally designed to strengthen the ability of coast-
25	al, estuarine, and marine resources, habitats,

1	and ecosystems to adapt to and withstand the
2	ongoing and expected impacts of climate
3	change, including, where applicable, ocean acidi-
4	fication, drought, and wildfire;
5	(D) the Open Rivers Initiative;
6	(E) the Magnuson-Stevens Fishery Con-
7	servation and Management Act (16 U.S.C.
8	1801 et seq.);
9	(F) the Marine Mammal Protection Act of
10	1972 (16 U.S.C. 1361 et seq.);
11	(G) the Endangered Species Act of 1973
12	(16 U.S.C. 1531 et seq.);
13	(H) the Marine Protection, Research, and
14	Sanctuaries Act of 1972 (33 U.S.C. 1401 et
15	seq.);
16	(I) the Coral Reef Conservation Act of
17	2000 (16 U.S.C. 6401 et seq.); and
18	(J) the Estuary Restoration Act of 2000
19	(33 U.S.C. 2901 et seq.).
20	(6) Estuarine and freshwater ecosystem
21	ADAPTATION.—Of the amounts made available for
22	each fiscal year to carry out this subpart, 7.5 per-
23	cent shall be allocated to the Administrator of the
24	Environmental Protection Agency and 5 percent
25	shall be available to the Secretary of the Army for

1	use by the Corps of Engineers for use in natural re-
2	sources adaptation activities restoring and pro-
3	tecting—
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, Puge
15	Sound, the Mississippi River Delta, the Sar
16	Francisco Bay Delta, Narragansett Bay, and
17	Albemarle-Pamlico Sound;
18	(C) freshwater and estuarine ecosystems
19	watersheds, and basins identified and
20	prioritized by the Administrator of the Environ-
21	mental Protection Agency or the Corps of Engi-
22	neers, working in cooperation with other Fed-
23	eral agencies, States, tribal governments, local
24	governments, scientists, and other conservation
25	partners; and

1	(D)(i) habitats and ecosystems through es-
2	tuary habitat restoration projects authorized by
3	the Estuary Restoration Act of 2000 (33
4	U.S.C. 2901 et seq.);
5	(ii) project modifications for improvement
6	of the environment;
7	(iii) aquatic restoration and protection
8	projects authorized by section 206 of the Water
9	Resources Development Act of 1996 (33 U.S.C.
10	2330); and
11	(iv) other appropriate programs and activi-
12	ties.
13	(b) Use of Funds by Federal Departments and
14	AGENCIES.—Funds allocated to Federal departments and
15	agencies under this section shall only be used for natural
16	resources adaptation activities consistent with an adapta-
17	tion plan approved under section 368.
18	(c) State Cost-sharing.—Notwithstanding any
19	other provision of law, a State that receives a grant under
20	this section shall use funds from non-Federal sources to
21	pay 10 percent of the costs of each activity carried out
22	under the grant.
23	SEC. 371. NATIONAL WILDLIFE HABITAT AND CORRIDORS
24	INFORMATION PROGRAM.
25	(a) DEFINITIONS.—In this section:

1	(1) Geospatial interoperability frame-
2	work.—The term "Geospatial Interoperability
3	Framework' means the strategy used by the Na-
4	tional Biological Information Infrastructure (based
5	on accepted standards, specifications, and protocols
6	adopted through the International Standards Orga-
7	nization, the Open Geospatial Consortium, and the
8	Federal Geographic Data Committee) to manage, ar-
9	chive, integrate, analyze, and make geospatial and
10	biological data and metadata accessible.
11	(2) Program.—The term "Program" means
12	the National Fish and Wildlife Habitat and Cor-
13	ridors Information Program established under sub-
14	section (b).
15	(3) Secretary.—The term "Secretary" means
16	the Secretary of the Interior.
17	(4) System.—The term "System" means the
18	Habitat and Corridors Information System estab-
19	lished under subsection $(d)(1)$.
20	(b) Establishment.—Not later than 180 days after
21	the date of enactment of this Act, the Secretary, in co-
22	operation with the States and Indian tribes, shall establish
23	a National Fish and Wildlife Habitat and Corridors Infor-
24	mation Program.
25	(c) Purpose.—The purposes of the Program are—

1	(1) to support States and Indian tribes in devel-
2	oping geographical information system databases of
3	fish and wildlife habitats and corridors that—
4	(A) inform planning and development deci-
5	sions within each State;
6	(B) enable each State to model climate im-
7	pacts and adaptation; and
8	(C) provide geographically specific en-
9	hancements of State wildlife action plans;
10	(2) to ensure the collaborative development of a
11	comprehensive national geographic information sys-
12	tem database of maps, models, data, surveys, infor-
13	mational products, and other geospatial information
14	regarding fish and wildlife habitat and corridors
15	that—
16	(A) is based on consistent protocols for
17	sampling and mapping across landscapes;
18	(B) takes into account regional differences;
19	and
20	(C) uses—
21	(i) existing and planned State- and
22	tribal-based geographical information sys-
23	tem databases; and
24	(ii) existing databases, analytical
25	tools, metadata activities, and other infor-

1	mation products available through the Na-
2	tional Biological Information Infrastruc-
3	ture maintained by the Secretary and non-
4	governmental organizations; and
5	(3) to facilitate the use of those databases by
6	Federal, State, local, and tribal decisionmakers to
7	incorporate qualitative information on fish and wild-
8	life habitats and corridors at the earliest practicable
9	stage for use in—
10	(A) prioritizing and targeting natural re-
11	sources adaptation strategies and activities;
12	(B) avoiding, minimizing, and mitigating
13	the impacts on fish and wildlife habitat and cor-
14	ridors when locating energy development, water
15	transmission, transportation, and other land
16	use projects;
17	(C) assessing the impacts of existing devel-
18	opment on habitats and corridors; and
19	(D) developing management strategies that
20	enhance the ability of fish, wildlife, and plant
21	species to migrate or respond to shifting habi-
22	tats within existing habitats and corridors.
23	(d) Habitat and Corridors Information Sys-
24	TEM.—

1	(1) In General.—The Secretary, in coopera-
2	tion with States and Indian tribes, shall establish a
3	Habitat and Corridors Information System.
4	(2) Contents.—The System shall—
5	(A) include maps, data, and descriptions of
6	fish and wildlife habitat and corridors that—
7	(i) have been developed by Federal
8	agencies, State wildlife agencies, and nat-
9	ural heritage programs, Indian tribes, local
10	governments, nongovernmental organiza-
11	tions, and industry; and
12	(ii) meet accepted geospatial inter-
13	operability framework data and metadata
14	protocols and standards;
15	(B) include maps and descriptions of pro-
16	jected shifts in habitats and corridors of fish
17	and wildlife species in response to climate
18	change;
19	(C) ensure data quality;
20	(D) at scales useful to decisionmakers,
21	make data, models, and analyses included in
22	the System available—
23	(i) to prioritize and target natural re-
24	sources adaptation strategies and activi-
25	ties;

1	(ii) to assess the impacts of existing
2	development on habitats and corridors;
3	(iii) to assess the impacts of proposed
4	energy development, water, transmission
5	transportation, and other land use projects
6	and to avoid, minimize, or mitigate those
7	impacts on habitats and corridors; and
8	(iv) to develop management strategies
9	that enhance the ability of fish, wildlife
10	and plant species to migrate or respond to
11	shifting habitats within existing habitats
12	and corridors;
13	(E) update maps and other information as
14	landscapes, habitats, corridors, and wildlife pop-
15	ulations change, or as new information becomes
16	available;
17	(F) encourage development of collaborative
18	plans by Federal and State agencies and Indian
19	tribes that monitor and evaluate the ability of
20	the System to meet the needs of decision-
21	makers;
22	(G) identify gaps in habitat and corridor
23	information, mapping, and research needed to
24	fully assess current data and metadata;

1	(H) prioritize research and future data col-
2	lection activities for use in updating the System
3	and provide support for those activities;
4	(I) include mechanisms to support collabo-
5	rative research, mapping, and planning of habi-
6	tats and corridors by Federal and State agen-
7	cies, Indian tribes, and other interested stake-
8	holders;
9	(J) incorporate biological and geospatial
10	data on species and corridors found in energy
11	development and transmission plans, including
12	renewable energy initiatives, transportation, and
13	other land use plans;
14	(K) identify, prioritize, and describe key
15	parcels of non-Federal land that—
16	(i) are located within units of the Na-
17	tional Park System, National Wildlife Ref-
18	uge System, National Forest System, or
19	National Grassland System; and
20	(ii) are critical to maintenance of
21	wildlife habitat and migration corridors;
22	and
23	(L) be based on the best scientific informa-
24	tion available.

1	(e) Financial and Other Support.—The Sec-
2	retary may provide support to the States and Indian
3	tribes, including financial and technical assistance, for ac-
4	tivities that support the development and implementation
5	of the System.
6	(f) COORDINATION.—In cooperation with States and
7	Indian tribes, the Secretary shall recommend how the in-
8	formation in the System may be incorporated into relevant
9	State and Federal plans that affect fish and wildlife, in-
10	cluding—
11	(1) land management plans;
12	(2) the State Comprehensive Wildlife Conserva-
13	tion Strategies; and
14	(3) appropriate tribal conservation plans.
15	(g) Purpose of Incorporation.—The Secretary
16	shall make the recommendations required by subsection
17	(f) to ensure that relevant State and Federal plans that
18	affect fish and wildlife—
19	(1) prevent unnecessary habitat fragmentation
20	and disruption of corridors;
21	(2) promote the landscape connectivity nec-
22	essary to allow wildlife to move as necessary to meet
23	biological needs, adjust to shifts in habitat, and
24	adapt to climate change; and

1	(3) minimize the impacts of energy, develop-
2	ment, water, transportation, and transmission
3	projects and other activities expected to impact habi-
4	tat and corridors.
5	SEC. 372. ADDITIONAL PROVISIONS REGARDING INDIAN
6	TRIBES.
7	(a) Federal Trust Responsibility.—Nothing in
8	this subpart amends, alters, or gives priority over the Fed-
9	eral trust responsibility to any Indian tribe.
10	(b) Exemption From FOIA.—If a Federal depart-
11	ment or agency receives any information relating to sacred
12	sites or cultural activities identified by an Indian tribe as
13	confidential, such information shall be exempt from disclo-
14	sure under section 552 of title 5, United States Code
15	(commonly referred to as the Freedom of Information
16	Act).
17	(c) APPLICATION OF OTHER LAW.—The Secretary of
18	the Interior may apply the provisions of the Indian Self-
19	Determination and Education Assistance Act (25 U.S.C.
20	450 et seq.) in the implementation of this subpart.
21	Subpart D—Additional Climate Change Adaptation
22	Programs
23	SEC. 381. WATER SYSTEM MITIGATION AND ADAPTION
24	PARTNERSHIPS.
25	(a) DEFINITIONS.—In this section:

1	(1) Owner or operator.—
2	(A) In general.—The term "owner or
3	operator" means a person (including a regional
4	local, municipal, or private entity) that owns or
5	operates a water system.
6	(B) Inclusion.—The term "owner or op-
7	erator" includes—
8	(i) a non-Federal entity that has oper-
9	ational responsibilities for a federally or
10	State owned water system; and
11	(ii) an entity formed pursuant to any
12	State's joint exercise of powers statutes
13	that includes one or more of the entities in
14	paragraph (A).
15	(2) Water system.—The term "water sys-
16	tem" means—
17	(A) a community water system (as defined
18	in section 1401 of the Safe Drinking Water Act
19	(42 U.S.C. 300f));
20	(B) a treatment works (as defined in sec-
21	tion 212 of the Federal Water Pollution Control
22	Act (33 U.S.C. 1292)), including a municipal
23	separate storm sewer system;
24	(C) a decentralized wastewater treatment
25	system for domestic sewage;

1	(D) a groundwater storage and replenish-
2	ment system; or
3	(E) a system for transport and delivery of
4	water for irrigation or conservation.
5	(b) Establishment.—The Administrator shall es-
6	tablish a water system mitigation and adaptation partner-
7	ship program to provide funds to States for water system
8	adaptation projects.
9	(c) Grants.—Beginning in fiscal year 2010, each
10	State receiving funds pursuant to this section shall make
11	grants to owners or operators of water systems to address
12	any ongoing or forecasted (based on the best available re-
13	search and data) climate-related impact on the water qual-
14	ity, water supply or reliability of a region of the United
15	States, for the purposes of mitigating or adapting to the
16	impacts of climate change.
17	(d) Eligible Uses.—The funds made available to
18	each State pursuant to this section shall be used exclu-
19	sively to assist in the planning, design, construction, im-
20	plementation, or operation or maintenance of any program
21	or project to respond or increase the resilience of a water
22	system to climate change by—
23	(1) conserving water or enhancing water use ef-
24	ficiency, including through the use of water metering

1 and electronic sensing and control systems to meas-2 ure the effectiveness of a water efficiency program; 3 (2) modifying or relocating existing water sys-4 tem infrastructure made or projected to be signifi-5 cantly impaired by climate change impacts; 6 (3) preserving or improving water quality, in-7 cluding through measures to manage, reduce, treat, 8 reuse municipal stormwater, wastewater, or 9 drinking water; 10 (4) investigating, designing, or constructing 11 groundwater remediation, recycled water, or desali-12 nation facilities or systems to serve existing commu-13 nities: 14 (5) enhancing water management by increasing 15 watershed preservation and protection, such as 16 through the use of natural or engineered green in-17 frastructure in the management, conveyance, or 18 treatment of water, wastewater, or stormwater; 19 (6) enhancing energy efficiency or the use and 20 generation of renewable energy in the management, 21 conveyance, or treatment of water, wastewater, or 22 stormwater; 23 (7) supporting the adoption and use of ad-24 vanced water treatment, water supply management 25 (such as reservoir reoperation and water banking),

1	or water demand management technologies, projects,
2	or processes (such as water reuse and recycling,
3	adaptive conservation pricing, and groundwater
4	banking) that maintain or increase water supply or
5	improve water quality;
6	(8) modifying or replacing existing systems or
7	constructing new systems for existing communities
8	or land currently in agricultural production to im-
9	prove water supply, reliability, storage, or convey-
10	ance in a manner that—
11	(A) promotes conservation or improves the
12	efficiency of utilization of available water sup-
13	plies; and
14	(B) does not further exacerbate stresses on
15	ecosystems or cause redirected impacts by de-
16	grading water quality or increasing net green-
17	house gas emissions;
18	(9) supporting practices and projects, such as
19	improved irrigation systems, water banking and
20	other forms of water transactions, groundwater re-
21	charge, stormwater capture, groundwater conjunc-
22	tive use, and reuse or recycling of drainage water,
23	to improve water quality or promote more efficient
24	water use on land currently in agricultural produc-
25	tion; or

1	(10) conducting and completing studies or as-
2	sessments to project how climate change may impact
3	the future operations and sustainability of water sys-
4	tems.
5	(e) APPLICATION.—To be eligible to receive a grant
6	from the State under this section, the owner or operator
7	of a water system shall submit to the State an application
8	that—
9	(1) includes a proposal of the program, strat-
10	egy, or infrastructure improvement to be planned,
11	designed, constructed, implemented, or maintained
12	by the water system;
13	(2) cites the best available research or data that
14	demonstrate—
15	(A) the risk to the water resources or in-
16	frastructure of the water system as a result of
17	ongoing or forecasted changes to the
18	hydrological system brought about by factors
19	arising from climate change, including rising
20	sea levels and changes in precipitation levels;
21	and
22	(B) how the proposed program, strategy,
23	or infrastructure improvement would perform
24	under the anticipated climate conditions; and

1	(3) explains how the proposed program, strat-
2	egy, or infrastructure improvement is expected to
3	enhance the resiliency of the water system, including
4	source water protection for community water sys-
5	tems, to these risks or reduce the direct or indirect
6	greenhouse gas emissions of the water system.
7	(f) Competitive Process.—
8	(1) IN GENERAL.—Each calendar year, each
9	State shall conduct a competitive process to select
10	and fund applications under this section.
11	(2) Priority requirements and
12	WEIGHTING.—In carrying out the process, the
13	States shall—
14	(A) prioritize funding of applications that
15	are submitted by the owners or operators of
16	water systems that are, based on the best avail-
17	able research and data, at the greatest and
18	most immediate risk of facing significant cli-
19	mate-related negative impacts on water quality
20	or quantity; and
21	(B) in selecting among the priority applica-
22	tions determined under subparagraph (A), en-
23	sure that, to the maximum extent practicable,
24	the final list of applications funded for each

1	year includes a substantial number meeting one
2	or more of each of the following goals—
3	(i) promote more efficient water use,
4	water conservation, water reuse, or recy-
5	$\operatorname{cling};$
6	(ii) use decentralized, low-impact de-
7	velopment technologies and nonstructural
8	approaches, including practices that use,
9	enhance, or mimic the natural hydrological
10	cycle or protect natural flows;
11	(iii) reduce stormwater runoff by pro-
12	tecting or enhancing natural ecosystem
13	functions;
14	(iv) modify, upgrade, enhance, or re-
15	place existing water system infrastructure
16	in response to ongoing or forecasted cli-
17	mate-related impacts;
18	(v) promote the sustainability and re-
19	liability of water supplies used for agricul-
20	tural purposes;
21	(vi) improve water quality or quantity
22	for agricultural and municipal uses, includ-
23	ing through salinity reduction; and
24	(vii) provide multiple benefits, includ-
25	ing to water supply enhancement or de-

1	mand reduction, water quality protection
2	or improvement, increased flood protection,
3	and ecosystem protection or improvement;
4	and
5	(C) provide for solicitation and consider-
6	ation of public input in the development of cri-
7	teria used in evaluating applications.
8	(g) Cost-sharing.—
9	(1) Federal share.—The share of the cost of
10	any program, strategy, or infrastructure improve-
11	ment that is the subject of a grant awarded by a
12	State to the owner or operator of a water system
13	under subsection (b) paid through funds distributed
14	under this section shall not exceed 50 percent of the
15	cost of the program, strategy, and infrastructure im-
16	provement.
17	(2) Calculation of non-federal share.—
18	In calculating the non-Federal share of the cost of
19	a program, strategy, or infrastructure improvement
20	proposed by a water system through an application
21	submitted by the water system under subsection (d),
22	the State shall—
23	(A) include the value of any in-kind serv-
24	ices that are integral to the completion of the
25	program, strategy, or infrastructure improve-

1	ment, including reasonable administrative and
2	overhead costs; and
3	(B) not include any other amount that the
4	water system receives from a Federal agency.
5	(h) Labor Standards.—
6	(1) In general.—Other than with respect to
7	employees of State and local agencies, or other pub-
8	lic entities, all laborers and mechanics employed or
9	infrastructure improvements funded directly by or
10	assisted in whole or in part by this section shall be
11	paid wages at rates not less than those prevailing for
12	the same type of work on similar construction in the
13	immediate locality, as determined by the Secretary
14	of Labor in accordance with subchapter IV of chap-
15	ter 31 of part A of subtitle II of title 40, United
16	States Code.
17	(2) Authority and functions.—With re-
18	spect to the labor standards in this subsection, the
19	Secretary of Labor shall have the authority and
20	functions set forth in Reorganization Plan Num-
21	bered 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.)
22	and section 3145 of title 40, United States Code.

1	SEC. 382. FLOOD CONTROL, PROTECTION, PREVENTION,
2	AND RESPONSE.
3	(a) Establishment.—The Administrator shall es-
4	tablish a Flood Control, Protection, Prevention and Re-
5	sponse Program to provide funds to states for flood con-
6	trol, protection, prevention and response projects.
7	(b) Eligible Uses.—
8	(1) In General.—States receiving funding
9	pursuant to section may use such funding on flood
10	control, protection, prevention and response pro-
11	grams and projects addressing the projected impacts
12	of climate change in accordance with this section.
13	(2) Objectives.—Such projects and activities
14	shall seek to mitigate or adapt to the destructive im-
15	pacts of climate related increases in the duration,
16	frequency, or magnitude of rainfall or runoff, includ-
17	ing snowmelt runoff, as well as hurricanes, including
18	projects and programs that—
19	(A) reduce flood damage, risk, and vulner-
20	ability;
21	(B) identify, maintain and restore eco-
22	systems and natural barriers integral to flood
23	control, protection, prevention and response;
24	(C) update the available data, technologies,
25	and scientific knowledge used in estimating,
26	identifying and mitigating flood hazards;

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1	(D) highlight, update and remediate
2	vulnerabilities in emergency response;
3	(E) incorporate risk analysis and a risk-re
4	duction approach to flood-related investments;
5	(F) incorporate and identify changes in
6	risk due to processes such as land loss, subsid-
7	ence, sea-level rise, reduced natural buffers
8	urban development and infrastructure aging
9	and
10	(G) identify and incorporate innovative ap
11	proaches to land use management, water re
12	source planning, and ecosystem restoration.
13	(3) Priority—Priority in projects to reduce
14	flood events shall be given to those projects that di
	rectly assist local governments and communities in
15	rectly assist focal governments and communities in
15 16	flood control, protection, prevention and response ac
16	· ·
16 17	flood control, protection, prevention and response activities.
	flood control, protection, prevention and response activities.
16 17 18	flood control, protection, prevention and response activities. SEC. 383. WILDFIRE.
16 17 18 19	flood control, protection, prevention and response activities. SEC. 383. WILDFIRE. (a) FINDINGS.—Congress finds that—
16 17 18 19 20	flood control, protection, prevention and response activities. SEC. 383. WILDFIRE. (a) FINDINGS.—Congress finds that— (1) since 1980, wildfires in the United States
16 17 18 19 20 21	flood control, protection, prevention and response activities. SEC. 383. WILDFIRE. (a) FINDINGS.—Congress finds that— (1) since 1980, wildfires in the United States have burned almost twice as many acres per year or

1	(2) the wildfire season in the western United
2	States has increased by an average of 78 days dur-
3	ing the 30-year period preceding the date of enact-
4	ment of this Act;
5	(3) researchers predict that the area subject to
6	wildfire damage will increase during the 21st cen-
7	tury by up to 118 percent as a result of climate
8	change;
9	(4) of the annual budget of the Forest Service.
10	the Forest Service used for wildfire suppression ac-
11	tivities—
12	(A) 13 percent in 1991; and
13	(B) 45 percent in 2007; and
14	(5) 1 percent of the largest escaped fires—
15	(A) burn 95 percent of all burned acres
16	and
17	(B) consume 85 percent of all wildfire
18	fighting costs.
19	(b) Purpose.—The purpose of this section is to au-
20	thorize a program to reduce the risk of wildfires in fire-
21	ready communities.
22	(c) Definitions.—In this section:
23	(1) Fire-ready community.—The term "fire-
24	ready community" means a community that—

1	(A) is located within a priority area identi
2	fied pursuant to subsection (d);
3	(B) has a cooperative fire agreement that
4	articulates the roles and responsibilities for
5	Federal, State and local government entities in
6	local wildfire suppression and protection;
7	(C) has local codes that require fire-resist
8	ant home design and building materials;
9	(D) has a community wildfire protection
10	plan (as defined in section 101 of the Healthy
11	Forests Restoration Act of 2003 (16 U.S.C
12	6502)); and
13	(E) is engaged in a successful collaborative
14	process that includes multiple interested per
15	sons representing diverse interests and is trans
16	parent and nonexclusive, such as a resource ad-
17	visory committee established under section 205
18	of the Secure Rural Schools and Community
19	Self-Determination Act of 2000 (Public Law
20	106-393; 16 U.S.C. 500 note).
21	(2) Secretaries.—The term "Secretaries"
22	means the Secretary of Agriculture and the Sec
23	retary of the Interior.
24	(d) Fire Risk Mapping.—As soon as is practicable
25	after the date of the enactment of this Act, the Secretaries

shall develop regional maps of communities most at risk 1 of wildfire and in need of hazardous fuel treatment and 3 maintenance. The maps shall identify priority areas for hazardous fuels reduction projects, including— 5 (1) at-risk communities in fire-prone areas of 6 the wildland-urban interface (as defined in section 7 101 of the Healthy Forests Restoration Act of 2003 8 (16 U.S.C. 6502)); 9 (2) watersheds and municipal drinking water 10 sources; 11 (3) emergency evacuation corridors; 12 (4) electricity transmission corridors; and 13 (5) low-capacity or low-income communities. 14 (e) Local Wildland Firefighting Capability 15 Grants.— 16 (1) Grants available.—The Secretaries may 17 provide cost-share grants to fire-ready communities 18 to assist such communities in carrying out activities 19 authorized by paragraph (2). 20 (2) Eligible activities.—Grant funds may 21 be used for the following: 22 (A) Education programs to raise aware-23 ness of homeowners and citizens about wildland 24 fire protection practices, including FireWise or 25 similar programs.

1	(B) Training programs for local fire-
2	fighters on wildland firefighting techniques and
3	approaches.
4	(C) Equipment acquisition to facilitate
5	wildland fire preparedness.
6	(D) Implementation of a community wild-
7	fire protection plan.
8	(E) Forest restoration that accomplishes
9	fuels reduction
10	(f) WILDLAND FIRE COST-SHARE AGREEMENTS.—In
11	developing any wildland fire cost-share agreement with a
12	State Forester or equivalent official, the Secretaries shall,
13	to the maximum extent practicable, encourage the State
14	and local communities involved to become fire-ready com-
15	munities.
16	SEC. 384. COASTAL STATE ADAPTATION PROGRAM.
17	(a) FINDINGS.—According to the National Ocean Ec-
18	onomics Program, coastal and Great Lakes States account
19	for 81.4 percent of the population of the United States
20	and generate 83 percent of the economic output of the
21	United States.
22	(b) Definitions.—In this section:
23	(1) Coastal state.—The term "coastal
24	State" has the meaning given the term "coastal

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- 1 state" in section 304 of the Coastal Zone Manage-2 ment Act of 1972 (16 U.S.C. 1453).
- 3 (2) Coastal watershed.—The term "coastal 4 watershed" means a geographical area drained into 5 or contributing water to an estuarine area, an ocean, 6 or a Great Lake, all or a portion of which is within 7 the coastal zone (as defined in section 304 of the 8 Coastal Zone Management Act of 1972 (16 U.S.C. 9 1453)).
- 10 (3) SHORELINE MILES.—The term "shoreline miles", with respect to a coastal State, means the 12 mileage of tidal shoreline or Great Lake shoreline of 13 the coastal State, based on the most recently avail-14 able data from or accepted by the National Ocean 15 Service of the National Oceanic and Atmospheric Administration. 16

(c) DISTRIBUTION.—

- (1) IN GENERAL.—Not later than September 30 of each of calendar years 2011 through 2049, the Administrator shall distribute, in accordance with this section, funding for coastal State economic protection under subsection.
- (2) Allocation.—The funding available for allocation under subsection (b) for a calendar year shall be distributed among coastal States, as follows:

1	(A) 25 percent based on the proportion
2	that—
3	(i) the number of shoreline miles of a
4	coastal State; bears to
5	(ii) the total number of shoreline
6	miles of all coastal States.
7	(B) 25 percent based on the proportion
8	that—
9	(i) the population of a coastal State;
10	bears to
11	(ii) the total population of all coastal
12	States.
13	(C) 50 percent divided equally among all
14	coastal States.
15	(d) Use of Funding.—
16	(1) In general.—During any calendar year, a
17	coastal State receiving funding under this section
18	may use the funding only for projects and activities
19	to plan for and address the impacts of climate
20	change in the coastal watershed, including—
21	(A) to address the impacts of climate
22	change with respect to—
23	(i) accelerated sea level rise and lake
24	level changes;
25	(ii) shoreline erosion;

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1	(111) increased storm frequency or in-
2	tensity;
3	(iv) changes in rainfall or other pre-
4	cipitation; and
5	(v) related flooding;
6	(B) to identify and develop plans to pro-
7	tect, or, as necessary or applicable, to relocate
8	public facilities and infrastructure, coastal re-
9	sources of national significance, public energy
10	facilities, or other public water uses located in
11	the coastal watershed that are affected by cli-
12	mate change, including strategies that use nat-
13	ural resources, such as natural buffer zones
14	natural shorelines, and habitat protection or
15	restoration;
16	(C) to research and collect data using, or
17	on matters such as—
18	(i) historical shoreline position maps;
19	(ii) historical shoreline erosion rates;
20	(iii) inventories of shoreline features
21	and conditions;
22	(iv) acquisition of high-resolution to-
23	pography and bathymetry;
24	(v) sea level rise inundation models;

1	(vi) storm surge sea level rise linked
2	inundation models;
3	(vii) shoreline change modeling based
4	on sea level rise projections;
5	(viii) sea level rise vulnerability anal-
6	yses and socioeconomic studies; and
7	(ix) environmental and habitat
8	changes associated with sea level rise; and
9	(D) to respond to—
10	(i) changes in chemical characteristics
11	(including ocean acidification) and physical
12	characteristics (including thermal strati-
13	fication) of marine systems;
14	(ii) saltwater intrusion into ground-
15	water aquifers;
16	(iii) increased harmful algae blooms;
17	(iv) spread of invasive species;
18	(v) coastal habitat loss;
19	(vi) species migrations; and
20	(vii) marine, estuarine, and freshwater
21	ecosystem changes associated with climate
22	change.
23	(2) Execution.—Priority to plan and carry
24	out projects and activities under this subsection shall

1	be given to State coastal agencies, as determined in
2	accordance with State law.
3	(3) Coordination.—In carrying out this sub-
4	section, a coastal State shall coordinate with other
5	statewide climate change efforts in order to avoid
6	duplication of such efforts.
7	(e) Report.—Not later than 1 year after the date
8	on which a State receives funds under this section, and
9	biennially thereafter until such time as the funding is fully
10	expended, the State shall submit to the Administrator, or
11	the heads of such other Federal agencies as the President
12	may designate, a report that—
13	(1) provides a full accounting for the State's
14	use of funding distributed under this section, includ-
15	ing a description of the projects and activities fund-
16	ed; and
17	(2) may be independent or included within the
18	report established under [section 203(f) of division
19	В].

1	DIVISION B—POLLUTION
2	REDUCTION AND INVESTMENT
3	TITLE I—REDUCING GLOBAL
4	WARMING POLLUTION
5	Subtitle A—Reducing Global
6	Warming Pollution
7	SEC. 101. REDUCING GLOBAL WARMING POLLUTION.
8	The Clean Air Act is amended by adding after title
9	VI (42 U.S.C. 7671 et seq.) the following new title:
10	"TITLE VII—GLOBAL WARMING
11	POLLUTION REDUCTION AND
12	INVESTMENT PROGRAM
13	"PART A—GLOBAL WARMING POLLUTION
14	REDUCTION GOALS AND TARGETS
15	"SEC. 701. FINDINGS.
16	"Congress finds that—
17	"(1) global warming poses a significant threat
18	to the national security, economy, public health and
19	welfare, and environment of the United States, as
20	well as of other countries;
21	"(2) reviews of scientific studies, including by
22	the Intergovernmental Panel on Climate Change and
23	the National Academy of Sciences, demonstrate that
24	global warming is the result of the combined anthro-

1	pogenic greenhouse gas emissions from numerous
2	sources of all types and sizes;
3	"(3) each increment of emission, when com-
4	bined with other emissions, causes or contributes
5	materially to the acceleration and extent of global
6	warming and its adverse effects for the lifetime of
7	such gas in the atmosphere;
8	"(4) accordingly, controlling emissions in small
9	as well as large quantities is essential to prevent,
10	slow the pace of, reduce the threats from, and miti-
11	gate global warming and its adverse effects;
12	"(5) because they induce global warming,
13	greenhouse gas emissions cause or contribute to in-
14	juries to persons in the United States, including—
15	"(A) adverse health effects, such as disease
16	and loss of life;
17	"(B) displacement of human populations;
18	"(C) damage to property and other inter-
19	ests relating to ocean levels, acidification, and
20	ice changes;
21	"(D) severe weather and seasonal changes;
22	"(E) disruption, costs, and losses to busi-
23	ness, trade, employment, farms, subsistence,
24	aesthetic enjoyment of the environment, recre-
25	ation, culture, and tourism;

1	(F) damage to plants, forests, lands, and
2	waters;
3	"(G) harm to wildlife and habitat;
4	"(H) scarcity of water and the decreased
5	abundance of other natural resources;
6	"(I) worsening of tropospheric air pollu-
7	tion;
8	"(J) substantial threats of similar damage;
9	and
10	"(K) other harm;
11	"(6) the fact that many of those effects and
12	risks of future effects of global warming are widely
13	shared does not minimize the adverse effects indi-
14	vidual persons have suffered, will suffer, and are at
15	risk of suffering because of global warming;
16	"(7) the fact that some of the adverse and po-
17	tentially catastrophic effects of global warming are
18	at risk of occurring and not a certainty does not ne-
19	gate the harm persons suffer from actions that in-
20	crease the likelihood, extent, and severity of such fu-
21	ture impacts;
22	"(8) countries of the world look to the United
23	States for leadership in addressing the threat of and
24	harm from global warming;

1	"(9) full implementation of this title is crit-
2	ical to engage other countries in an international ef-
3	fort to mitigate the threat of and harm from global
4	warming; and
5	"(10) global warming and its adverse effects
6	are occurring and are likely to continue and increase
7	in magnitude, and to do so at a greater and more
8	harmful rate, unless the [this title] is fully imple-
9	mented and enforced in an expeditious manner.
10	"SEC. 702. ECONOMYWIDE REDUCTION GOALS.
11	"The goals of this title, and the
12	[Act] (and the amendments
13	made by that Act) are to reduce steadily the quantity of
14	United States greenhouse gas emissions such that—
15	"(1) in 2012, the quantity of United States
16	greenhouse gas emissions does not exceed 97 percent
17	of the quantity of United States greenhouse gas
18	emissions in 2005;
19	"(2) in 2020, the quantity of United States
20	greenhouse gas emissions does not exceed 80 percent
21	of the quantity of United States greenhouse gas
22	emissions in 2005;
23	"(3) in 2030, the quantity of United States
24	greenhouse gas emissions does not exceed 58 percent

1	of the quantity of United States greenhouse gas
2	emissions in 2005; and
3	"(4) in 2050, the quantity of United States
4	greenhouse gas emissions does not exceed 17 percent
5	of the quantity of United States greenhouse gas
6	emissions in 2005.
7	"SEC. 703. REDUCTION TARGETS FOR SPECIFIED SOURCES.
8	"(a) In General.—The regulations issued under
9	section 721 shall cap and reduce annually the greenhouse
10	gas emissions of capped sources each calendar year begin-
11	ning in 2012 such that—
12	"(1) in 2012, the quantity of greenhouse gas
13	emissions from capped sources does not exceed 97
14	percent of the quantity of greenhouse gas emissions
15	from such sources in 2005;
16	"(2) in 2020, the quantity of greenhouse gas
17	emissions from capped sources does not exceed 80
18	percent of the quantity of greenhouse gas emissions
19	from such sources in 2005;
20	"(3) in 2030, the quantity of greenhouse gas
21	emissions from capped sources does not exceed 58
22	percent of the quantity of greenhouse gas emissions
23	from such sources in 2005; and
24	"(4) in 2050, the quantity of greenhouse gas
25	emissions from capped sources does not exceed 17

- 1 percent of the quantity of greenhouse gas emissions
- 2 from such sources in 2005.
- 3 "(b) Definition.—For purposes of this section, the
- 4 term 'greenhouse gas emissions from such sources in
- 5 2005' means emissions to which section 722 would have
- 6 applied if the requirements of this title for the specified
- 7 year had been in effect for 2005.

8 "SEC. 704. SUPPLEMENTAL POLLUTION REDUCTIONS.

- 9 "For the purposes of decreasing the likelihood of cat-
- 10 astrophic climate change, preserving tropical forests,
- 11 building capacity to generate offset credits, and facili-
- 12 tating international action on global warming, the Admin-
- 13 istrator shall set aside the percentage specified in section
- 14 781 of the quantity of emission allowances established
- 15 under section 721(a) for each year, to be used to achieve
- 16 a reduction of greenhouse gas emissions from deforest-
- 17 ation in developing countries in accordance with part E.
- 18 In 2020, activities supported under part E shall provide
- 19 greenhouse gas reductions in an amount equal to an addi-
- 20 tional 10 percentage points of reductions from United
- 21 States greenhouse gas emissions in 2005. The Adminis-
- 22 trator shall distribute these allowances with respect to ac-
- 23 tivities in countries that enter into and implement agree-
- 24 ments or arrangements relating to reduced deforestation
- 25 as described in section 753(a)(2).

1	"CFC	705	PEVIEW	AND	DROCRAN	M RECOMM	ENDATIONS.
- 1	"SP.U.	. 7เมล.	. R.P. VIP. W	AINI	PRUUTRAN	VI K.H.C.(J)VI)VI	RINIJA I IUNS.

2	"(a) In General.—The Administrator shall, in con-
3	sultation with appropriate Federal agencies, submit to
4	Congress a report not later than July 1, 2013, and every
5	4 years thereafter, that includes—
6	"(1) an analysis of key findings based on the
7	latest scientific information and data relevant to
8	global climate change;
9	"(2) an analysis of capabilities to monitor and
10	verify greenhouse gas reductions on a worldwide
11	basis, including for the United States, as required
12	under the Act (and the
13	amendments made by that Act); and
14	"(3) an analysis of the status of worldwide
15	greenhouse gas reduction efforts, including imple-
16	mentation of the Act and
17	other policies, both domestic and international, for
18	reducing greenhouse gas emissions, preventing dan-
19	gerous atmospheric concentrations of greenhouse
20	gases, preventing significant irreversible con-
21	sequences of climate change, and reducing vulner-
22	ability to the impacts of climate change.
23	"(b) Exception.—Paragraph (3) of subsection (a)
24	shall not apply to the first report submitted under such
25	subsection.

1	"(c) Latest Scientific Information.—The anal-
2	ysis required under subsection (a)(1) shall—
3	"(1) address existing scientific information and
4	reports, considering, to the greatest extent possible,
5	the most recent assessment report of the Intergov-
6	ernmental Panel on Climate Change, reports by the
7	United States Global Change Research Program, the
8	Natural Resources Climate Change Adaptation
9	Panel established under section 375 of the
10	Act, and Federal agencies,
11	and the European Union's global temperature data
12	assessment;
13	"(2) review trends and projections for—
14	"(A) global and country-specific annual
15	emissions of greenhouse gases, and cumulative
16	greenhouse gas emissions produced between
17	1850 and the present, including—
18	"(i) global cumulative emissions of an-
19	thropogenic greenhouse gases;
20	"(ii) global annual emissions of an-
21	thropogenic greenhouse gases; and
22	"(iii) by country, annual total, annual
23	per capita, and cumulative anthropogenic
24	emissions of greenhouse gases for the top
25	50 emitting nations;

1	"(B) significant changes, both globally and
2	by region, in annual net non-anthropogenic
3	greenhouse gas emissions from natural sources,
4	including permafrost, forests, or oceans;
5	"(C) global atmospheric concentrations of
6	greenhouse gases, expressed in annual con-
7	centration units as well as carbon dioxide
8	equivalents based on 100-year global warming
9	potentials;
10	"(D) major climate forcing factors, such as
11	aerosols;
12	"(E) global average temperature, expressed
13	as seasonal and annual averages in land, ocean,
14	and land-plus-ocean averages; and
15	"(F) sea level rise;
16	"(3) assess the current and potential impacts of
17	global climate change on—
18	"(A) human populations, including impacts
19	on public health, economic livelihoods, subsist-
20	ence, tribal culture, human infrastructure, and
21	displacement or permanent relocation due to
22	flooding, severe weather, extended drought, ero-
23	sion, or other ecosystem changes;
24	"(B) freshwater systems, including water
25	resources for human consumption and agri-

1	culture and natural and managed ecosystems,
2	flood and drought risks, and relative humidity;
3	"(C) the carbon cycle, including impacts
4	related to the thawing of permafrost, the fre-
5	quency and intensity of wildfire, and terrestrial
6	and ocean carbon sinks;
7	"(D) ecosystems and animal and plant
8	populations, including impacts on species abun-
9	dance, phenology, and distribution;
10	"(E) oceans and ocean ecosystems, includ-
11	ing effects on sea level, ocean acidity, ocean
12	temperatures, coral reefs, ocean circulation,
13	fisheries, and other indicators of ocean eco-
14	system health;
15	"(F) the cryosphere, including effects on
16	ice sheet mass balance, mountain glacier mass
17	balance, and sea-ice extent and volume;
18	"(G) changes in the intensity, frequency,
19	or distribution of severe weather events, includ-
20	ing precipitation, tropical cyclones, tornadoes,
21	and severe heat waves;
22	"(H) agriculture and forest systems; and
23	"(I) any other indicators the Administrator
24	deems appropriate;

1	"(4) summarize any significant socioeconomic
2	impacts of climate change in the United States, in-
3	cluding the territories of the United States, drawing
4	on work by Federal agencies and the academic lit-
5	erature, including impacts on—
6	"(A) public health;
7	"(B) economic livelihoods, subsistence, and
8	tribal culture;
9	"(C) displacement or permanent relocation
10	due to flooding, severe weather, extended
11	drought, or other ecosystem changes;
12	"(D) human infrastructure, including
13	coastal infrastructure vulnerability to extreme
14	events and sea level rise, river floodplain infra-
15	structure, and sewer and water management
16	systems;
17	"(E) agriculture and forests, including ef-
18	fects on potential growing season, distribution,
19	and yield;
20	"(F) water resources for human consump-
21	tion, agriculture and natural and managed eco-
22	systems, flood and drought risks, and relative
23	humidity;
24	"(G) energy supply and use; and
25	"(H) transportation;

1	"(5) in assessing risks and impacts, use a risk
2	management framework, including both qualitative
3	and quantitative measures, to assess the observed
4	and projected impacts of current and future climate
5	change, accounting for—
6	"(A) both monetized and non-monetized
7	losses;
8	"(B) potential nonlinear, abrupt, or essen-
9	tially irreversible changes in the climate system;
10	"(C) potential nonlinear increases in the
11	cost of impacts;
12	"(D) potential low-probability, high impact
13	events; and
14	"(E) whether impacts are transitory or es-
15	sentially permanent; and
16	"(6) based on the findings of the Administrator
17	under this section, as well as assessments produced
18	by the Intergovernmental Panel on Climate Change,
19	the United States Global Change Research program,
20	and other relevant scientific entities—
21	"(A) describe increased risks to natural
22	systems and society that would result from an
23	increase in global average temperature 3.6 de-
24	grees Fahrenheit (2 degrees Celsius) above the
25	pre-industrial average or an increase in atmos-

1	pheric greenhouse gas concentrations above 450
2	parts per million carbon dioxide equivalent; and
3	"(B) identify and assess—
4	"(i) significant residual risks not
5	avoided by the thresholds described in sub-
6	paragraph (A);
7	"(ii) alternative thresholds or targets
8	that may more effectively limit the risks
9	identified pursuant to clause (i); and
10	"(iii) thresholds above those described
11	in subparagraph (A) which significantly in-
12	crease the risk of certain impacts or render
13	them essentially permanent.
14	"(d) Status of Monitoring and Verification
15	Capabilities to Evaluate Greenhouse Gas Reduc-
16	TION EFFORTS.—The analysis required under subsection
17	(a)(2) shall evaluate the capabilities of the monitoring, re-
18	porting, and verification systems used to quantify progress
19	in achieving reductions in greenhouse gas emissions both
20	globally and in the United States (as described in section
21	[702]), including—
22	"(1) quantification of emissions and emission
23	reductions by entities participating in the cap and
24	trade program under this title;

1	"(2) quantification of emissions and emission
2	reductions by entities participating in the offset pro-
3	gram under this title;
4	"(3) quantification of emission and emissions
5	reductions by entities regulated by performance
6	standards;
7	"(4) quantification of aggregate net emissions
8	and emissions reductions by the United States; and
9	"(5) quantification of global changes in net
10	emissions and in sources and sinks of greenhouse
11	gases.
12	"(e) Status of Greenhouse Gas Reduction Ef-
13	FORTS.—The analysis required under subsection (a)(3)
14	shall address—
15	"(1) whether the programs under the
16	Act (and the amendments
17	made by that Act) and other Federal statutes are re-
18	sulting in sufficient United States greenhouse gas
19	emissions reductions to meet the emissions reduction
20	goals described in section [702], taking into ac-
21	count the use of offsets; and
22	"(2) whether United States actions, taking into
23	account international actions, commitments, and
24	trends, and considering the range of plausible emis-
25	sions scenarios, are sufficient to avoid—

1	"(A) atmospheric greenhouse gas con-
2	centrations above 450 parts per million carbon
3	dioxide equivalent;
4	"(B) global average surface temperature
5	3.6 degrees Fahrenheit (2 degrees Celsius)
6	above the pre-industrial average, or such other
7	temperature thresholds as the Administrator
8	deems appropriate; and
9	"(C) other temperature or greenhouse gas
10	thresholds identified pursuant to subsection
11	(c)(6)(B).
12	"(f) Recommendations.—
13	"(1) Latest scientific information.—
14	Based on the analysis described in subsection (a)(1),
15	each report under subsection (a) shall identify ac-
16	tions that could be taken to—
17	"(A) improve the characterization of
18	changes in the earth-climate system and im-
19	pacts of global climate change;
20	"(B) better inform decision making and
21	actions related to global climate change;
22	"(C) mitigate risks to natural and social
23	systems; and
24	"(D) design policies to better account for
25	climate risks.

1	"(2) Monitoring, reporting and
2	VERIFICATION.—Based on the analysis described in
3	subsection (a)(2), each report under subsection (a)
4	shall identify key gaps in measurement, reporting,
5	and verification capabilities and make recommenda-
6	tions to improve the accuracy and reliability of those
7	capabilities.
8	"(3) Status of greenhouse gas reduction
9	EFFORTS.—Based on the analysis described in sub-
10	section (a)(3), taking into account international ac-
11	tions, commitments, and trends, and considering the
12	range of plausible emissions scenarios, each report
13	under subsection (a) shall identify—
14	"(A) the quantity of additional reductions
15	required to meet the emissions reduction goals
16	in section [702];
17	"(B) the quantity of additional reductions
18	in global greenhouse gas emissions needed to
19	avoid the concentration and temperature
20	thresholds identified in subsection (e); and
21	"(C) possible strategies and approaches for
22	achieving additional reductions.
23	"(g) Authorization of Appropriations.—There
24	are authorized to be appropriated to carry out this section
25	such sums as may be necessary.

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1	SEC. 700. IMITORIE HOMBERT REVIEW.
2	"(a) In General.—Not later than 1 year after the
3	date of enactment of this title, the Administrator shall
4	offer to enter into a contract with the National Academy
5	of Sciences (in this section referred to as the 'Academy')
6	under which the Academy shall, not later than July 1,
7	2014, and every 4 years thereafter, submit to Congress
8	and the Administrator a report that includes—
9	"(1) a review of the most recent report and rec-
10	ommendations issued under section 703; and
11	"(2) an analysis of technologies to achieve re-
12	ductions in greenhouse gas emissions.
13	"(b) Failure to Issue a Report.—In the event
14	that the Administrator has not issued all or part of the
15	most recent report required under section 703, the Acad-
16	emy shall conduct its own review and analysis of the re-
17	quired information.
18	"(c) Technological Information.—The analysis
19	required under subsection (a)(2) shall—
20	"(1) review existing technological information
21	and reports, including the most recent reports by the
22	Department of Energy, the United States Global
23	Change Research Program, the Intergovernmental
24	Panel on Climate Change, and the International En-
25	ergy Agency and any other relevant information on

1	technologies or practices that reduce or limit green-
2	house gas emissions;
3	"(2) include the participation of technical ex-
4	perts from relevant private industry sectors;
5	"(3) review the current and future projected de-
6	ployment of technologies and practices in the United
7	States that reduce or limit greenhouse gas emis-
8	sions, including—
9	"(A) technologies for capture and seques-
10	tration of greenhouse gases;
11	"(B) technologies to improve energy effi-
12	ciency;
13	"(C) low- or zero-greenhouse gas emitting
14	energy technologies;
15	"(D) low- or zero-greenhouse gas emitting
16	fuels;
17	"(E) biological sequestration practices and
18	technologies; and
19	"(F) any other technologies the Academy
20	deems relevant; and
21	"(4) review and compare the emissions reduc-
22	tion potential, commercial viability, market penetra-
23	tion, investment trends, and deployment of the tech-
24	nologies described in paragraph (3), including—

1	"(A) the need for additional research and
2	development, including publicly funded research
3	and development;
4	"(B) the extent of commercial deployment
5	including, where appropriate, a comparison to
6	the cost and level of deployment of conventional
7	fossil fuel-fired energy technologies and devices
8	and
9	"(C) an evaluation of any substantial tech-
10	nological, legal, or market-based barriers to
11	commercial deployment.
12	"(d) Recommendations.—
13	"(1) Latest scientific information.—
14	Based on the review described in subsection (a)(1),
15	the Academy shall identify actions that could be
16	taken to—
17	"(A) improve the characterization of
18	changes in the earth-climate system and im-
19	pacts of global climate change;
20	"(B) better inform decision making and
21	actions related to global climate change;
22	"(C) mitigate risks to natural and social
23	systems;
24	"(D) design policies to better account for
25	climate risks; and

1	"(E) improve the accuracy and reliability
2	of capabilities to monitor, report, and verify
3	greenhouse gas emissions reduction efforts.
4	"(2) Technological information.—Based
5	on the analysis described in subsection (a)(2), the
6	Academy shall identify—
7	"(A) additional emissions reductions that
8	may be possible as a result of technologies de-
9	scribed in the analysis;
10	"(B) barriers to the deployment of such
11	technologies; and
12	"(C) actions that could be taken to speed
13	deployment of such technologies.
14	"(3) Status of greenhouse gas reduction
15	EFFORTS.—Based on the review described in sub-
16	section (a)(1), the Academy shall identify—
17	"(A) the quantity of additional reductions
18	required to meet the emissions reduction goals
19	described in section [702]; and
20	"(B) the quantity of additional reductions
21	in global greenhouse gas emissions needed to
22	avoid the concentration and temperature
23	thresholds described in section 703(c)(6)(A) or
24	identified pursuant to section 703(c)(6)(B).

1	"(e) Authorization of Appropriations.—There
2	are authorized to be appropriated to carry out this section
3	such sums as may be necessary.
4	"SEC. 707. PRESIDENTIAL RESPONSE AND RECOMMENDA
5	TIONS.
6	"Not later than July 1, 2015, and every 4 years
7	thereafter—
8	"(1) the President shall direct relevant Federal
9	agencies to use existing statutory authority to take
10	appropriate actions identified in the reports sub-
11	mitted under sections 703 and 704 and to address
12	any shortfalls identified in such reports; and
13	"(2) in the event that the National Academy of
14	Sciences has concluded, in the most recent report
15	submitted under section 704, that the United States
16	will not achieve the necessary domestic greenhouse
17	gas emissions reductions, or that global actions will
18	not maintain safe global average surface tempera-
19	ture and atmospheric greenhouse gas concentration
20	thresholds, the President shall submit to Congress a
21	plan identifying domestic and international actions
22	that will achieve necessary additional greenhouse gas
23	reductions, including any recommendations for legis-
24	lative action.

1	"PART B—DESIGNATION AND REGISTRATION OF
2	GREENHOUSE GASES
3	"SEC. 711. DESIGNATION OF GREENHOUSE GASES.
4	"(a) Greenhouse Gases.—For purposes of this
5	title, the following are greenhouse gases:
6	"(1) Carbon dioxide.
7	"(2) Methane.
8	"(3) Nitrous oxide.
9	"(4) Sulfur hexafluoride.
10	"(5) Hydrofluorocarbons from a chemical man-
11	ufacturing process at an industrial stationary
12	source.
13	"(6) Any perfluorocarbon, except as otherwise
14	provided in section 714.
15	"(7) Nitrogen trifluoride.
16	"(8) Any other anthropogenic gas designated as
17	a greenhouse gas by the Administrator under this
18	section.
19	"(b) Determination on Administrator's Initia-
20	TIVE.—The Administrator shall, by rule—
21	"(1) determine whether 1 metric ton of another
22	anthropogenic gas makes the same or greater con-
23	tribution to global warming over 100 years as 1 met-
24	ric ton of carbon dioxide;
25	"(2) determine the carbon dioxide equivalent

value for each gas with respect to which the Admin-

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1	istrator makes an affirmative determination under
2	paragraph (1);
3	"(3) for each gas with respect to which the Ad-
4	ministrator makes an affirmative determination
5	under paragraph (1) and that is used as a substitute
6	for a class I or class II substance under title VI, de-
7	termine the extent to which to regulate that gas
8	under section 619 and specify appropriate compli-
9	ance obligations under section 619;
10	"(4) designate as a greenhouse gas for purposes
11	of this title each gas for which the Administrator
12	makes an affirmative determination under para-
13	graph (1), to the extent that it is not regulated
14	under section 619; and
15	"(5) specify the appropriate compliance obliga-
16	tions under this title for each gas designated as a
17	greenhouse gas under paragraph (4).
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.

"(2) Contents of Petition.—The petitioner 1 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 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

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 and publish in the Federal Reg-
8	ister—
9	"(i) a determination that 1 metric ton
10	of the gas does not make a contribution to
11	global warming over 100 years that is
12	equal to or greater than that made by 1
13	metric ton of carbon dioxide; and
14	"(ii) an explanation of the decision; or
15	"(B) determine that 1 metric ton of the
16	gas makes a contribution to global warming
17	over 100 years that is equal to or greater than
18	that made by 1 metric ton of carbon dioxide,
19	and take the actions described in subsection (b)
20	with respect to such 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) Science Advisory Board Consultation.—

1	"(1) Consultation.—The Administrator
2	shall—
3	"(A) give notice to the Science Advisory
4	Board prior to making a determination under
5	subsection (b)(1), (c)(6), or (e)(2)(B);
6	"(B) consider the written recommendations
7	of the Science Advisory Board under paragraph
8	(2) regarding the determination; and
9	"(C) consult with the Science Advisory
10	Board regarding such determination, including
11	consultation subsequent to receipt of such writ-
12	ten recommendations.
13	"(2) Formulation of recommendations.—
14	Upon receipt of notice under paragraph (1)(A) re-
15	garding a pending determination under subsection
16	(b)(1), $(e)(6)$, or $(e)(2)(B)$, the Science Advisory
17	Board shall—
18	"(A) formulate recommendations regarding
19	such determination, subject to a peer review
20	process; and
21	"(B) submit such recommendations in
22	writing to the Administrator.
23	"(e) Manufacturing and Emission Notices.—
24	"(1) Notice requirement.—

1	"(A) In general.—Except as otherwise
2	provided in section 714, effective 24 months
3	after the date of enactment of this title, no per-
4	son may manufacture or introduce into inter-
5	state commerce a fluorinated gas, or emit a sig-
6	nificant quantity, as determined by the Admin-
7	istrator, of any fluorinated gas that is gen-
8	erated as a byproduct during the production or
9	use of another fluorinated gas, unless—
10	"(i) the gas is designated as a green-
11	house gas under this section or is an
12	ozone-depleting substance listed as a class
13	I or class II substance under title VI;
14	"(ii) the Administrator has deter-
15	mined that 1 metric ton of such gas does
16	not make a contribution to global warming
17	that is equal to or greater than that made
18	by 1 metric ton of carbon dioxide; or
19	"(iii) the person manufacturing or im-
20	porting the gas for distribution into inter-
21	state commerce, or emitting the gas, has
22	submitted to the Administrator, at least 90
23	days before the start of such manufacture,
24	introduction into commerce, or emission, a
25	notice of such person's manufacture, intro-

1	duction into commerce, or emission of such
2	gas, and the Administrator has not deter-
3	mined that notice or a substantially similar
4	notice is incomplete.
5	"(B) ALTERNATIVE COMPLIANCE.—For a
6	gas that is a substitute for a class I or class II
7	substance under title VI and either has been
8	listed as acceptable for use under section 612
9	or is currently subject to evaluation under sec-
10	tion 612, the Administrator may accept the no-
11	tice and information provided pursuant to that
12	section as fulfilling the obligation under clause
13	(iii) of subparagraph (A).
14	"(2) REVIEW AND ACTION BY THE ADMINIS-
15	TRATOR.—
16	"(A) Completeness.—Not later than 90
17	days after receipt of notice under paragraph
18	(1)(A)(iii) or (B), the Administrator shall deter-
19	mine whether the notice is complete.
20	"(B) Determination.—If the Adminis-
21	trator determines that the notice is complete
22	the Administrator shall, after notice and an op-
23	portunity for comment, not later than 12
24	months after receipt of the notice—

1	"(i) issue and publish in the Federal
2	Register a determination that 1 metric tor
3	of the gas does not make a contribution to
4	global warming over 100 years that is
5	equal to or greater than that made by 1
6	metric ton of carbon dioxide and an expla-
7	nation of the decision; or
8	"(ii) determine that 1 metric ton of
9	the gas makes a contribution to global
10	warming over 100 years that is equal to or
11	greater than that made by 1 metric ton of
12	carbon dioxide, and take the actions de-
13	scribed in subsection (b) with respect to
14	such gas.
15	"(f) REGULATIONS.—Not later than one year after
16	the date of enactment of this title, the Administrator shall
17	promulgate regulations to carry out this section. Such reg-
18	ulations shall include—
19	"(1) requirements for the contents of a petition
20	submitted under subsection (e);
21	"(2) requirements for the contents of a notice
22	required under subsection (e); and
23	"(3) methods and standards for evaluating the
24	carbon dioxide equivalent value of a gas.

- 1 "(g) Gases Regulated Under Title VI.—The
- 2 Administrator shall not designate a gas as a greenhouse
- 3 gas under this section to the extent that the gas is regu-
- 4 lated under title VI.
- 5 "(h) SAVINGS CLAUSE.—Nothing in this section shall
- 6 be interpreted to relieve any person from complying with
- 7 the requirements of section 612.
- 8 "SEC. 712. CARBON DIOXIDE EQUIVALENT VALUE OF
- 9 GREENHOUSE GASES.
- 10 "(a) Measure of Quantity of Greenhouse
- 11 Gases.—Any provision of this title or title VIII that refers
- 12 to a quantity or percentage of a quantity of greenhouse
- 13 gases shall mean the quantity or percentage of the green-
- 14 house gases expressed in carbon dioxide equivalents.
- 15 "(b) Initial Value.—Except as provided by the Ad-
- 16 ministrator under this section or section 711—
- 17 "(1) the carbon dioxide equivalent value of
- greenhouse gases for purposes of this Act shall be as
- 19 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

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

Greenhouse gas (1 metric ton)	Carbon dioxide equivalent (metric tons)
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
$\mathrm{C_4F_{10}}$	8,860
C ₆ F ₁₄	9,300
SF ₆	22,800
NF ₃	17,200

1 ; and

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"(2) the carbon dioxide equivalent value for purposes of this Act for any greenhouse gas not listed in the table under paragraph (1) shall be the 100-year Global Warming Potentials provided in the Intergovernmental Panel on Climate Change Fourth

8 "(c) Periodic Review.—

Assessment Report.

"(1) Not later than February 1, 2017, and (except as provided in paragraph (3)) not less than every 5 years thereafter, the Administrator shall—

1	"(A) review and, if appropriate, revise the
2	carbon dioxide equivalent values established
3	under this section or section 711(b)(2), based
4	on a determination of the number of metric
5	tons of carbon dioxide that makes the same
6	contribution to global warming over 100 years
7	as 1 metric ton of each greenhouse gas; and
8	"(B) publish in the Federal Register the
9	results of that review and any revisions.
10	"(2) A revised determination published in the
11	Federal Register under paragraph (1)(B) shall take
12	effect for greenhouse gas emissions starting on Jan-
13	uary 1 of the first calendar year starting at least 9
14	months after the date on which the revised deter-
15	mination was published.
16	"(3) The Administrator may decrease the fre-
17	quency of review and revision under paragraph (1)
18	if the Administrator determines that such decrease
19	is appropriate in order to synchronize such review
20	and revision with any similar review process carried
21	out pursuant to the United Nations Framework
22	Convention on Climate Change, done at New York
23	on May 9, 1992, or to an agreement negotiated
24	under that convention, except that in no event shall

1	the Administrator carry out such review and revision
2	any less frequently than every 10 years.
3	"(d) Methodology.—In setting carbon dioxide
4	equivalent values, for purposes of this section or section
5	711, the Administrator shall take into account publica-
6	tions by the Intergovernmental Panel on Climate Change
7	or a successor organization under the auspices of the
8	United Nations Environmental Programme and the World
9	Meteorological Organization.
10	"SEC. 713. GREENHOUSE GAS REGISTRY.
11	"(a) Definitions.—For purposes of this section:
12	"(1) CLIMATE REGISTRY.—The term 'Climate
13	Registry' means the greenhouse gas emissions reg-
14	istry jointly established and managed by more than
15	40 States and Indian tribes in 2007 to collect high-
16	quality greenhouse gas emission data from facilities,
17	corporations, and other organizations to support var-
18	ious greenhouse gas emission reporting and reduc-
19	tion policies for the member States and Indian
20	tribes.
21	"(2) Reporting entity.—The term 'reporting
22	entity' means—
23	"(A) a covered entity;
24	"(B) an entity that—

1	"(i) would be a covered entity if it had
2	emitted, produced, imported, manufac-
3	tured, or delivered in 2008 or any subse-
4	quent year more than the applicable
5	threshold level in the definition of covered
6	entity in paragraph (13) of section 700;
7	and
8	"(ii) has emitted, produced, imported,
9	manufactured, or delivered in 2008 or any
10	subsequent year more than the applicable
11	threshold level in the definition of covered
12	entity in paragraph (13) of section 700,
13	provided that the figure of 25,000 tons of
14	carbon dioxide equivalent is read instead
15	as 10,000 tons of carbon dioxide equivalent
16	and the figure of 460,000,000 cubic feet is
17	read instead as 184,000,000 cubic feet;
18	"(C) any other entity that emits a green-
19	house gas, or produces, imports, manufactures,
20	or delivers material whose use results or may
21	result in greenhouse gas emissions if the Ad-
22	ministrator determines that reporting under
23	this section by such entity will help achieve the
24	purposes of this title or title VIII;

1	"(D) any vehicle fleet with emissions of
2	more than 25,000 tons of carbon dioxide equiv-
3	alent on an annual basis, if the Administrator
4	determines that the inclusion of such fleet will
5	help achieve the purposes of this title or title
6	VIII; or
7	"(E) any entity that delivers electricity to
8	an energy-intensive facility in an industrial sec-
9	tor that meets the energy or greenhouse gas in-
10	tensity criteria in section 764(b)(2)(A)(i).
11	"(b) Regulations.—
12	"(1) In general.—Not later than 6 months
13	after the date of enactment of this title, the Admin-
14	istrator shall issue regulations establishing a Federal
15	greenhouse gas registry. Such regulations shall—
16	"(A) require reporting entities to submit to
17	the Administrator data on—
18	"(i) greenhouse gas emissions in the
19	United States;
20	"(ii) the production and manufacture
21	in the United States, importation into the
22	United States, and, at the discretion of the
23	Administrator, exportation from the
24	United States, of fuels and industrial gases

1	the uses of which result or may result in
2	greenhouse gas emissions;
3	"(iii) deliveries in the United States of
4	natural gas, and any other gas meeting the
5	specifications for commingling with natural
6	gas for purposes of delivery, the combus-
7	tion of which result or may result in green-
8	house gas emissions; and
9	"(iv) the capture and sequestration of
10	greenhouse gases;
11	"(B) require covered entities and, where
12	appropriate, other reporting entities to submit
13	to the Administrator data sufficient to ensure
14	compliance with or implementation of the re-
15	quirements of this title;
16	"(C) require reporting of electricity deliv-
17	ered to industrial sources in energy-intensive in-
18	dustries;
19	"(D) ensure the completeness, consistency,
20	transparency, accuracy, precision, and reliability
21	of such data;
22	"(E) take into account the best practices
23	from the most recent Federal, State, tribal, and
24	international protocols for the measurement, ac-
25	counting, reporting, and verification of green-

1	house gas emissions, including protocols from
2	the Climate Registry and other mandatory
3	State or multistate authorized programs;
4	"(F) take into account the latest scientific
5	research;
6	"(G) require that, for covered entities with
7	respect to greenhouse gases to which section
8	722 applies, and, to the extent determined to be
9	appropriate by the Administrator, for covered
10	entities with respect to other greenhouse gases
11	and for other reporting entities, submitted data
12	are based on—
13	"(i) continuous monitoring systems
14	for fuel flow or emissions, such as contin-
15	uous emission monitoring systems;
16	"(ii) alternative systems that are dem-
17	onstrated as providing data with the same
18	precision, reliability, accessibility, and
19	timeliness, or, to the extent the Adminis-
20	trator determines is appropriate for report-
21	ing small amounts of emissions, the same
22	precision, reliability, and accessibility and
23	similar timeliness, as data provided by con-
24	tinuous monitoring systems for fuel flow or
25	emissions; or

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"(iii) alternative methodologies that are demonstrated to provide data with precision, reliability, accessibility, and timeliness, or, to the extent the Administrator determines is appropriate for reporting small amounts of emissions, precision, reliability, and accessibility, as similar as is technically feasible to that of data generally provided by continuous monitoring systems for fuel flow or emissions, if the Administrator determines that, with respect to a reporting entity, there is no continuous monitoring system or alternative system described in clause (i) or (ii) that is technically feasible; "(H) require that the Administrator, in determining the extent to which the requirement to use systems or methodologies in accordance with subparagraph (G) is appropriate for reporting entities other than covered entities or for greenhouse gases to which section 722 does not apply, consider the cost of using such systems and methodologies, and of using other systems and methodologies that are available and

suitable, for quantifying the emissions involved

1	in light of the purposes of this title, including
2	the goal of collecting consistent entity-wide
3	data;
4	"(I) include methods for minimizing double
5	reporting and avoiding irreconcilable double re-
6	porting of greenhouse gas emissions;
7	"(J) establish measurement protocols for
8	carbon capture and sequestration systems, tak-
9	ing into consideration the regulations promul-
10	gated under section 813;
11	"(K) require that reporting entities provide
12	the data required under this paragraph in re-
13	ports submitted electronically to the Adminis-
14	trator, in such form and containing such infor-
15	mation as may be required by the Adminis-
16	trator;
17	"(L) include requirements for keeping
18	records supporting or related to, and protocols
19	for auditing, submitted data;
20	"(M) establish consistent policies for calcu-
21	lating carbon content and greenhouse gas emis-
22	sions for each type of fossil fuel with respect to
23	which reporting is required;
24	"(N) subsequent to implementation of poli-
25	cies developed under subparagraph (M), provide

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

1	is located, if the Administrator deter-
2	mines that such State or Indian tribe
3	has in effect protections for confiden-
4	tial business information that are
5	equivalent to protections applicable to
6	the Federal Government;
7	"(O) prescribe methods by which the Ad-
8	ministrator shall, in cases in which satisfactory
9	data are not submitted to the Administrator for
10	any period of time, estimate emission, produc-
11	tion, importation, manufacture, or delivery lev-
12	els—
13	"(i) for covered entities with respect
14	to greenhouse gas emissions, production,
15	importation, manufacture, or delivery regu-
16	lated under this title to ensure that emis-
17	sions, production, importation, manufac-
18	ture, or deliveries are not underreported,
19	and to create a strong incentive for meet-
20	ing data monitoring and reporting require-
21	ments—
22	"(I) with a conservative estimate
23	of the highest emission, production,
24	importation, manufacture, or delivery
25	levels that may have occurred during

1	the period for which data are missing;
2	or
3	"(II) to the extent the Adminis-
4	trator considers appropriate, with an
5	estimate of such levels assuming the
6	unit is emitting, producing, importing,
7	manufacturing, or delivering at a
8	maximum potential level during the
9	period, in order to ensure that such
10	levels are not underreported and to
11	create a strong incentive for meeting
12	data monitoring and reporting re-
13	quirements; and
14	"(ii) for covered entities with respect
15	to greenhouse gas emissions to which sec-
16	tion 722 does not apply and for other re-
17	porting entities, with a reasonable estimate
18	of the emission, production, importation,
19	manufacture, or delivery levels that may
20	have occurred during the period for which
21	data are missing;
22	"(P) require the designation of a des-
23	ignated representative for each reporting entity;
24	"(Q) require an appropriate certification,
25	by the designated representative for the report-

ing entity, of accurate and complete accounting of greenhouse gas emissions, as determined by the Administrator; and

"(R) include requirements for other data necessary for accurate and complete accounting of greenhouse gas emissions, as determined by the Administrator, including data for quality assurance of monitoring systems, monitors and other measurement devices, and other data needed to verify reported emissions, production, importation, manufacture, or delivery.

"(2) TIMING.—

"(A) CALENDAR YEARS 2007 THROUGH 2010.—For a base period of calendar years 2007 through 2010, each reporting entity shall submit annual data required under this section to the Administrator not later than March 31, 2011. The Administrator may waive or modify reporting requirements for calendar years 2007 through 2010 for categories of reporting entities to the extent that the Administrator determines that the reporting entities did not keep data or records necessary to meet reporting requirements. The Administrator may, in addition

1 to or in lieu of such requirements, collect infor-2 mation on energy consumption and production. 3 "(B) Subsequent Calendar Years.— 4 For calendar year 2011 and each subsequent 5 calendar year, each reporting entity shall sub-6 mit quarterly data required under this section 7 to the Administrator not later than 60 days 8 after the end of the applicable quarter, except 9 when the data is already being reported to the 10 Administrator on an earlier timeframe for an-11 other program. 12 "(3) Waiver of reporting requirements.— 13 The Administrator may waive reporting require-14 ments under this section for specific entities to the 15 extent that the Administrator determines that suffi-16 cient and equally or more reliable verified and timely 17 data are available to the Administrator and the pub-18 lic on the Internet under other mandatory statutory 19 requirements. 20 "(4) Alternative threshold.—The Admin-21 istrator may, by rule, establish applicability thresh-22 olds for reporting under this section using alter-23 native metrics and levels, provided that such metrics 24 and levels are easier to administer and cover the

1	same size and type of sources as the threshold de-
2	fined in this section.
3	"(c) Interrelationship With Other Systems.—
4	In developing the regulations issued under subsection (b),
5	the Administrator shall take into account the work done
6	by the Climate Registry and other mandatory State or
7	multistate programs. Such regulations shall include an ex-
8	planation of any major differences in approach between
9	the system established under the regulations and such reg-
10	istries and programs.
11	"SEC. 714. PERFLUOROCARBON REGULATION.
12	"(a) Definitions.—In this section:
13	"(1) Consumption.—The term 'consumption'
14	means, with respect to perflourocarbon, the quantity
15	of that substance produced in the United States,
16	plus the quantity imported, minus the quantity ex-
17	ported.
18	"(2) Produce; produced; production.—
19	"(A) IN GENERAL.—The terms 'produce',
20	'produced', and 'production' mean the manufac-
21	ture of perfluorocarbon, or the emission of
22	perfluorocarbon from other industrial sources.
23	"(B) Exclusions.—The terms 'produce',
24	'produced', and 'production' do not include—

1	"(i) the manufacture of
2	perfluorocarbon that is used and entirely
3	consumed (except for trace quantities) in
4	the manufacture of other chemicals or
5	products;
6	"(ii) the reuse or recycling of
7	perfluorocarbon; or
8	"(iii) the emission of perflourocarbon
9	from use in production processes, such as
10	electronics manufacturing.
11	"(C) Offset Credit.—The term offset
12	credit' means reduction of perfluorocarbon
13	emissions by destruction or conversionary use of
14	perfluorocarbons during production processes
15	such as electronics manufacturing.
16	"(b) Determination by Administrator.—As soon
17	as practicable after the date of enactment of this section
18	the Administrator shall determine, based on such criteria
19	as the Administrator determines to be appropriate, wheth-
20	er emissions from the production and consumption of
21	perfluorocarbon should be regulated in accordance with—
22	"(1) this section; or
23	"(2) the other applicable provisions of this title
24	"(c) Effect of Determination.—On a determina-
25	tion by the Administrator under subsection (a)(1) that

1	perfluorocarbon emissions described in subsection (b)
2	should be regulated in accordance with this section—
3	"(1) emissions from the production of
4	perfluorocarbon shall be subject to the best available
5	control technology (as defined in section 169) for
6	each greenhouse gas designated in section 711 at fa-
7	cilities emitting 25,000 metric tons of carbon dioxide
8	equivalent perflourocarbon emissions or more; and
9	"(2) the consumption of perfluorocarbon shall
10	be phased down in accordance with this section.
11	"(d) Use and Consumption.—
12	"(1) Phase-downs.—
13	"(A) Consumption.—
14	"(i) In general.—With respect to
15	perfluorocarbon, not later than 18 months
16	after the date of enactment of this section,
17	the Administrator shall promulgate regula-
18	tions phasing down, in accordance with
19	this section—
20	(I) the consumption of
21	perfluorocarbon in the United States;
22	and
23	"(II) the importation into the
24	United States of products containing
25	any perfluorocarbon.

1	"(ii) Prohibition.—Effective begin-
2	ning on January 1, 2014, it shall be un-
3	lawful for any person to produce any
4	perfluorocarbon, import any
5	perfluorocarbon, or import any product
6	containing perfluorocarbon, unless the per-
7	son holds 1 consumption allowance or 1
8	offset credit for each carbon dioxide equiv-
9	alent ton of the perfluorocarbon destroyed.
10	"(iii) Retired allowances.—Any
11	person who exports a perfluorocarbon for
12	which a use allowance was retired may re-
13	ceive a refund of that allowance from the
14	Administrator after the date of export.
15	"(B) Integrity of cap.—To maintain
16	the integrity of the perfluorocarbon cap under
17	this paragraph, the Administrator may limit, by
18	regulation, the percentage of the compliance ob-
19	ligation of any person that may be met through
20	the consumption of offset credits or banked al-
21	lowances.
22	"(C) Counting of violations.—Each
23	consumption allowance or offset credit not held
24	as required by this subsection shall be a sepa-
25	rate violation of this section.

1	"(2) Schedule.—Pursuant to the regulations
2	promulgated under paragraph (1)(A), the number of
3	perfluorocarbon consumption allowances available for
4	distribution for each calendar year beginning in cal-
5	endar year 2014 shall be established by the Adminis-
6	trator.
7	"(3) Baseline.—
8	"(A) IN GENERAL.—Not later than 1 year
9	after the date of enactment of this section, the
10	Administrator shall promulgate regulations to
11	establish the baseline for purposes of paragraph
12	(2).
13	"(B) CALCULATION.—The baseline shall
14	be—
15	"(i) the sum, expressed in metric tons
16	of carbon dioxide equivalents, of—
17	"(I) the average of the annual
18	consumption of all perfluorocarbon in
19	each of calendar years 2004, 2005,
20	and 2006; and
21	"(II) the annual average quantity
22	of all perfluorocarbon contained in im-
23	ported products during the period of
24	calendar years 2004, 2005, and 2006;
25	or

1 "(ii) such alternative quantity of car-2 bon dioxide equivalents that, as determined 3 by the Administrator, more accurately re-4 flects the average annual quantity of 5 perfluorocarbon consumed in and imported 6 into the United States (including in prod-7 ucts), as based on information compiled by 8 the Administrator. 9 "(4) DISTRIBUTION OF ALLOWANCES.—The 10 Administrator shall determine an allocation, and 11 procedures for the distribution, transfer, and ex-12 change of allowances for the consumption of 13 perfluorocarbon under this section, including a de-14 termination of whether allowances may be auctioned, 15 sold, or allocated and distributed at no cost, trans-16 ferred, or exchanged for domestic or international 17 consumption, in accordance with such criteria as the 18 Administrator considers to be appropriate. "(e) Implementation.—To the maximum extent 19 practicable, the Administrator shall implement this section 21 in accordance with the procedures described in section 22 619. 23 "(f) Deadlines for Compliance.—The Administrator shall promulgate regulations for perfluorocarbon in

1	accordance with this section by not later than October 31,
2	2013.
3	"PART C—PROGRAM RULES
4	"SEC. 721. EMISSION ALLOWANCES.
5	"(a) In General.—The Administrator shall estab-
6	lish a separate quantity of emission allowances for each
7	calendar year starting in 2012, in the amounts prescribed
8	under subsection (e).
9	"(b) Identification Numbers.—The Adminis-
10	trator shall assign to each emission allowance established
11	under subsection (a) a unique identification number that
12	includes the vintage year for that emission allowance.
13	"(c) Legal Status of Emission Allowances.—
14	"(1) In general.—An allowance established
15	by the Administrator under this title does not con-
16	stitute a property right.
17	"(2) Termination or limitation.—Nothing
18	in this Act or any other provision of law shall be
19	construed to limit or alter the authority of the
20	United States, including the Administrator acting
21	pursuant to statutory authority, to terminate or
22	limit allowances or offset credits.
23	"(3) Other provisions unaffected.—Ex-
24	cept as otherwise specified in this Act, nothing in

this Act relating to allowances or offset credits es-

- tablished or issued under this title shall affect the
- 2 application of any other provision of law to a covered
- 3 entity, or the responsibility for a covered entity to
- 4 comply with any such provision of law.
- 5 "(d) SAVINGS PROVISION.—Nothing in this part shall
- 6 be construed as requiring a change of any kind in any
- 7 State law regulating electric utility rates and charges, or
- 8 as affecting any State law regarding such State regula-
- 9 tion, or as limiting State regulation (including any
- 10 prudency review) under such a State law. Nothing in this
- 11 part shall be construed as modifying the Federal Power
- 12 Act (16 U.S.C. 791a et seq.) or as affecting the authority
- 13 of the Federal Energy Regulatory Commission under that
- 14 Act. Nothing in this part shall be construed to interfere
- 15 with or impair any program for competitive bidding for
- 16 power supply in a State in which such program is estab-
- 17 lished.
- 18 "(e) Allowances for Each Calendar Year.—
- 19 "(1) IN GENERAL.—Except as provided in para-
- graph (2), the number of emission allowances estab-
- 21 lished by the Administrator under subsection (a) for
- each calendar year shall be as provided in the fol-
- lowing table:

"Calendar year	Emission allowances (in millions)
2012	4,627
2013	4,544
2014	5,099
2015	5,003
2016	5,482
2017	5,375
2018	5,269
2019	5,162
2020	5,056
2021	4,903
2022	4,751
2023	4,599
2024	4,446
2025	4,294
2026	4,142
2027	3,990
2028	3,837
2029	3,685
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

"Calendar year	Emission allowances (in millions)
2039	2,409
2040	2,284
2041	2,159
2042	2,034
2043	1,910
2044	1,785
2045	1,660
2046	1,535
2047	1,410
2048	1,285
2049	1,160
2050 and each year thereafter	1,035

"(2) REVISION.—

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"(A) IN GENERAL.—The Administrator may adjust, in accordance with subparagraph (B), the number of emission allowances established pursuant to paragraph (1) if, after notice and an opportunity for public comment, the Administrator determines that—

"(i) United States greenhouse gas emissions in 2005 were other than 7,206 million metric tons carbon dioxide equivalent;

"(ii) if the requirements of this title for 2012 had been in effect in 2005, sec-

1	tion 722 would have required emission al-
2	lowances to be held for other than 66.2
3	percent of United States greenhouse gas
4	emissions in 2005;
5	"(iii) if the requirements of this title
6	for 2014 had been in effect in 2005, sec-
7	tion 722 would have required emission al-
8	lowances to be held for other than 75.7
9	percent of United States greenhouse gas
10	emissions in 2005; or
11	"(iv) if the requirements of this title
12	for 2016 had been in effect in 2005, sec-
13	tion 722 would have required emission al-
14	lowances to be held for other than 84.5
15	percent United States greenhouse gas
16	emissions in 2005.
17	"(B) Adjustment formula.—
18	"(i) In General.—If the Adminis-
19	trator adjusts under this paragraph the
20	number of emission allowances established
21	pursuant to paragraph (1), the number of
22	emission allowances the Administrator es-
23	tablishes for any given calendar year shall
24	equal the product of—

1	"(I) United States greenhouse
2	gas emissions in 2005, expressed in
3	tons of carbon dioxide equivalent;
4	"(II) the percent of United
5	States greenhouse gas emissions in
6	2005, expressed in tons of carbon di-
7	oxide equivalent, that would have been
8	subject to section 722 if the require-
9	ments of this title for the given cal-
10	endar year had been in effect in 2005;
11	and
12	"(III) the percentage set forth
13	for that calendar year in section
14	701(a), or determined under clause
15	(ii) of this subparagraph.
16	"(ii) Targets.—In applying the por-
17	tion of the formula in clause (i)(III) of this
18	subparagraph, for calendar years for which
19	a percentage is not listed in section 701(a),
20	the Administrator shall use a uniform an-
21	nual decline in the amount of emissions be-
22	tween the years that are specified.
23	"(iii) Carbon dioxide equivalent
24	VALUE.—If the Administrator adjusts
25	under this paragraph the number of emis-

1	sion allowances established pursuant to
2	paragraph (1), the Administrator shall use
3	the carbon dioxide equivalent values estab-
4	lished pursuant to section 712.
5	"(iv) Limitation on adjustment
6	TIMING.—Once a calendar year has start-
7	ed, the Administrator may not adjust the
8	number of emission allowances to be estab-
9	lished for that calendar year.
10	"(C) Limitation on adjustment au-
11	THORITY.—The Administrator may adjust
12	under this paragraph the number of emission
13	allowances to be established pursuant to para-
14	graph (1) only once.
15	"(f) Compensatory Allowance.—
16	"(1) In general.—The regulations promul-
17	gated under subsection (h) shall provide for the es-
18	tablishment and distribution of compensatory allow-
19	ances for—
20	"(A) the destruction, in 2012 or later, of
21	fluorinated gases that are greenhouse gases if—
22	"(i) allowances or offset credits were
23	retired for their production or importation;
24	and

1 "(ii) such gases are not required to be 2 destroyed under any other provision of law; 3 "(B) the nonemissive use, in 2012 or later, 4 of petroleum-based or coal-based liquid or gas-5 eous fuel, petroleum coke, natural gas liquid, or 6 natural gas as a feedstock, if allowances or off-7 set credits were retired for the greenhouse 8 gases that would have been emitted from their 9 combustion; and 10 "(C) the conversionary use, in 2012 or 11 later, of fluorinated gases in a manufacturing 12 process, including semiconductor research or 13 manufacturing, if allowances or offset credits 14 were retired for the production or importation 15 of such gas. "(2) Establishment and distribution.— 16 17 "(A) IN GENERAL.—Not later than 90 18 days after the end of each calendar year, the 19 Administrator shall establish and distribute to 20 the entity taking the actions described in sub-21 paragraph (A), (B), or (C) of paragraph (1) a 22 quantity of compensatory allowances equivalent 23 to the number of tons of carbon dioxide equiva-24 lent of avoided emissions achieved through such 25 actions. In establishing the quantity of compen-

1	satory allowances, the Administrator shall take
2	into account the carbon dioxide equivalent value
3	of any greenhouse gas resulting from such ac-
4	tion.
5	"(B) Source of allowances.—Compen-
6	satory allowances established under this sub-
7	section shall not be emission allowances estab-
8	lished under subsection (a).
9	"(C) Identification numbers.—The
10	Administrator shall assign to each compen-
11	satory allowance established under subpara-
12	graph (A) a unique identification number.
13	"(3) Definitions.—For purposes of this sub-
14	section—
15	"(A) the term 'destruction' means the con-
16	version of a greenhouse gas by thermal, chem-
17	ical, or other means to another gas or set of
18	gases with little or no carbon dioxide equivalent
19	value;
20	"(B) the term 'nonemissive use' means the
21	use of fossil fuel as a feedstock in an industrial
22	or manufacturing process to the extent that
23	greenhouse gases are not emitted from such
24	process, and to the extent that the products of

1	such process are not intended for use as, or to
2	be contained in, a fuel; and
3	"(C) the term 'conversionary use' means
4	the conversion during research or manufac-
5	turing of a fluorinated gas into another green-
6	house gas or set of gases with a lower carbon
7	dioxide equivalent value.
8	"(4) Feedstock emissions study.—
9	"(A) The Administrator may conduct a
10	study to determine the extent to which petro-
11	leum-based or coal-based liquid or gaseous fuel,
12	petroleum coke, natural gas liquid, or natural
13	gas are used as feedstocks in manufacturing
14	processes to produce products and the green-
15	house gas emissions resulting from such uses.
16	"(B) If as a result of such a study, the Ad-
17	ministrator determines that the use of such
18	products by noncovered sources results in sub-
19	stantial emissions of greenhouse gases or their
20	precursors and that such emissions have not
21	been adequately addressed under other require-
22	ments of this Act, the Administrator may, after
23	notice and comment rulemaking, promulgate a

regulation reducing compensatory allowances

1	commensurately if doing so will not result in
2	leakage.
3	"(g) Fluorinated Gases Assessment.—
4	"(1) IN GENERAL.—Not later than March 31,
5	2014, the Administrator shall conduct an assess-
6	ment of the regulation of non-hydrofluorocarbon
7	fluorinated gases under this title (excluding
8	perfluorocarbon) to determine whether the most ap-
9	propriate point of regulation of those gases is at—
10	"(A) the gas manufacturer or importer
11	level; or
12	"(B) the downstream source of the emis-
13	sions.
14	"(2) Modification of Definition.—If the
15	Administrator determines, based on consideration of
16	environmental effectiveness, cost-effectiveness, ad-
17	ministrative feasibility, extent of coverage of emis-
18	sions, and competitiveness considerations, that emis-
19	sions of non-hydrofluorocarbon fluorinated gases (ex-
20	cluding perfluorocarbons) can best be regulated by
21	designating downstream emission sources as covered
22	entities with compliance obligations under section
23	722, the Administrator shall—
24	"(A) after providing notice and an oppor-
25	tunity for comment, modify the definition of the

- 1 term 'covered entity' with respect to fluorinated 2 than hydrofluorocarbons (other 3 perfluorocarbons) accordingly; and 4 "(B) establish such requirements as are 5 necessary to ensure compliance by the covered 6 entities with the requirements of this title. 7 "(h) REGULATIONS.—Not later than 24 months after 8 the date of enactment of this title, the Administrator shall promulgate regulations to carry out the provisions of this 10 title. "SEC. 722. PROHIBITION OF EXCESS EMISSIONS. 12 "(a) Prohibition.—Except as provided in sub-13 section (c), effective January 1, 2012, each covered entity is prohibited from emitting greenhouse gases, and having 14 15 attributable greenhouse gas emissions, in combination, in excess of its allowable emissions level. A covered entity's 16 17 allowable emissions level for each calendar year is the 18 number of emission allowances (or credits or other allow-19 ances as provided in subsection (d)) it holds as of 12:01 20 a.m. on April 1 (or a later date established by the Admin-21 istrator under subsection (j)) of the following calendar 22 year. 23 "(b) Methods of Demonstrating Compliance.— Except as otherwise provided in this section, the owner
- 25 or operator of a covered entity shall not be considered to

be in compliance with the prohibition in subsection (a) unless, as of 12:01 a.m. on April 1 (or a later date estab-3 lished by the Administrator under subsection (j)) of each 4 calendar year starting in 2013, the owner or operator 5 holds a quantity of emission allowances (or credits or other 6 allowances as provided in subsection (d)) at least as great 7 as the quantity calculated as follows: "(1) Electricity sources.—For a covered 8 9 entity described in section 700(13)(A), 1 emission 10 allowance for each ton of carbon dioxide equivalent 11 of greenhouse gas that such covered entity emitted 12 in the previous calendar year, excluding emissions 13 resulting from the combustion of— 14 "(A) petroleum-based or coal-based liquid fuel; 15 "(B) natural gas liquid; 16 17 "(C) renewable biomass or gas derived 18 from renewable biomass; or 19 "(D) petroleum coke or gas derived from 20 petroleum coke. "(2) Fuel producers and importers.—For 21 22 a covered entity described in section 700(13)(B), 1 23 emission allowance for each ton of carbon dioxide 24 equivalent of greenhouse gas that would be emitted 25 from the combustion of any petroleum-based or coal-

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- 1 based liquid fuel, petroleum coke, or natural gas liq-2 uid, produced or imported by such covered entity 3 during the previous calendar year for sale or dis-4 tribution in interstate commerce, assuming no cap-5 ture and sequestration of any greenhouse gas emis-6 sions.
- 7 "(3) Industrial gas producers and im-8 PORTERS.—For a covered entity described in section 9 700(13)(C), 1 emission allowance for each ton of 10 carbon dioxide equivalent of fossil fuel-based carbon dioxide, nitrous oxide, or any other fluorinated gas 12 that is a greenhouse gas (except for nitrogen 13 trifluoride), or any combination thereof, produced or 14 imported by such covered entity during the previous 15 calendar year for sale or distribution in interstate 16 commerce or released as fugitive emissions in the 17 production of fluorinated gas.
 - "(4) NITROGEN TRIFLUORIDE SOURCES.—For a covered entity described in section 700(13)(D), 1 emission allowance for each ton of carbon dioxide equivalent of nitrogen trifluoride that such covered entity emitted in the previous calendar year.
 - "(5) Geological sequestration sites.—For a covered entity described in section 700(13)(E), 1 emission allowance for each ton of carbon dioxide

1	equivalent of greenhouse gas that such covered enti-
2	ty emitted in the previous calendar year.
3	"(6) Industrial stationary sources.—For
4	a covered entity described in section 700(13)(F),
5	(G), or (H), 1 emission allowance for each ton of
6	carbon dioxide equivalent of greenhouse gas that
7	such covered entity emitted in the previous calendar
8	year, excluding emissions resulting from—
9	"(A) the combustion of petroleum-based or
10	coal-based liquid fuel;
11	"(B) the combustion of natural gas liquid;
12	"(C) the combustion of renewable biomass
13	or gas derived from renewable biomass;
14	"(D) the combustion of petroleum coke or
15	gas derived from petroleum coke; or
16	"(E) the use of any fluorinated gas that is
17	a greenhouse gas purchased for use at that cov-
18	ered entity, except for nitrogen trifluoride.
19	"(7) Industrial fossil fuel-fired combus-
20	TION DEVICES.—For a covered entity described in
21	section 700(13)(I), 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 combus-
25	tion of—

1	"(A) petroleum-based or coal-based liquid
2	fuel;
3	"(B) natural gas liquid;
4	"(C) renewable biomass or gas derived
5	from renewable biomass; or
6	"(D) petroleum coke or gas derived from
7	petroleum coke.
8	"(8) Natural gas local distribution com-
9	PANIES.—For a covered entity described in section
10	700(13)(J), 1 emission allowance for each ton of
11	carbon dioxide equivalent of greenhouse gas that
12	would be emitted from the combustion of the natural
13	gas, and any other gas meeting the specifications for
14	commingling with natural gas for purposes of deliv-
15	ery, that such entity delivered during the previous
16	calendar year to customers that are not covered enti-
17	ties, assuming no capture and sequestration of that
18	greenhouse gas.
19	"(9) R&D facilities.—
20	"(A) IN GENERAL.—For a qualified R&D
21	facility that emitted 25,000 tons per year or
22	more carbon dioxide equivalent in the previous
23	calendar year, 1 emission allowance for each
24	ton of carbon dioxide equivalent of greenhouse

1	gas that such facility emitted in the previous
2	calendar year.
3	"(B) Treatment.—A qualified R&D facil-
4	ity shall be treated as a separate covered entity
5	solely for purposes of applying the requirements
6	of this subsection.
7	"(10) Algae-based fuels.—Where carbon di-
8	oxide (or another greenhouse gas) is used as an
9	input in the production of algae-based fuels, the Ad-
10	ministrator shall ensure that allowances are required
11	to be held either for the carbon dioxide used to grow
12	the algae or for the carbon dioxide emitted from
13	combustion of the fuel produced from such algae,
14	but not for both.
15	"(11) Fugitive emissions.—The greenhouse
16	gas emissions to which paragraphs (1), (4), (6), and
17	(7) apply shall not include fugitive emissions of
18	greenhouse gas, except to the extent the Adminis-
19	trator determines that data on the carbon dioxide
20	equivalent value of greenhouse gas in the fugitive
21	emissions can be provided with sufficient precision
22	reliability, accessibility, and timeliness to ensure the
23	integrity of emission allowances, the allowance track-
24	ing system, and the cap on emissions.

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"(12) Export exemption.—This section shall not apply to any petroleum-based or coal-based liquid fuel, petroleum coke, natural gas liquid, fossil fuel-based carbon dioxide, nitrous oxide, or fluorinated gas that is exported for sale or use.

"(13) Natural LIQUIDS.—Notwith-GAS standing subsection (a), if the owner or operator of a covered entity described in section 700(13)(B) that produces natural gas liquids does not take ownership of the liquids, and is not responsible for the distribution or use of the liquids in commerce, the owner of the liquids shall be responsible for compliance with this section, section 723, and other relevant sections of this title with respect to such liquids. In the regulations promulgated under section 721, the Administrator shall include such provisions with respect to such liquids as the Administrator determines are appropriate to determine and ensure compliance, and to penalize noncompliance. In such a case, the owner of the covered entity shall provide to the Administrator, in a manner to be determined by the Administrator, information regarding the quantity and ownership of liquids produced at the covered entity.

1	"(14) Application of multiple para-
2	GRAPHS.—For a covered entity to which more than
3	1 of paragraphs (1) through (8) apply, all applicable
4	paragraphs shall apply, except that not more than 1
5	emission allowance shall be required for the same
6	emission.
7	"(c) Phase-in of Prohibition.—
8	"(1) Industrial stationary sources.—The
9	prohibition under subsection (a) shall first apply to
10	a covered entity described in section 700(13)(D),
11	(F), (G), (H), or (I), with respect to emissions oc-
12	curring during calendar year 2014.
13	"(2) Natural gas local distribution com-
14	PANIES.—The prohibition under subsection (a) shall
15	first apply to a covered entity described in section
16	700(13)(J) with respect to deliveries occurring dur-
17	ing calendar year 2016.
18	"(d) Additional Methods.—In addition to using
19	the method of compliance described in subsection (b), a
20	covered entity may do the following:
21	"(1) Offset credits.—
22	"(A) Credits.—
23	"(i) In general.—Covered entities
24	collectively may, in accordance with this
25	paragraph, use offset credits to dem-

1	onstrate compliance for up to a maximum
2	of 2,000,000,000 tons of greenhouse gas
3	emissions annually.
4	"(ii) Demonstration of compli-
5	ANCE.—In any calendar year, a covered
6	entity may demonstrate compliance by
7	holding 1 domestic offset credit or 1.25
8	international offset credits in lieu of an
9	emission allowance, except as provided in
10	subparagraph (D), up to a total number of
11	offset credits described in subparagraph
12	(B).
13	"(B) APPLICABLE PERCENTAGE.—
14	"(i) IN GENERAL.—The total number
15	of offset credits referred to in subpara-
16	graph (A)(ii) for a covered entity for a
17	given calendar year shall be determined
18	by—
19	"(I) dividing—
20	"(aa) the tons of carbon di-
21	oxide equivalent of greenhouse
22	gas emissions of the covered enti-
23	ty (except for the types of emis-
24	sions excluded under subpara-
25	graphs (A) through (D) of sub-

1	section (b)(1), subparagraphs (A)
2	through (E) of subsection (b)(6),
3	and subparagraphs (A) through
4	(D) of subsection $(b)(7)$) and at-
5	tributable greenhouse gas emis-
6	sions for the year before the pre-
7	ceding calendar year; by
8	"(bb) the sum of the tons of
9	carbon dioxide equivalent of
10	greenhouse gas emissions of all
11	covered entities (except for the
12	types of emissions excluded under
13	subparagraphs (A) through (D)
14	of subsection (b)(1), subpara-
15	graphs (A) through (E) of sub-
16	section $(b)(6)$, and subpara-
17	graphs (A) through (D) of sub-
18	section $(b)(7)$ and attributable
19	greenhouse gas emissions for the
20	year before the preceding cal-
21	endar year; and
22	"(II) multiplying the quotient ob-
23	tained under subclause (I) by
24	2,000,000,000.

1	"(ii) APPLICABILITY.—Clause (i) shall
2	apply to a covered entity (including a cov-
3	ered entity that commenced operation dur-
4	ing the preceding calendar year) even if
5	the covered entity had no greenhouse gas
6	emissions or attributable greenhouse gas
7	emissions described in that clause.
8	"(iii) Offset credits.—Not more
9	than $\frac{3}{4}$ of the applicable percentage under
10	this paragraph may be used by holding do-
11	mestic offset credits, and not more than $\frac{1}{4}$
12	of the applicable percentage under this
13	paragraph may be used by holding inter-
14	national offset credits, except as provided
15	in subparagraph (C).
16	"(C) Modified percentages.—If the
17	Administrator determines that domestic offset
18	credits available for use in demonstrating com-
19	pliance in any calendar year at domestic offset
20	prices generally equal to or less than allowance
21	prices, are likely to offset less than 900,000,000
22	tons of greenhouse gas emissions (measured in
23	tons of carbon dioxide equivalents), the Admin-
24	istrator shall increase the percent of emissions
25	that can be offset through the use of inter-

1 national offset credits (and decrease the percent 2 of emissions that can be allowed through the 3 use of domestic offset credits by the same 4 amount) to reflect the amount that 5 1,500,000,000 exceeds the number of domestic 6 offset credits the Administrator determines is 7 available for that year, up to a maximum of 8 750,000,000 tons of greenhouse gas emissions. 9 "(D) International offset credits.— 10 Notwithstanding subparagraph (A), to dem-11 onstrate compliance prior to calendar year 12 2018, a covered entity may use 1 international offset credit in lieu of an emission allowance up 13 14 to the amount permitted under this paragraph. 15 "(E) President's recommendation.— 16 The President may make a recommendation to 17 whether Congress to the number as 18 2,000,000,000 specified in subparagraphs (A) 19 and (B) should be increased or decreased. 20 "(2)International **EMISSION** ALLOW-21 ANCES.—To demonstrate compliance, a covered enti-22 ty may hold an international emission allowance in 23 lieu of an emission allowance, except as modified 24 under section 728(d).

- 1 "(3) Compensatory allowances.—To dem-2 onstrate compliance, a covered entity may hold a 3 compensatory allowance obtained under section 4 721(f) in lieu of an emission allowance. 5 "(e) Retirement of Allowances and Credits.— As soon as practicable after a deadline established for cov-6 7 ered entities to demonstrate compliance with this title, the 8 Administrator shall retire the quantity of allowances or 9 credits required to be held under this title. 10 "(f) ALTERNATIVE METRICS.—For categories of covered entities described in subparagraph (B), (C), (D), (G), 12 (H), or (I) of section 700(13), the Administrator may, by 13 rule, establish an applicability threshold for inclusion under those subparagraphs using an alternative metric 14 15 and level, provided that such metric and level are easier to administer and cover the same size and type of sources 16 17 as the threshold defined in such subparagraphs. 18 "(g) Threshold Review.—For each category of 19 covered entities described in subparagraph (B), (C), (D), 20 (G), (H), or (I) of section 700(13), the Administrator 21 shall, in 2020 and once every 8 years thereafter, review 22 the carbon dioxide equivalent emission thresholds that are 23 used to define covered entities. After consideration of—
- 24 "(1) emissions from covered entities in each 25 such category, and from other entities of the same

type that emit less than the threshold amount for 1 2 the category (including emission sources that com-3 mence operation after the date of enactment of this 4 title that are not covered entities); and 5 "(2) whether greater greenhouse gas emission 6 reductions can be cost-effectively achieved by low-7 ering the applicable threshold, 8 the Administrator may by rule lower such threshold to not less than 10,000 tons of carbon dioxide equivalent emis-10 sions. In determining the cost effectiveness of potential re-11 ductions from lowering the threshold for covered entities, 12 the Administrator shall consider alternative regulatory 13 greenhouse gas programs, including setting standards 14 under other titles of this Act. 15 "(h) Designated Representatives.—The regulations promulgated under section 721(h) shall require that 16 17 each covered entity, and each entity holding allowances or 18 credits or receiving allowances or credits from the Admin-19 istrator under this title, select a designated representative. 20 "(i) Education and Outreach.— 21 "(1) In General.—The Administrator shall es-22 tablish and carry out a program of education and 23 outreach to assist covered entities, especially entities 24 having little experience with environmental regu-

latory requirements similar or comparable to those

- 1 under this title, in preparing to meet the compliance
- 2 obligations of this title. Such program shall include
- 3 education with respect to using markets to effec-
- 4 tively achieve such compliance.
- 5 "(2) Failure to receive information.—A
- 6 failure to receive information or assistance under
- 7 this subsection may not be used as a defense against
- 8 an allegation of any violation of this title.
- 9 "(j) Adjustment of Deadline.—The Adminis-
- 10 trator may, by rule, establish a deadline for demonstrating
- 11 compliance, for a calendar year, later than the date pro-
- 12 vided in subsection (a), as necessary to ensure the avail-
- 13 ability of emissions data, but in no event shall the deadline
- 14 be later than June 1.
- 15 "(k) Notice Requirement for Covered Enti-
- 16 TIES RECEIVING NATURAL GAS FROM NATURAL GAS
- 17 Local Distribution Companies.—The owner or oper-
- 18 ator of a covered entity that takes delivery of natural gas
- 19 from a natural gas local distribution company shall, not
- 20 later than September 1 of each calendar year, notify such
- 21 natural gas local distribution company in writing that
- 22 such entity will qualify as a covered entity under this title
- 23 for that calendar year.
- 24 "(1) Compliance Obligation.—For purposes of
- 25 this title, the year of a compliance obligation is the year

- 1 in which compliance is determined, not the year in which
- 2 the greenhouse gas emissions occur or the covered entity
- 3 has attributable greenhouse gas emissions.

4 "SEC. 723. PENALTY FOR NONCOMPLIANCE.

- 5 "(a) Enforcement.—A violation of any prohibition
- 6 of, requirement of, or regulation promulgated pursuant to
- 7 this title shall be a violation of this Act. It shall be a viola-
- 8 tion of this Act for a covered entity to emit greenhouse
- 9 gases, and have attributable greenhouse gas emissions, in
- 10 combination, in excess of its allowable emissions level as
- 11 provided in section 722(a). Each ton of carbon dioxide
- 12 equivalent for which a covered entity fails to demonstrate
- 13 compliance under section 722(b) shall be a separate viola-
- 14 tion.
- 15 "(b) Excess Emissions Penalty.—
- 16 "(1) IN GENERAL.—The owner or operator of
- any covered entity that fails for any year to comply,
- on the deadline described in section 722(a) or (j),
- shall be liable for payment to the Administrator of
- an excess emissions penalty in the amount described
- in paragraph (2).
- 22 "(2) Amount of an excess emis-
- sions penalty required to be paid under paragraph
- 24 (1) shall be equal to the product obtained by multi-
- 25 plying—

1	"(A) the tons of carbon dioxide equivalent
2	of greenhouse gas emissions or attributable
3	greenhouse gas emissions for which the owner
4	or operator of a covered entity failed to comply
5	under section 722(b) on the deadline; by
6	"(B) twice the fair market value of emis-
7	sion allowances established for emissions occur-
8	ring in the calendar year for which the emission
9	allowances were due.
10	"(3) Timing.—An excess emissions penalty re-
11	quired under this subsection shall be immediately
12	due and payable to the Administrator, without de-
13	mand, in accordance with regulations promulgated
14	by the Administrator, which shall be issued not later
15	than 2 years after the date of enactment of this
16	title.
17	"(4) No effect on liability.—An excess
18	emissions penalty due and payable by the owners or
19	operators of a covered entity under this subsection
20	shall not diminish the liability of the owners or oper-
21	ators for any fine, penalty, or assessment against
22	the owners or operators for the same violation under
23	any other provision of this Act or any other law.
24	"(c) Excess Emissions Allowances.—The owner
25	or operator of a covered entity that fails for any year to

- 1 comply on the deadline described in section 722(a) or (j)
- 2 shall be liable to offset the covered entity's excess com-
- 3 bination of greenhouse gases emitted and attributable
- 4 greenhouse gas emissions by an equal quantity of emission
- 5 allowances during the following calendar year, or such
- 6 longer period as the Administrator may prescribe. During
- 7 the year in which the covered entity failed to comply, or
- 8 any year thereafter, the Administrator may deduct the
- 9 emission allowances required under this subsection to off-
- 10 set the covered entity's excess actual or attributable emis-
- 11 sions.

12 "SEC. 724. TRADING.

- 13 "(a) Permitted Transactions.—Except as other-
- 14 wise provided in this title, the lawful holder of an emission
- 15 allowance, compensatory allowance, or offset credit may,
- 16 without restriction, sell, exchange, transfer, hold for com-
- 17 pliance in accordance with section 722, or request that the
- 18 Administrator retire the emission allowance, compensatory
- 19 allowance, or offset credit.
- 20 "(b) No Restriction on Transactions.—The
- 21 privilege of purchasing, holding, selling, exchanging,
- 22 transferring, and requesting retirement of emission allow-
- 23 ances, compensatory allowances, or offset credits shall not
- 24 be restricted to the owners and operators of covered enti-
- 25 ties, except as otherwise provided in this title.

- 1 "(c) Effectiveness of Allowance Trans-
- 2 FERS.—No transfer of an allowance or offset credit shall
- 3 be effective for purposes of this title until a certification
- 4 of the transfer, signed by the designated representative of
- 5 the transferor, is received and recorded by the Adminis-
- 6 trator in accordance with regulations promulgated under
- 7 section 721(h).
- 8 "(d) Allowance Tracking System.—The regula-
- 9 tions promulgated under section 721(h) shall include a
- 10 system for issuing, recording, holding, and tracking allow-
- 11 ances and offset credits that shall specify all necessary
- 12 procedures and requirements for an orderly and competi-
- 13 tive functioning of the allowance and offset credit markets.
- 14 Such regulations shall provide for appropriate publication
- 15 of the information in the system on the Internet.
- 16 "SEC. 725. BANKING AND BORROWING.
- 17 "(a) Banking.—An emission allowance may be used
- 18 to comply with section 722 or section 723 for emissions
- 19 in—
- 20 "(1) the vintage year for the allowance; or
- 21 "(2) any calendar year subsequent to the vin-
- tage year for the allowance.
- 23 "(b) Expiration.—
- 24 "(1) Regulations.—The Administrator may
- establish by regulation criteria and procedures for

1	determining whether, and for implementing a deter-
2	mination that, the expiration of an allowance or
3	credit established or issued by the Administrator
4	under this title, or expiration of the ability to use an
5	international emission allowance to comply with sec-
6	tion 722, is necessary to ensure the authenticity and
7	integrity of allowances or credits or the allowance
8	tracking system.
9	"(2) General Rule.—An allowance or credit
10	established or issued by the Administrator under
11	this title shall not expire unless—
12	"(A) it is retired by the Administrator as
13	required under this title; or
14	"(B) it is determined to expire or to have
15	expired by a specific date by the Administrator
16	in accordance with regulations promulgated
17	under paragraph (1).
18	"(3) International emission allow-
19	ANCES.—The ability to use an international emission
20	allowance to comply with section 722 shall not ex-
21	pire unless—
22	"(A) the allowance is retired by the Ad-
23	ministrator as required by this title; or
24	"(B) the ability to use such allowance to
25	meet such compliance obligation requirements is

1	determined to expire or to have expired by a
2	specific date by the Administrator in accord-
3	ance with regulations promulgated under para-
4	graph (1).
5	"(c) Borrowing Future Vintage Year Allow-
6	ANCES.—
7	"(1) Borrowing without interest.—In ad-
8	dition to the uses described in subsection (a), an
9	emission allowance may be used to comply with sec-
10	tion 722(a) or section 723 for emissions, production
11	importation, manufacture, or deliveries in the cal-
12	endar year immediately preceding the vintage year
13	for the allowance.
14	"(2) Borrowing with interest.—
15	"(A) In general.—A covered entity may
16	demonstrate compliance under subsection (b) in
17	a specific calendar year for up to 15 percent of
18	its emissions by holding emission allowances
19	with a vintage year 1 to 5 years later than that
20	calendar year.
21	"(B) Limitations.—An emission allow-
22	ance borrowed pursuant to this paragraph shall
23	be an emission allowance that is established by
24	the Administrator for a specific future calendar

1	year under section 721(a) and that is held by
2	the borrower.
3	"(C) Prepayment of interest.—For
4	each emission allowance that an owner or oper-
5	ator of a covered entity borrows pursuant to
6	this paragraph, such owner or operator shall, at
7	the time it borrows the allowance, hold for re-
8	tirement by the Administrator a quantity of
9	emission allowances that is equal to the product
10	obtained by multiplying—
11	"(i) 0.08; by
12	"(ii) the number of years between the
13	calendar year in which the allowance is
14	being used to satisfy a compliance obliga-
15	tion and the vintage year of the allowance.
16	"SEC. 726. STRATEGIC RESERVE.
17	"(a) Strategic Reserve Auctions.—
18	"(1) IN GENERAL.—Once each quarter of each
19	calendar year for which allowances are established
20	under section 721(a), the Administrator shall auc-
21	tion strategic reserve allowances.
22	"(2) Restriction to covered entities.—In
23	each auction conducted under paragraph (1), only
24	covered entities that the Administrator expects will
25	be required to comply with section 722 in the fol-

1	lowing calendar year shall be eligible to make pur-
2	chases.
3	"(b) Pool of Emission Allowances for Stra-
4	TEGIC RESERVE AUCTIONS.—
5	"(1) FILLING THE STRATEGIC RESERVE INI-
6	TIALLY.—
7	"(A) In General.—The Administrator
8	shall, not later than 2 years after the date of
9	enactment of this title, establish a strategic re-
10	serve account, and shall place in that account
11	an amount of emission allowances established
12	under section 721(a) for each calendar year
13	from 2012 through 2050 in the amounts speci-
14	fied in subparagraph (B) of this paragraph.
15	"(B) Amount.—The amount referred to in
16	subparagraph (A) shall be—
17	"(i) for each of calendar years 2012
18	through 2019, 1 percent of the quantity of
19	emission allowances established for that
20	year pursuant to section 721(e)(1);
21	"(ii) for each of calendar years 2020
22	through 2029, 2 percent of the quantity of
23	emission allowances established for that
24	year pursuant to section 721(e)(1); and

1	(III) for each of calendar years 2030
2	through 2050, 3 percent of the quantity of
3	emission allowances established for that
4	year pursuant to section 721(e)(1).
5	"(C) Effect on other provisions.—
6	Any provision in this title (except for subpara-
7	graph (B) of this paragraph) that refers to a
8	quantity or percentage of the emission allow-
9	ances established for a calendar year under sec-
10	tion 721(a) shall be considered to refer to the
11	amount of emission allowances as determined
12	pursuant to section 721(e), less any emission
13	allowances established for that year that are
14	placed in the strategic reserve account under
15	this paragraph.
16	"(2) Supplementing the strategic re-
17	SERVE.—The Administrator shall also—
18	"(A) at the end of each calendar year,
19	transfer to the strategic reserve account each
20	emission allowance that was offered for sale but
21	not sold at any auction conducted under section
22	789; and
23	"(B) transfer emission allowances estab-
24	lished under subsection (g) from auction pro-
25	ceeds, and deposit them into the strategic re-

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1	serve, to the extent necessary to maintain the
2	reserve at its original size.
3	"(c) Minimum Strategic Reserve Auction
4	Price.—
5	"(1) In general.—At each strategic reserve
6	auction, the Administrator shall offer emission al-
7	lowances for sale beginning at a minimum price per
8	emission allowance, which shall be known as the
9	'minimum strategic reserve auction price'.
10	"(2) Initial minimum strategic reserve
11	AUCTION PRICES.—The minimum strategic reserve
12	auction price shall be \$28 (in constant 2009 dollars)
13	for the strategic reserve auctions held in 2012. For
14	the strategic reserve auctions held in 2013 through
15	2017, the minimum strategic reserve auction price
16	shall be the strategic reserve auction price for the
17	previous year increased by 5 percent plus the rate of
18	inflation (as measured by the Consumer Price Index
19	for All Urban Consumers).
20	"(3) Minimum strategic reserve auction
21	PRICE IN SUBSEQUENT YEARS.—For each strategic
22	reserve auction held in 2018 and each year there-
23	after, the minimum strategic reserve auction price
24	shall be the strategic reserve auction price for the

previous year increased by 7 percent, plus the rate

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- 1 of inflation (as measured by the Consumer Price 2 Index for All Urban Consumers). 3 "(d) Quantity of Emission Allowances Re-LEASED FROM THE STRATEGIC RESERVE.— 5 "(1) Initial limits.—Subject to paragraph 6 (4), for each of calendar years 2012 through 2016, 7 the annual limit on the number of emission allow-8 ances from the strategic reserve account that may be 9 auctioned is an amount equal to 15 percent of the 10 emission allowances established for that calendar 11 year under section 721(a). This limit does not apply 12 to offset credits sold on consignment pursuant to 13 subsection (h). 14 "(2) Limits in subsequent years.—Subject 15 to paragraph (4), for calendar year 2017 and each 16 year thereafter, the annual limit on the number of 17 emission allowances from the strategic reserve ac-18 count that may be auctioned is an amount equal to 19 25 percent of the emission allowances established for 20 that calendar year under section 721(a). This limit 21 does not apply to offset credits sold on consignment
 - "(3) Allocation of Limitation.—One-fourth of each year's annual strategic reserve auction limit under this subsection shall be made available for

pursuant to subsection (h).

auction in each quarter. Any allowances from the strategic reserve account that are made available for sale in a quarterly auction and not sold shall be rolled over and added to the quantity available for sale in the following quarter, except that allowances not sold at auction in the fourth quarter of a year shall not be rolled over to the following calendar year's auctions, but shall be returned to the strategic reserve account.

"(4) AUTHORITY TO ADJUST LIMITATION.—The Administrator may adjust the limits in paragraphs (1) or (2) if the Administrator determines an adjustment is required to prevent disruptively high prices or to preserve the integrity of the strategic reserve. "(e) Purchase Limit.—

"(1) IN GENERAL.—Except as provided in paragraph (2) or (3), the annual number of emission allowances that a covered entity may purchase at the strategic reserve auctions in each calendar year shall not exceed 20 percent of the covered entity's emissions during the most recent year for which allowances or credits were retired under section 722.

"(2) 2012 LIMIT.—For calendar year 2012, the maximum aggregate number of emission allowances that a covered entity may purchase from that year's

- 1 strategic reserve auctions shall be 20 percent of the 2 covered entity's greenhouse gas emissions that the 3 covered entity reported to the registry established under section 713 for 2011 and that would be sub-4 5 ject to section 722(a) if occurring in later calendar 6 years. "(3) 7 NEW ENTRANTS.—The Administrator 8 shall, by regulation, establish a separate purchase 9 limit applicable to entities that expect to become a 10 covered entity in the year of the auction, permitting 11 them to purchase emission allowances at the stra-12 tegic reserve auctions in their first calendar year of 13 operation in an amount of at least 20 percent of 14 their expected combined emissions and attributable 15 greenhouse gas emissions for that year. 16 "(f) Delegation or Contract.—Pursuant to regu-17 lations under this section, the Administrator may, by dele-18 gation or contract, provide for the conduct of strategic re-19 serve auctions under the Administrator's supervision by 20 other departments or agencies of the Federal Government 21 or by nongovernmental agencies, groups, or organizations. "(g) Use of Auction Proceeds.—
- 22
- "(1) Deposit in Strategic reserve fund.— 23 24 The proceeds from strategic reserve auctions shall be 25 placed in the Strategic Reserve Fund established

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1	under section $[793(1)]$, and shall be available with-
2	out further appropriation or fiscal year limitation for
3	the purposes described in this subsection.
4	"(2) Offset Credits.—The Administrator
5	shall use the proceeds from each strategic reserve
6	auction to purchase offset credits, including domes-

shall use the proceeds from each strategic reserve auction to purchase offset credits, including domestic offset credits and international offset credits [issued for reduced deforestation activities pursuant to section 753]. The Administrator shall retire those offset credits and establish a number of emission allowances equal to the number of international offset credits so retired. Emission allowances established under this paragraph shall be in addition to those established under section 721(a).

"(3) EMISSION ALLOWANCES.—The Administrator shall deposit emission allowances established under paragraph (2) in the strategic reserve, except that, with respect to any such emission allowances in excess of the amount necessary to fill the strategic reserve to its original size, the Administrator shall—

"(A) except as provided in subparagraph (B), assign a vintage year to the emission allowance, which shall be no earlier than the year in which the allowance is established under paragraph (2) and shall treat such allowances

1	as ones that are not designated for distribution
2	or auction; and
3	"(B) to the extent any such allowances
4	cannot be assigned a vintage year because of
5	the limitation in paragraph (4), retire the allow-
6	ances.
7	"(4) Limitation.—In no case may the Admin-
8	istrator assign under paragraph (3)(A) more emis-
9	sion allowances to a vintage year than the number
10	of emission allowances from that vintage year that
11	were placed in the strategic reserve account under
12	subsection $(b)(1)$.
13	"(h) Availability of Offset Credits for Auc-
14	TION.—
15	"(1) In general.—The regulations promul-
16	gated under section 721(h) shall allow any entity
17	holding offset credits to request that the Adminis-
18	trator include such offset credits in an upcoming
19	strategic reserve auction. The regulations shall pro-
20	vide that—
21	"(A) upon sale of such offset credits, the
22	Administrator shall retire those offset credits,
23	and establish and provide to the purchasers a
	number of emission allowances equal to the
24	number of emission anowances equal to the

1	ances shall be in addition to those established
2	under section 721(a); and
3	"(B) for offset credits sold pursuant to
4	this subsection, the proceeds for the entity that
5	offered the offset credits for sale shall be the
6	lesser of—
7	"(i) the average daily closing price for
8	offset credits sold on registered exchanges
9	(or if such price is unavailable, the average
10	price as determined by the Administrator)
11	during the six months prior to the stra-
12	tegic reserve auction at which they were
13	auctioned, with the remaining funds col-
14	lected upon the sale of the offset credits
15	deposited in the Treasury; and
16	"(ii) the amount received for the off-
17	set credits at the auction.
18	"(2) Proceeds.—For offset credits sold pursu-
19	ant to this subsection, notwithstanding section 3302
20	of title 31, United States Code, or any other provi-
21	sion of law, within 90 days of receipt, the United
22	States shall transfer the proceeds from the auction,
23	as defined in paragraph (1)(D), to the entity that
24	offered the offset credits for sale. No funds trans-
25	ferred from a purchaser to a seller of offset credits

under this paragraph shall be held by any officer or employee of the United States or treated for any purpose as public monies.

"(3) Pricing.—When the Administrator acts under this subsection as the agent of an entity in possession of offset credits, the Administrator is not obligated to obtain the highest price possible for the offset credits, and instead shall auction such offset credits in the same manner and pursuant to the same rules (except as modified in paragraph (1)) as set forth for auctioning strategic reserve allowances. Entities requesting that such offset credits be offered for sale at a strategic reserve auction may not set a minimum reserve price for their offset credits that is different than the minimum strategic reserve auction price set pursuant to subsection (c).

"(i) Initial Regulations.—Not later than 24
months after the date of enactment of this title, the Administrator shall promulgate regulations, in consultation
with other appropriate agencies, governing the auction of
allowances under this section. Such regulations shall include the following requirements:

"(1) Frequency; first auction.—Auctions shall be held four times per year at regular intervals,

1	with the first auction to be held no later than March
2	31, 2012.
3	"(2) Auction format.—Auctions shall follow
4	a single-round, sealed-bid, uniform price format.
5	"(3) Participation; financial assurance.—
6	Auctions shall be open to any covered entity eligible
7	to purchase emission allowances at the auction
8	under subsection (a)(2), except that the [Adminis-
9	trator] may establish financial assurance require-
10	ments to ensure that auction participants can and
11	will perform on their bids.
12	"(4) Disclosure of Beneficial Owner-
13	SHIP.—Each bidder in an auction shall be required
14	to disclose the person or entity sponsoring or bene-
15	fitting from the bidder's participation in the auction
16	if such person or entity is, in whole or in part, other
17	than the bidder.
18	"(5) Purchase limits.—No person may, di-
19	rectly or in concert with another participant, pur-
20	chase more than 20 percent of the allowances of-
21	fered for sale at any quarterly auction.
22	"(6) Publication of information.—After
23	the auction, the Administrator shall, in a timely
24	fashion, publish the identities of winning bidders,

- the quantity of allowances obtained by each winningbidder, and the auction clearing price.
- "(7) OTHER REQUIREMENTS.—The Administrator may include in the regulations such other requirements or provisions as the Administrator, in consultation with other agencies as appropriate, considers appropriate to promote effective, efficient, transparent, and fair administration of auctions under this section.
- 10 "(j) REVISION OF REGULATIONS.—The Administrator may, at any time, in consultation with other agen-11 12 cies as appropriate, revise the initial regulations promul-13 gated under subsection (i). Such revised regulations need not meet the requirements identified in subsection (i) if 14 15 the Administrator determines that an alternative auction design would be more effective, taking into account factors 16 17 including costs of administration, transparency, fairness, 18 and risks of collusion or manipulation. In determining 19 whether and how to revise the initial regulations under 20 this subsection, the Administrator shall not consider maxi-

22 "SEC. 727. PERMITS.

21

23 "(a) Permit Program.—For stationary sources

subject to title V of this Act, that are covered entities,

mization of revenues to the Federal Government.

25 the provisions of this title shall be implemented by permits

- issued to such covered entities (and enforced) in accord-1 2 ance with the provisions of title V, as modified by this 3 title. Any such permit issued by the Administrator, or by 4 a State with an approved permit program, shall require 5 the owner or operator of a covered entity to hold emission allowances or offset credits at least equal to the total an-6 7 nual amount of carbon dioxide equivalents for its com-8 bined emissions and attributable greenhouse gas emissions 9 to which section 722 applies. No such permit shall be 10 issued that is inconsistent with the requirements of this title, and title V as applicable. Nothing in this section re-11 12 garding compliance plans or in title V shall be construed 13 as affecting allowances or offset credits. Submission of a 14 statement by the owner or operator, or the designated rep-15 resentative of the owners and operators, of a covered entity that the owners and operators will hold emission allow-16 17 ances or offset credits for the entity's combined emissions 18 and attributable greenhouse gas emissions to which sec-19 tion 722 applies shall be deemed to meet the proposed and 20 approved planning requirements of title V. Recordation by 21 the Administrator of transfers of emission allowances shall 22 amend automatically all applicable proposed or approved 23 permit applications, compliance plans, and permits.
- 24 "(b) Multiple Owners.—No permit shall be issued 25 under this section and no allowances or offset credits shall

- 1 be disbursed under this title to a covered entity or any
- 2 other person until the designated representative of the
- 3 owners or operators has filed a certificate of representa-
- 4 tion with regard to matters under this title, including the
- 5 holding and distribution of emission allowances and the
- 6 proceeds of transactions involving emission allowances.
- 7 Where there are multiple holders of a legal or equitable
- 8 title to, or a leasehold interest in, such a covered entity
- 9 or other entity or where a utility or industrial customer
- 10 purchases power under a long-term power purchase con-
- 11 tract from an independent power production facility that
- 12 is a covered entity, the certificate shall state—
- "(1) that emission allowances and the proceeds
- of transactions involving emission allowances will be
- deemed to be held or distributed in proportion to
- each holder's legal, equitable, leasehold, or contrac-
- tual reservation or entitlement; or
- "(2) if such multiple holders have expressly pro-
- vided for a different distribution of emission allow-
- ances by contract, that emission allowances and the
- 21 proceeds of transactions involving emission allow-
- ances will be deemed to be held or distributed in ac-
- cordance with the contract.
- 24 A passive lessor, or a person who has an equitable interest
- 25 through such lessor, whose rental payments are not based,

- 1 either directly or indirectly, upon the revenues or income
- 2 from the covered entity or other entity shall not be deemed
- 3 to be a holder of a legal, equitable, leasehold, or contrac-
- 4 tual interest for the purpose of holding or distributing
- 5 emission allowances as provided in this subsection, during
- 6 either the term of such leasehold or thereafter, unless ex-
- 7 pressly provided for in the leasehold agreement. Except
- 8 as otherwise provided in this subsection, where all legal
- 9 or equitable title to or interest in a covered entity, or other
- 10 entity, is held by a single person, the certificate shall state
- 11 that all emission allowances received by the entity are
- 12 deemed to be held for that person.
- 13 "(c) Prohibition.—It shall be unlawful for any per-
- 14 son to operate any stationary source subject to the re-
- 15 quirements of this section except in compliance with the
- 16 terms and requirements of a permit issued by the Admin-
- 17 istrator or a State with an approved permit program in
- 18 accordance with this section. For purposes of this sub-
- 19 section, compliance, as provided in section 504(f), with a
- 20 permit issued under title V which complies with this title
- 21 for covered entities shall be deemed compliance with this
- 22 subsection as well as section 502(a).
- 23 "(d) Reliability.—Nothing in this section or title
- 24 V shall be construed as requiring termination of oper-
- 25 ations of a stationary source that is a covered entity for

- 1 failure to have an approved permit, or compliance plan,
- 2 that is consistent with the requirements in the second and
- 3 fifth sentences of subsection (a) concerning the holding
- 4 of emission allowances, compensatory allowances, inter-
- 5 national emission allowances, or offset allowances, except
- 6 that any such covered entity may be subject to the applica-
- 7 ble enforcement provision of section 113.
- 8 "(e) Regulations.—The Administrator shall pro-
- 9 mulgate regulations to implement this section. To provide
- 10 for permits required under this section, each State in
- 11 which one or more stationary sources and that are covered
- 12 entities are located shall submit, in accordance with this
- 13 section and title V, revised permit programs for approval.
- 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-
- 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 at least comparable monitoring, com-
4	pliance, enforcement, quality of offsets, and restric-
5	tions on the use of offsets.
6	"(b) Disqualified Allowances.—An international
7	emission allowance may not be held under section
8	722(d)(2) if it is in the nature of an offset instrument
9	or allowance awarded based on the achievement of green-
10	house gas emission reductions or avoidance, or greenhouse
11	gas sequestration, that are not subject to the mandatory
12	absolute 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(d)(2) shall
17	certify to the Administrator that such international
18	emission allowance has not previously been used to
19	comply with any foreign, international, or domestic
20	greenhouse 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 disqualified or otherwise used for purposes
20	of compliance with this title, such allowance
21	shall be disqualified from any further use under
22	this title.
23	"(d) USE LIMITATIONS.—The Administrator may, by
24	rule, modify the percentage applicable to international

1	emission allowances under section $722(a)(2)$, consistent
2	with the purposes of the Act.
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 at least nine members. Each member shall
15	be qualified by education, training, and experience to
16	evaluate scientific and technical information on matters
17	referred to the Board under this section. The Adminis-
18	trator shall appoint Advisory Board members, including
19	a chair and vice-chair of the Advisory Board. Terms shall
20	be 3 years in length, except for initial terms, which may
21	be up to 5 years in length to allow staggering. Members
22	may be reappointed only once for an additional 3-year
23	term, and such second term may follow directly after a
24	first 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 availability of a representative
11	data set for use in developing the activity base-
12	line;
13	"(B) the potential for accurate quantifica-
14	tion of greenhouse gas reduction, avoidance, or
15	sequestration for an offset project type;
16	"(C) the potential level of scientific and
17	measurement uncertainty associated with an
18	offset project type;
19	"(D) any beneficial or adverse environ-
20	mental, public health, welfare, social, economic,
21	or energy effects associated with an offset
22	project type;
23	"(E) the extent to which, as of the date of
24	submission of the report, the project or activity
25	types within each category—

1	"(i) are required by law (including a
2	regulation); or
3	"(ii) represent business-as-usual (ab-
4	sent funding from offset credits) practices
5	for a relevant land area, industry sector, or
6	forest, soil or facility type;
7	"(2) make available to the Administrator its ad-
8	vice and comments on offset methodologies that
9	should be considered under regulations promulgated
10	pursuant to subsection (a) and (b) of section 734,
11	including methodologies to address the issues of
12	additionality, activity baselines, measurement, leak-
13	age, uncertainty, permanence, and environmental in-
14	tegrity;
15	"(3) make available to the Administrator, and
16	other relevant Federal agencies, its advice and com-
17	ments regarding scientific, technical, and methodo-
18	logical issues specific to the issuance of international
19	offset credits under section 744;
20	"(4) make available to the Administrator, and
21	other relevant Federal agencies, its advice and com-
22	ments regarding scientific, technical, and methodo-
23	logical issues associated with the implementation of
24	part E;

1 "(5) make available to the Administrator its ad-2 vice and comments on areas in which further knowl-3 edge is required to appraise the adequacy of exist-4 ing, revised, or proposed methodologies for use 5 under this part and part E, and describe the re-6 search efforts necessary to provide the required in-7 formation; and "(6) make available to the Administrator its ad-8 9 vice and comments on other ways to improve or 10 safeguard the environmental integrity of programs 11 established under this part and part E. 12 "(d) Scientific Review of Offset and Defor-13 ESTATION REDUCTION PROGRAMS.—Not later than Janu-14 ary 1, 2017, and at five-year intervals thereafter, the Ad-15 visory Board shall submit to the Administrator and make available to the public an analysis of relevant scientific and 16 17 technical information related to this part and part E. The 18 Advisory Board shall review approved and potential meth-19 odologies, scientific studies, offset project monitoring, off-20 set project verification reports, and audits related to this 21 part and part E, and evaluate the net emissions effects 22 of implemented offset projects. The Advisory Board shall 23 recommend changes to offset methodologies, protocols, or project types, or to the overall offset program under this part, to ensure that offset credits issued by the Adminis-

- 1 trator do not compromise the integrity of the annual emis-
- 2 sion reductions established under section 701, and to
- 3 avoid or minimize adverse effects to human health or the
- 4 environment.

5 "SEC. 732. ESTABLISHMENT OF OFFSETS PROGRAM.

- 6 "(a) Regulations.—Not later than 2 years after
- 7 the date of enactment of this title, the Administrator, in
- 8 consultation with appropriate Federal agencies and taking
- 9 into consideration the recommendations of the Advisory
- 10 Board, shall promulgate regulations establishing a pro-
- 11 gram for the issuance of offset credits in accordance with
- 12 the requirements of this part. The Administrator shall pe-
- 13 riodically revise these regulations as necessary to meet the
- 14 requirements of this part.
- 15 "(b) Requirements.—The regulations described in
- 16 subsection (a) shall—
- 17 "(1) authorize the issuance of offset credits
- with respect to qualifying offset projects that result
- in reductions or avoidance of greenhouse gas emis-
- sions, or sequestration of greenhouse gases;
- 21 "(2) ensure that such offset credits represent
- verifiable and additional greenhouse gas emission re-
- ductions or avoidance, or increases in sequestration;

1	"(3) ensure that offset credits issued for se-
2	questration offset projects are only issued for green-
3	house gas reductions that are permanent;
4	"(4) provide for the implementation of the re-
5	quirements of this part;
6	"(5) include as reductions in greenhouse gases
7	reductions achieved through the destruction of meth-
8	ane and its conversion to carbon dioxide, and reduc-
9	tions achieved through destruction of
10	chlorofluorocarbons or other ozone depleting sub-
11	stances, if permitted by the Administrator under
12	section 619(b)(9) and subject to the conditions spec-
13	ified in section 619(b)(9), based on the carbon diox-
14	ide equivalent value of the substance destroyed; and
15	"(6) establish a process to accept and respond
16	to comments from third parties regarding programs
17	established under this part in a timely manner.
18	"(c) Coordination to Minimize Negative Ef-
19	FECTS.—In promulgating and implementing regulations
20	under this part, the Administrator shall act (including by
21	rejecting projects, if necessary) to avoid or minimize, to
22	the maximum extent practicable, adverse effects on human
23	health or the environment resulting from the implementa-
24	tion of offset projects under this part.

- 1 "(d) Offset Registry.—The Administrator shall
- 2 establish within the allowance tracking system established
- 3 under section 724(d) an Offset Registry for qualifying off-
- 4 set projects and offset credits issued with respect thereto
- 5 under this part.
- 6 "(e) Legal Status of Offset Credit.—An offset
- 7 credit does not constitute a property right.
- 8 "(f) Fees.—The Administrator shall assess fees pay-
- 9 able by offset project developers in an amount necessary
- 10 to cover the administrative costs and the enforcement
- 11 costs to the Environmental Protection Agency and the De-
- 12 partment of Justice of carrying out the activities under
- 13 this part. Amounts collected for such fees shall be avail-
- 14 able to the Administrator and the Attorney General for
- 15 carrying out the activities under this part to the extent
- 16 provided in advance in appropriations Acts.
- 17 **[**"(g) Delegation of Authority.—In addition to
- 18 the authority provided to the Administrator under this
- 19 part, the President may delegate authority to the Sec-
- 20 retary of Agriculture for the purposes of implementing the
- 21 requirements of this part for agricultural or forestry offset
- 22 projects.]
- 23 "SEC. 733. ELIGIBLE PROJECT TYPES.
- 24 "(a) List of Eligible Project Types.—

1	"(1) In general.—As part of the regulations
2	promulgated under section 732(a), the Adminis-
3	trator shall establish, and may periodically revise, a
4	list of types of projects eligible to generate offset
5	credits, including international offset credits, under
6	this part.
7	"(2) Advisory board recommendations.—

- in determining the eligibility of project types, the Administrator shall take into consideration the recommendations of the Advisory Board. If a list established under this section differs from the recommendations of the Advisory Board, the regulations promulgated under section 732(a) shall include a justification for the discrepancy.
- "(3) Initial determination.—The Administrator shall establish the initial eligibility list under paragraph (1) not later than one year after the date of enactment of this title for which there are well developed methodologies that the Administrator determines would meet the criteria of section 734.
- "(4) Project types to be considered for Initial List.—In determining the initial list, the Administrator shall give priority to consideration of offset project types that are recommended by the Advisory Board and for which there are well devel-

1	oped methodologies that the Administrator deter-
2	mines would meet the criteria of section 734, and
3	shall consider—
4	"(A) methane collection and combustion
5	projects at active underground coal mines;
6	"(B) methane collection and combustion
7	projects at landfills;
8	"(C) capture of venting, flaring, and fugi-
9	tive emissions from oil and natural gas systems;
10	"(D) nonlandfill methane collection, com-
11	bustion and avoidance projects involving organic
12	waste streams that would have otherwise emit-
13	ted methane in the atmosphere, including ma-
14	nure management and biogas capture and com-
15	bustion;
16	"(E) projects involving afforestation or re-
17	forestation of acreage not forested as of Janu-
18	ary 1, 2009;
19	"(F) forest management resulting in an in-
20	crease in forest carbon stores, including har-
21	vested wood products;
22	"(G) agricultural, grassland, and range-
23	land sequestration and management practices,
24	including—

1	"(i) altered tillage practices, including
2	avoided abandonment of such practices;
3	"(ii) winter cover cropping, contin-
4	uous cropping, and other means to in-
5	crease biomass returned to soil in lieu of
6	planting followed by fallowing;
7	"(iii) reduction of nitrogen fertilizer
8	use or increase in nitrogen use efficiency;
9	"(iv) reduction in the frequency and
10	duration of flooding of rice paddies;
11	"(v) reduction in carbon emissions
12	from organic soils;
13	"(vi) reduction in greenhouse gas
14	emissions from manure and effluent;
15	"(vii) reduction in greenhouse gas
16	emissions due to changes in animal man-
17	agement practices, including dietary modi-
18	fications;
19	"(viii) planting and cultivation of per-
20	manent tree crops;
21	"(ix) greenhouse gas emission reduc-
22	tions from improvements and upgrades to
23	mobile or stationary equipment (including
24	engines):

1	"(x) practices to reduce and eliminate
2	soil tillage;
3	"(xi) reductions in greenhouse gas
4	emissions through restoration of wetlands,
5	forestland, and grassland; and
6	"(xii) sequestration of greenhouse
7	gases through management of tree crops;
8	and
9	"(H) changes in carbon stocks attributed
10	to land use change and forestry activities, in-
11	cluding—
12	"(i) management of peatland or wet-
13	land;
14	"(ii) conservation of grassland and
15	forested land;
16	"(iii) improved forest management,
17	including accounting for carbon stored in
18	wood products;
19	"(iv) reduced deforestation or avoided
20	forest conversion;
21	"(v) urban tree-planting and mainte-
22	nance;
23	"(vi) agroforestry; and

1	"(vii) adaptation of plant traits or
2	new technologies that increase sequestra-
3	tion by forests.
4	"(5) Methodologies.—In issuing methodolo-
5	gies pursuant to section 734, the Administrator shall
6	give priority to methodologies for offset types in-
7	cluded on the initial eligibility list.
8	"(b) Modification of List.—The Administrator—
9	"(1) shall add additional project types to the
10	list not later than 2 years after the date of enact-
11	ment of this title;
12	"(2) may at any time, by rule, add a project
13	type to the list established under subsection (a) if
14	the Administrator, in consultation with appropriate
15	Federal agencies and taking into consideration the
16	recommendations of the Advisory Board, determines
17	that the project type can generate additional reduc-
18	tions or avoidance of greenhouse gas emissions, or
19	sequestration of greenhouse gases, subject to the re-
20	quirements of this part;
21	"(3) may at any time, by rule, determine that
22	a project type on the list does not meet the require-
23	ments of this part, and remove a project type from
24	the list established under subsection (a), in consulta-
25	tion with appropriate Federal agencies and taking

- into consideration any recommendations of the Advi-1 2 sory Board; and "(4) shall consider adding to or removing from 3 the list established under subsection (a), at a min-4 5 imum, project types proposed to the Adminis-6 trator— "(A) by petition pursuant to subsection 7 8 (c); or 9 "(B) by the Advisory Board. 10 "(c) Petition Process.—Any person may petition the Administrator to modify the list established under sub-11 12 section (a) by adding or removing a project type pursuant 13 to subsection (b). Any such petition shall include a show-14 ing by the petitioner that there is adequate data to estab-15 lish that the project type does or does not meet the re-16 quirements of this part. Not later than 12 months after 17 receipt of such a petition, the Administrator shall either 18 grant or deny the petition and publish a written expla-19 nation of the reasons for the Administrator's decision. The 20 Administrator may not deny a petition under this sub-21 section on the basis of inadequate Environmental Protec-22 tion Agency resources or time for review. 23 "SEC. 734. REQUIREMENTS FOR OFFSET PROJECTS. "(a) METHODOLOGIES.—As part of the regulations 24

- promulgated under section 732(a), the Administrator shall

1	establish, for each type of offset project listed as eligible
2	under section 733, the following:
3	"(1) Additionality.—A standardized method-
4	ology for determining the additionality of greenhouse
5	gas emission reductions or avoidance, or greenhouse
6	gas sequestration, achieved by an offset project of
7	that type. Such methodology shall ensure, at a min-
8	imum, that any greenhouse gas emission reduction
9	or avoidance, or any greenhouse gas sequestration, is
10	considered additional only to the extent that it re-
11	sults from activities that—
12	"(A) are not required by or undertaken to
13	comply with any law, including any regulation
14	or consent order;
15	"(B) were not commenced prior to Janu-
16	ary 1, 2009, except in the case of—
17	"(i) offset project activities that com-
18	menced after January 1, 2001, and were
19	registered as of the date of enactment of
20	this title under an offset program with re-
21	spect to which the Administrator has made
22	an affirmative determination under section
23	740(a)(2); or
24	"(ii) activities that are readily revers-
25	ible, with respect to which the Adminis-

1	trator may set an alternative earlier date
2	under this subparagraph that is not earlier
3	than January 1, 2001, where the Adminis-
4	trator determines that setting such an al-
5	ternative date may produce an environ-
6	mental benefit by removing an incentive to
7	cease and then reinitiate activities that
8	began prior to January 1, 2009;
9	"(C) are not receiving support under part
10	E of this title or subtitle D of title IV of the
11	[Act]; and
12	"(D) exceed the activity baseline estab-
13	lished under paragraph (2).
14	"(2) Activity baselines.—A standardized
15	methodology for establishing activity baselines for
16	offset projects of that type. The Administrator shall
17	set activity baselines to reflect a conservative esti-
18	mate of business-as-usual performance or practices
19	for the relevant type of activity such that the base-
20	line provides an adequate margin of safety to ensure
21	the environmental integrity of offsets calculated in
22	reference to such baseline.
23	"(3) Quantification methods.—A standard-
24	ized methodology for determining the extent to
25	which greenhouse gas emission reductions or avoid-

1	ance, or greenhouse gas sequestration, achieved by
2	an offset project of that type exceed a relevant activ-
3	ity baseline, including protocols for monitoring and
4	accounting for uncertainty.
5	"(4) Leakage.—A standardized methodology
6	for accounting for and mitigating potential leakage,
7	if any, from an offset project of that type, taking
8	uncertainty into account.
9	"(b) Accounting for Reversals.—
10	"(1) In general.—As part of the regulations
11	promulgated under section 732(a), for each type of
12	sequestration project listed under section 733, the
13	Administrator shall establish requirements to ac-
14	count for and address reversals, including—
15	"(A) a requirement to report any reversal
16	with respect to an offset project for which offset
17	credits have been issued under this part;
18	"(B) provisions to require emission allow-
19	ances to be held in amounts to fully compensate
20	for greenhouse gas emissions attributable to re-
21	versals, and to assign responsibility for holding
22	such emission allowances;
23	"(C) provisions to discourage repeated in-
24	tentional reversals by offset project developers,
25	including but not limited to the assessment of

1	administrative fees, temporary suspension, or						
2	disqualification of an offset project developer						
3	from the program; and						
4	"(D) 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 purchase						
20	and provision to the Administrator for retire-						
21	ment of an amount of offset credits or emission						
22	allowances equal in number to the tons of car-						
23	bon dioxide equivalents of greenhouse gas emis-						
24	sions released due to reversal.						

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

1	"(ii) Intentional reversals.—If
2	the Administrator determines that a rever-
3	sal was intentional, the offset project devel-
4	oper for the relevant offset project shall
5	place into the offsets reserve a quantity of
6	offset credits, or combination of offset
7	credits and emission allowances, equal in
8	number to the number of reserve offset
9	credits that were canceled due to the rever-
10	sal pursuant to clause (i).
11	"(iii) Unintentional reversals.—
12	If the Administrator determines that a re-
13	versal was unintentional, the offset project
14	developer for the relevant offset project
15	shall place into the offsets reserve a quan-
16	tity of offset credits, or combination of off-
17	set credits and emission allowances, equal
18	in number to half the number of offset
19	credits that were reserved for that offset
20	project, or half the number of reserve off-
21	set credits that were canceled due to the
22	reversal pursuant to clause (i), whichever
23	is less.
24	"(iv) Petition.—Any person may pe-
25	tition the Administrator for a determina-

Any such petition shall include a showing by the petitioner that there is adequate data or other evidence to support the petition. Not later than 90 days after the date of receipt of the petition, the Administrator shall take final action determining either that the reversal has occurred or that the reversal has not occurred. Such determination shall be accompanied by a statement of the basis for the determination.

"(C) USE OF RESERVED OFFSET CRED-ITS.—Offset credits placed into the offsets reserve under this paragraph may not be used to comply with section 722.

"(4) Term offset credits.—

"(A) APPLICABILITY.—With respect to a practice listed under section 733 that sequesters greenhouse gases and has a crediting period of not more than 5 years, the Administrator may address reversals pursuant to this paragraph in lieu of permanently accounting for reversals pursuant to paragraphs (1) and (2).

1	"(B) Accounting for reversals.—For						
2	such practices or projects implementing the						
3	practices described in subparagraph (A), the						
4	Administrator shall require only reversals that						
5	occur during the crediting period to be ac-						
6	counted for and addressed pursuant to para-						
7	graphs (1) and (2).						
8	"(C) Credits issued.—For practices or						
9	projects regulated pursuant to subparagraph						
10	(B), the Secretary shall issue under section 737						
11	a term offset credit, in lieu of an offset credit,						
12	for each ton of carbon dioxide equivalent that						
13	has been sequestered.						
14	"(c) Crediting Periods.—						
15	"(1) In general.—As part of the regulations						
16	promulgated under section 732(a), for each offset						
17	project type, the Administrator shall specify a cred-						
18	iting period, and establish provisions for petitions						
19	for new crediting periods, in accordance with this						
20	subsection.						
21	"(2) Duration.—						
22	"(A) IN GENERAL.—The crediting period						
23	shall be not less than 5 and not greater than						
24	10 years for any project type other than those						
25	involving sequestration or term offsets.						

1	"(B) Forestry projects.—The crediting
2	period for a forestry offset project shall not ex-
3	ceed 20 years.
4	"(C) Term offset credits.—The cred-
5	iting period for a term offset credit issued shall
6	not exceed 5 years.
7	"(3) Eligibility.—An offset project shall be
8	eligible to generate offset credits under this part
9	only during the project's crediting period. During
10	such crediting period, the project shall remain eligi-
11	ble to generate offset credits, subject to the meth-
12	odologies and project type eligibility list that applied
13	as of the date of project approval under section 735,
14	except as provided in paragraph (4).
15	"(4) Petition for New Crediting Period.—
16	An offset project developer may petition for a new
17	crediting period to commence after termination of a
18	crediting period, subject to the methodologies and
19	project type eligibility list in effect at the time when
20	such petition is submitted. A petition may not be
21	submitted under this paragraph more than 18
22	months before the end of the pending crediting pe-
23	riod. The Administrator may grant such petition
24	after public notice and opportunity for comment
25	The Administrator may limit the number of new

- 1 crediting periods available for projects of particular
- 2 project types.
- 3 "(d) Environmental Integrity.—In establishing
- 4 the requirements under this section, the Administrator
- 5 shall apply conservative assumptions or methods to maxi-
- 6 mize the certainty that the environmental integrity of the
- 7 cap established under section 701 is not compromised.
- 8 "(e) Pre-existing Methodologies.—In promul-
- 9 gating requirements under this section, the Administrator
- 10 shall give due consideration to methodologies for offset
- 11 projects existing as of the date of enactment of this title.
- 12 "(f) Added Project Types.—The Administrator
- 13 shall establish methodologies described in subsection (a),
- 14 and, as applicable, requirements and mechanisms for re-
- 15 versals as described in subsection (b), for any project type
- 16 that is added to the list pursuant to section 733.

17 "SEC. 735. APPROVAL OF OFFSET PROJECTS.

- 18 "(a) APPROVAL PETITION.—An offset project devel-
- 19 oper shall submit an offset project approval petition signed
- 20 by a responsible official (who shall certify the accuracy of
- 21 the information submitted) and providing such informa-
- 22 tion as the Administrator requires to determine whether
- 23 the offset project is eligible for issuance of offset credits
- 24 under rules promulgated pursuant to this part.

1 "(b) TIMING.—An approval petition shall be sub-2 mitted to the Administrator under subsection (a) not later 3 than the time at which an offset project's first verification 4 report is submitted under section 736. 5 "(c) Approval Petition Requirements.—As part of the regulations promulgated under section 732, the Ad-6 ministrator shall include provisions for, and shall specify, 7 8 the required components of an offset project approval peti-9 tion required under subsection (a), which shall include— 10 "(1) designation of an offset project developer; 11 "(2) designation of a party who is authorized to 12 provide access to the appropriate officials or an au-13 thorized representative to the offset project; and 14 "(3) any other information that the Adminis-15 trator considers to be necessary to achieve the pur-16 poses of this part. 17 "(d) APPROVAL AND NOTIFICATION.—Not later than 90 days after receiving a complete approval petition under 18 19 subsection (a), the Administrator shall make the approval petition publicly available on the internet, approve or deny 20 21 the petition in writing, and, if the petition is denied, make 22 the Administrator's decision publicly available on the 23 internet. After an offset project is approved, the offset project developer shall not be required to resubmit an ap-

- 1 proval petition during the offset project's crediting period,
- 2 except as provided in section 734(c)(4).
- 3 "(e) Appeal.—The Administrator shall establish
- 4 procedures for appeal and review of determinations made
- 5 under subsection (d).
- 6 "(f) Voluntary Preapproval Review.—The Ad-
- 7 ministrator may establish a voluntary preapproval review
- 8 procedure, to allow an offset project developer to request
- 9 the Administrator to conduct a preliminary eligibility re-
- 10 view for an offset project. Findings of such reviews shall
- 11 not be binding upon the Administrator. The voluntary
- 12 preapproval review procedure—
- "(1) shall require the offset project developer to
- submit such basic project information as the Admin-
- istrator requires to provide a meaningful review; and
- 16 "(2) shall require a response from the Adminis-
- trator not later than 6 weeks after receiving a re-
- quest for review under this subsection.

19 "SEC. 736. VERIFICATION OF OFFSET PROJECTS.

- 20 "(a) In General.—As part of the regulations pro-
- 21 mulgated under section 732(a), the Administrator shall es-
- 22 tablish requirements, including protocols, for verification
- 23 of the quantity of greenhouse gas emission reductions or
- 24 avoidance, or sequestration of greenhouse gases, resulting
- 25 from an offset project. The regulations shall require that

- an offset project developer shall submit a report, prepared 1 by a third-party verifier accredited under subsection (d), providing such information as the Administrator requires 4 to determine the quantity of greenhouse gas emission re-5 ductions or avoidance, or sequestration of greenhouse gas, 6 resulting from the offset project. 7 "(b) Schedule.—The Administrator shall prescribe 8 a schedule for the submission of verification reports under 9 subsection (a). 10 "(c) Verification Report Requirements.—The Administrator shall specify the required components of a 12 verification report required under subsection (a), which 13 shall include— 14 "(1) the name and contact information for a 15 designated representative for the offset project devel-16 oper;
- 17 "(2) the quantity of greenhouse gas reduced, 18 avoided, or sequestered;
- 19 "(3) the methodologies applicable to the project 20 pursuant to section 734;
- 21 "(4) a certification that the project meets the 22 applicable requirements;
- 23 "(5) a certification establishing that the conflict 24 of interest requirements in the regulations promul-

1	gated under	subsection	(d)(1)	have	been	complied
2	with; and					

"(6) any other information that the Administrator considers to be necessary to achieve the purposes of this part.

"(d) Verifier Accreditation.—

"(1) IN GENERAL.—As part of the regulations promulgated under section 732(a), the Administrator shall establish a process and requirements for periodic accreditation of third-party verifiers to ensure that such verifiers are professionally qualified and have no conflicts of interest.

"(2) STANDARDS.—

"(A) AMERICAN NATIONAL STANDARDS INSTITUTE ACCREDITATION.—The Administrator
may accredit, or accept for purposes of accreditation under this subsection, verifiers accredited
under the American National Standards Institute (ANSI) accreditation program in accordance with ISO 14065. The Administrator shall
accredit, or accept for accreditation, verifiers
under this subparagraph only if the Administrator finds that the American National Standards Institute accreditation program provides

1	sufficient assurance that the requirements of
2	this part will be met.
3	"(B) EPA ACCREDITATION.—As part of
4	the regulations promulgated under section
5	732(a), the Administrator may establish accred-
6	itation standards for verifiers under this sub-
7	section, and may establish related training and
8	testing programs and requirements.
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.
13 14	tained and updated by the Administrator. "(4) Revocation.—The regulations concerning
14	"(4) Revocation.—The regulations concerning
14 15	"(4) Revocation.—The regulations concerning accreditation of third-party verifiers required under
141516	"(4) Revocation.—The regulations concerning accreditation of third-party verifiers required under paragraph (1) shall establish a process for the Ad-
14151617	"(4) Revocation.—The regulations concerning accreditation of third-party verifiers required under paragraph (1) shall establish a process for the Administrator to revoke the accreditation of any third-
14 15 16 17 18	"(4) Revocation.—The regulations concerning accreditation of third-party verifiers required under paragraph (1) shall establish a process for the Administrator to revoke the accreditation of any third-party verifier that the Administrator finds fails to
141516171819	"(4) Revocation.—The regulations concerning accreditation of third-party verifiers required under paragraph (1) shall establish a process for the Administrator to revoke the accreditation of any third-party verifier that the Administrator finds fails to maintain professional qualifications or to avoid a
14 15 16 17 18 19 20	"(4) Revocation.—The regulations concerning accreditation of third-party verifiers required under paragraph (1) shall establish a process for the Administrator to revoke the accreditation of any third-party verifier that the Administrator finds fails to maintain professional qualifications or to avoid a conflict of interest, or for other good cause.
14 15 16 17 18 19 20 21	"(4) Revocation.—The regulations concerning accreditation of third-party verifiers required under paragraph (1) shall establish a process for the Administrator to revoke the accreditation of any third-party verifier that the Administrator finds fails to maintain professional qualifications or to avoid a conflict of interest, or for other good cause. "SEC. 737. ISSUANCE OF OFFSET CREDITS.

1	"(1) make the report publicly available on the
2	Internet;
3	"(2) make a determination of the quantity of
4	greenhouse gas emissions reduced or avoided, or
5	greenhouse gases sequestered, resulting from an off-
6	set project approved under section 735; and
7	"(3) notify the offset project developer in writ-
8	ing of such determination and make such determina-
9	tion publicly available on the Internet.
10	"(b) Issuance of Offset Credits.—The Adminis-
11	trator shall issue one offset credit to an offset project de-
12	veloper for each ton of carbon dioxide equivalent that the
13	Administrator has determined has been reduced, avoided,
14	or sequestered during the period covered by a verification
15	report submitted in accordance with section 736, only if—
16	"(1) the Administrator has approved the offset
17	project pursuant to section 735; and
18	"(2) the relevant emissions reduction, avoid-
19	ance, or sequestration has—
20	"(A) already occurred, during the offset
21	project's crediting period; and
22	"(B) occurred after January 1, 2009.
23	"(c) Appeal.—The Administrator shall establish
24	procedures for appeal and review of determinations made
25	under subsection (a).

- 1 "(d) Timing.—Offset credits meeting the criteria es-
- 2 tablished in subsection (b) shall be issued not later than
- 3 2 weeks following the verification determination made by
- 4 the Administrator under subsection (a).
- 5 "(e) REGISTRATION.—The Administrator shall as-
- 6 sign a unique serial number to and register each offset
- 7 credit to be issued in the Offset Registry established under
- 8 section 732(d).

9 "SEC. 738. AUDITS.

- 10 "(a) IN GENERAL.—The Administrator shall, on an
- 11 ongoing basis, conduct random audits of offset projects
- 12 and offset credits. The Administrator shall conduct audits
- 13 of the practices of third-party verifiers. In each year, the
- 14 Administrator shall conduct audits, at minimum, for a
- 15 representative sample of project types and geographic
- 16 areas.
- 17 "(b) Delegation.—The Administrator may delegate
- 18 to a State or tribal government the responsibility for con-
- 19 ducting audits under this section if the Administrator
- 20 finds that the program proposed by the State or tribal
- 21 government provides assurances equivalent to those pro-
- 22 vided by the auditing program of the Administrator, and
- 23 that the integrity of the offset program under this part
- 24 will be maintained. Nothing in this subsection shall pre-

vent the Administrator from conducting any audit the Administrator considers necessary and appropriate. 3 "(c) AUDIT REQUIREMENTS.—As part of the regulations promulgated under section 732(a), the appropriate 5 officials shall establish requirements and protocols for an 6 auditing program, whether undertaken by the appropriate 7 officials or an authorized representative, concerning 8 project developers, third party verifiers, and various components of the offsets program. Such regulations shall in-10 clude— 11 "(1) the components of the offset project, which 12 shall be evaluated against the offset approval peti-13 tion and the verification report; 14 "(2) the minimum experience or training of the 15 auditors; "(3) the form in which reports shall be com-16 17 pleted; 18 "(4) requirements for delegating auditing func-19 tions to States or tribal governments, including re-20 quiring periodic reports from State or tribal govern-21 ments on their auditing activities and findings; and 22 "(5) any other information that the appropriate 23 officials considers to be necessary to achieve the pur-24 pose of the Act.

1	"CTC	720	PROGRAM	DEVIEW	ANTO	DEVICION
ı	L "SEC.	739.	PROGERAM	REVIEW	ANI	REVISION.

"At least once every 5 years, the Administrator shall
review and, based on new or updated information and tak-
ing into consideration the recommendations of the Advi-
sory Board, update and revise—
"(1) the list of eligible project types established
under section 733;
"(2) the methodologies established, including
specific activity baselines, under section 734(a);
"(3) the reversal requirements and mechanisms
established or prescribed under section 734(b);
"(4) measures to improve the accountability of
the offsets program; and
"(5) any other requirements established under
this part to ensure the environmental integrity and
effective operation of this part.
"SEC. 740. EARLY OFFSET SUPPLY.
"(a) Projects Registered Under Other Gov-
ERNMENT-RECOGNIZED PROGRAMS.—Except as provided
in subsection (b) or (c), after public notice and oppor-
tunity for comment, the Administrator shall issue one off-
set credit for each ton of carbon dioxide equivalent emis-
sions reduced, avoided, or sequestered—
"(1) under an offset project that was started
after January 1, 2001;

1	"(2) for which a credit was issued under any
2	regulatory or voluntary greenhouse gas emission off-
3	set program that the Administrator determines—
4	"(A) was established under State or tribal
5	law or regulation prior to January 1, 2009, or
6	has been approved by the Administrator pursu-
7	ant to subsection (e);
8	"(B) has developed offset project type
9	standards, methodologies, and protocols
10	through a public consultation process or a peer
11	review process;
12	"(C) has made available to the public
13	standards, methodologies, and protocols that re-
14	quire that credited emission reductions, avoid-
15	ance, or sequestration are permanent, addi-
16	tional, verifiable, and enforceable;
17	"(D) requires that all emission reductions,
18	avoidance, or sequestration be verified by a
19	State regulatory agency or an accredited third-
20	party independent verification body;
21	"(E) requires that all credits issued are
22	registered in a publicly accessible registry, with
23	individual serial numbers assigned for each ton
24	of carbon dioxide equivalent emission reduc-
25	tions, avoidance, or sequestration; and

1	"(F) ensures that no credits are issued for
2	activities for which the entity administering the
3	program, or a program administrator or rep-
4	resentative, has funded, solicited, or served as a
5	fund administrator for the development of, the
6	project or activity that caused the emission re-
7	duction, avoidance, or sequestration; and
8	"(3) for which the credit described in para-
9	graph (2) is transferred to the Administrator.
10	"(b) Ineligible Credits.—Subsection (a) shall not
11	apply to offset credits that have expired or have been re-
12	tired, canceled, or used for compliance under a program
13	established under State or tribal law or regulation.
14	"(c) Limitation.—Notwithstanding subsection
15	(a)(1), offset credits shall be issued under this section—
16	"(1) only for reductions or avoidance of green-
17	house gas emissions, or sequestration of greenhouse
18	gases, that occur after January 1, 2009; and
19	"(2) only until the date that is 3 years after the
20	date of enactment of this title, or the date that regu-
21	lations promulgated under section 732(a) take ef-
22	fect, whichever occurs sooner.
23	"(d) Retirement of Credits.—The Administrator
24	shall seek to ensure that offset credits described in sub-

1	section (a)(2) are retired for purposes of use under a pro-
2	gram described in subsection (b).
3	"(e) Other Programs.—
4	"(1) In general.—Offset programs that ei-
5	ther—
6	"(A) were not established under State or
7	tribal law; or
8	"(B) were not established prior to January
9	1, 2009;
10	but that otherwise meet all of the criteria of sub-
11	section (a)(2) may apply to the Administrator to be
12	approved under this subsection as an eligible pro-
13	gram for early offset credits under this section.
14	"(2) APPROVAL.—The Administrator shall ap-
15	prove any such program that the Administrator de-
16	termines has criteria and methodologies of at least
17	equal stringency to the criteria and methodologies of
18	the programs established under State or tribal law
19	that the Administrator determines meet the criteria
20	of subsection (a)(2). The Administrator may approve
21	types of offsets under any such program that are
22	subject to criteria and methodologies of at least
23	equal stringency to the criteria and methodologies
24	for such types of offsets applied under the programs
25	established under State or tribal law that the Ad-

1	ministrator determines meet the criteria of sub-
2	section (a)(2). The Administrator shall make a de-
3	termination on any application received under this
4	subsection by not later than 180 days from the date
5	of receipt of the application.
6	"SEC. 741. ENVIRONMENTAL CONSIDERATIONS.
7	"If the Administrator lists forestry or other relevant
8	land management-related offset projects as eligible offset
9	project types under section 733, the Administrator, in con-
10	sultation with appropriate Federal agencies, shall promul-
11	gate regulations to establish criteria for such offset
12	projects—
13	"(1) to ensure that native species are given pri-
14	mary consideration in such projects;
15	"(2) to enhance biological diversity in such
16	projects;
17	"(3) to prohibit the use of federally designated
18	or State-designated noxious weeds;
19	"(4) to prohibit the use of a species listed by
20	a regional or State invasive plant authority within
21	the applicable region or State;
22	"(5) in the case of forestry offset projects, in
23	accordance with widely accepted, environmentally
24	sustainable forestry practices;

- "(6) to ensure that the offset project area was not converted from native ecosystems, such as a forest, grassland, scrubland or wetland, to generate offsets, unless such conversation took place at least 10 years prior to the date of enactment of this title or before January 1, 2009, whichever date is earlier; and
- that the use of offset credits would be eligible to satisfy emission reduction commitments made by the United States in multilateral agreements, such as the United Nations Framework Convention on Climate Change, done at New York on May 9, 1992 (or any successor agreement).

15 "SEC. 742. TRADING.

16 "Section 724 shall apply to the trading of offset cred-17 its.

18 "SEC. 743. OFFICE OF OFFSETS INTEGRITY.

"(a) ESTABLISHMENT.—There is established within
the Office of the Assistant Attorney General of the Environment and Natural Resources Division in the Department of Justice a Carbon Offsets Integrity Unit, to be
headed by a Special Counsel (hereinafter referred to as
the 'Special Counsel'). The Carbon Offsets Integrity Unit
and the Special Counsel shall be responsible to and shall

- 1 report directly to the Assistant Attorney General of the
- 2 Environment and Natural Resources Division.
- 3 "(b) APPOINTMENT.—The Special Counsel shall be
- 4 appointed by the President, by and with the advice and
- 5 consent of the Senate.
- 6 "(c) Responsibilities.—The Special Counsel
- 7 shall—
- 8 "(1) supervise and coordinate investigations
- 9 and civil enforcement within the Department of Jus-
- tice of the carbon offsets program set forth in [IN-
- 11 SERT CITE];
- 12 "(2) ensure that Federal law relating to civil
- enforcement of the carbon offsets program is used to
- the fullest extent authorized; and
- 15 "(3) ensure that adequate resources are made
- available for the investigation and enforcement of
- civil violations of the carbon offsets program.
- 18 "(d) Compensation.—The Special Counsel shall be
- 19 paid at the basic pay payable for level V of the Executive
- 20 Schedule under section 5316 of title 5, United States
- 21 Code.
- 22 "(e) Assignment of Personnel.—There shall be
- 23 assigned to the Carbon Offsets Integrity Unit such per-
- 24 sonnel as the Attorney General determines to be necessary

- 1 to provide an appropriate level of enforcement activity in
- 2 the area of carbon offsets.

3 "SEC. 744. INTERNATIONAL OFFSET CREDITS.

- 4 "(a) In General.—The Administrator, in consulta-
- 5 tion with the Secretary of State and the Administrator
- 6 of the United States Agency for International Develop-
- 7 ment, may issue, in accordance with this section, inter-
- 8 national offset credits based on activities that reduce or
- 9 avoid greenhouse gas emissions, or increase sequestration
- 10 of greenhouse gases, in a developing country. Such credits
- 11 may be issued for projects pursuant to the requirements
- 12 of this part or as provided in subsection (c), (d), or (e).
- 13 "(b) Issuance.—
- 14 "(1) REGULATIONS.—Not later than 2 years
- after the date of enactment of this title, the Admin-
- istrator, in consultation with the Secretary of State,
- the Administrator of the United States Agency for
- 18 International Development, and any other appro-
- priate Federal agency, and taking into consideration
- the recommendations of the Advisory Board, shall
- 21 promulgate regulations for implementing this sec-
- 22 tion, taking into consideration specific factors rel-
- evant to the determination of eligible international
- offset project types and the implementation of inter-
- 25 national methodologies for each offset type ap-

1	proved. Except as otherwise provided in this section,
2	the issuance of international offset credits under this
3	section shall be subject to the requirements of this
4	part.
5	"(2) Requirements for international
6	OFFSET CREDITS.—The Administrator may issue
7	international offset credits only if—
8	"(A) the United States is a party to a bi-
9	lateral or multilateral agreement or arrange-
10	ment that includes the country in which the
11	project or measure achieving the relevant green-
12	house gas emission reduction or avoidance, or
13	greenhouse gas sequestration, has occurred;
14	"(B) such country is a developing country;
15	and
16	"(C) such agreement or arrangement—
17	"(i) ensures that all of the require-
18	ments of this part apply to the issuance of
19	international offset credits under this sec-
20	tion;
21	"(ii) provides for the appropriate dis-
22	tribution of international offset credits
23	issued; and
24	"(iii) requires the offset project devel-
25	oper to designate a registered agent in the

1	United States to receive, and be eligible to
2	receive, service of process in the United
3	States for the purpose of all civil and regu-
4	latory actions in Federal courts, if such
5	service is made in accordance with the
6	Federal rules for service of process in the
7	States in which the case or regulatory ac-
8	tion is brought. A foreign offset project de-
9	veloper that designates an agent under this
10	section thereby consents to the personal ju-
11	risdiction of the Federal courts of the
12	State in which the registered agent is lo-
13	cated for the purpose of any civil or regu-
14	latory proceeding.
15	"(3) Supplemental international offset
16	CATEGORIES.—
17	"(A) In GENERAL.—In order to ensure a
18	sufficient supply of international offsets and to
19	reduce the cost of compliance with this title, the
20	Administrator may establish categories of inter-
21	national offsets in addition to those described in
22	subsections (e), (d), and (e), if—
23	"(i) for 2 consecutive years, the auc-
24	tion price for allowances reaches the
25	amount necessary to [trigger the auction

1	of allowances in the strategic reserve under
2	section 726]; and
3	"(ii) the Administrator determines
4	that the total amount of international off-
5	sets held by covered entities for each of the
6	2 years referred to in clause (i) does not
7	exceed the limit on international offsets es-
8	tablished under [section 722(d)].
9	"(B) Supplemental categories.—
10	"(i) In general.—Any supplemental
11	categories of international offsets estab-
12	lished pursuant to subparagraph (A)
13	shall—
14	"(I) satisfy all applicable provi-
15	sions of this part, including subsection
16	(b)(2) of this section and sections 733
17	and 734; and
18	"(II) meet the criteria described
19	in clause (ii).
20	"(ii) Criteria.—The criteria referred
21	to in clause (i)(II) are that—
22	"(I) the country in which the ac-
23	tivities in the offset category would
24	take place has developed and is imple-
25	menting a low carbon development

1	plan that includes provisions for the
2	activities described in the offset cat-
3	egory;
4	"(II) the activities in the offset
5	category are not activities included
6	under subsection (c), (d) or (e); and
7	"(III) the activities in the offset
8	category satisfy specific criteria rel-
9	evant to methodologies and institu-
10	tional and technical capacities associ-
11	ated with developing country contexts
12	to ensure adequate treatment of leak-
13	age, additionality, and permanence.
14	"(c) Sector-based Credits.—
15	"(1) In general.—In order to minimize the
16	potential for leakage and to encourage countries to
17	take nationally appropriate mitigation actions to re-
18	duce or avoid greenhouse gas emissions, or sequester
19	greenhouse gases, the Administrator, in consultation
20	with the Secretary of State and the Administrator of
21	the United States Agency for International Develop-
22	ment, shall—
23	"(A) identify sectors, or combinations of
24	sectors, within specific countries with respect to

1	which the issuance of international offset cred-
2	its on a sectoral basis is appropriate; and
3	"(B) issue international offset credits for
4	such sectors only on a sectoral basis.
5	"(2) Identification of sectors.—
6	"(A) General rule.—For purposes of
7	paragraph (1)(A), a sectoral basis shall be ap-
8	propriate for activities—
9	"(i) in countries that have compara-
10	tively high greenhouse gas emissions, or
11	comparatively greater levels of economic
12	development; and
13	"(ii) that, if located in the United
14	States, would be within a sector subject to
15	the compliance obligation under section
16	722.
17	"(B) Factors.—In determining the sec-
18	tors and countries for which international offset
19	credits should be awarded only on a sectoral
20	basis, the Administrator, in consultation with
21	the Secretary of State and the Administrator of
22	the United States Agency for International De-
23	velopment, shall consider the following factors:
24	"(i) The country's gross domestic
25	product.

1	"(ii) The country's total greenhouse
2	gas emissions.
3	"(iii) Whether the comparable sector
4	of the United States economy is covered by
5	the compliance obligation under section
6	722.
7	"(iv) The heterogeneity or homo-
8	geneity of sources within the relevant sec-
9	tor.
10	"(v) Whether the relevant sector pro-
11	vides products or services that are sold in
12	internationally competitive markets.
13	"(vi) The risk of leakage if inter-
14	national offset credits were issued on a
15	project-level basis, instead of on a sectoral
16	basis, for activities within the relevant sec-
17	tor.
18	"(vii) The capability of accurately
19	measuring, monitoring, reporting, and
20	verifying the performance of sources across
21	the relevant sector.
22	"(viii) Such other factors as the Ad-
23	ministrator, in consultation with the Sec-
24	retary of State and the Administrator of
25	the United States Agency for International

1	Development, determines are appropriate
2	to—
3	"(I) ensure the integrity of the
4	United States greenhouse gas emis-
5	sions cap established under section
6	701; and
7	"(II) encourage countries to take
8	nationally appropriate mitigation ac-
9	tions to reduce or avoid greenhouse
10	gas emissions, or sequester green-
11	house gases.
12	"(ix) The issuance of offsets for ac-
13	tivities that are—
14	"(I) in addition to nationally ap-
15	propriate mitigation actions taken by
16	developing countries pursuant to the
17	low-carbon development plans of the
18	countries; and
19	"(II) on a sectoral basis.
20	"(3) Sectoral basis.—
21	"(A) DEFINITION.—In this subsection, the
22	term 'sectoral basis' means the issuance of
23	international offset credits only for the quantity
24	of sector-wide reductions or avoidance of green-
25	house gas emissions, or sector-wide increases in

1	sequestration of greenhouse gases, achieved
2	across the relevant sector or sectors of the econ-
3	omy relative to a baseline level of emissions es-
4	tablished in an agreement or arrangement de-
5	scribed in subsection (b)(2)(A) for the sector.
6	"(B) Baseline.—The baseline for a sec-
7	tor shall—
8	"(i) be established at levels of green-
9	house gas emissions lower than would
10	occur under a business-as-usual scenario,
11	taking into account relevant domestic or
12	international policies or incentives to re-
13	duce greenhouse gas emissions;
14	"(ii) be used to determine
15	additionality and performance;
16	"(iii) account for all significant
17	sources of emissions from a sector;
18	"(iv) be adjusted over time to reflect
19	changing circumstances;
20	"(v) be developed taking into consid-
21	eration such factors as—
22	"(I) any established emissions
23	performance level for the sector;
24	"(II) the current performance of
25	the sector in the country;

1	"(III) expected future trends of
2	the sector in the country; and
3	"(IV) historical data and other
4	factors to ensure additionality; and
5	"(vi) be designed to produce signifi-
6	cant deviations from business-as-usual
7	emissions, consistent with nationally appro-
8	priate mitigation commitments or actions,
9	in a way that equitably contributes to
10	meeting thresholds identified in section
11	705(e)(2).
12	"(d) Credits Issued by an International
13	Вору.—
14	"(1) IN GENERAL.—The Administrator, in con-
15	sultation with the Secretary of State, may issue
16	international offset credits in exchange for instru-
17	ments in the nature of offset credits that are issued
18	by an international body established pursuant to the
19	United Nations Framework Convention on Climate
20	Change, to a protocol to such Convention, or to a
21	treaty that succeeds such Convention. The Adminis-
22	trator may issue international offset credits under
23	this subsection only if, in addition to the require-
24	ments of subsection (b), the Administrator has de-
25	termined that the international body that issued the

11

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1 instruments has implemented substantive and proce-2 dural requirements for the relevant project type that 3 provide equal or greater assurance of the integrity of 4 such instruments as is provided by the requirements 5 of this part. Beginning on January 1, 2016, the Ad-6 ministrator shall issue no offset credit pursuant to 7 this subsection if the activity generating the green-8 house gas emissions reductions or avoidance, or 9 greenhouse gas sequestration, occurs in a country 10 and sector identified by the Administrator under subsection (c), unless the offset credit issued by the 12 international body is consistent with 743(c). 13 RETIREMENT.—The Administrator, in 14 consultation with the Secretary of State, shall seek, 15 by whatever means appropriate, including agree-16 ments, arrangements, or technical cooperation with 17 the international issuing body described in para-18 graph (1), to ensure that such body— 19 "(A) is notified of the Administrator's 20 issuance, under this subsection, of an international offset credit in exchange for an instru-22 ment issued by such international body; and 23 "(B) provides, to the extent feasible, for 24 the disqualification of the instrument issued by 25 such international body for subsequent use

1	under any relevant foreign or international
2	greenhouse gas regulatory program, regardless
3	of whether such use is a sale, exchange, or sub-
4	mission to satisfy a compliance obligation.
5	"(e) Offsets From Reduced Deforestation.—
6	"(1) REQUIREMENTS.—The Administrator, in
7	accordance with the regulations promulgated under
8	subsection (b)(1) and an agreement or arrangement
9	described in subsection (b)(2)(A), shall issue inter-
10	national offset credits for greenhouse gas emission
11	reductions achieved through activities to reduce de-
12	forestation only if, in addition to the requirements of
13	subsection (b)—
14	"(A) the activity occurs in—
15	"(i) a country listed by the Adminis-
16	trator pursuant to paragraph (2);
17	"(ii) a state or province listed by the
18	Administrator pursuant to paragraph (5);
19	or
20	"(iii) a country listed by the Adminis-
21	trator pursuant to paragraph (6);
22	"(B) except as provided in paragraph (5)
23	or (6), the quantity of the international offset
24	credits is determined by comparing the national
25	emissions from deforestation relative to a na-

1	tional deforestation baseline for that country es
2	tablished, in accordance with an agreement or
3	arrangement described in subsection (b)(2)(A)
4	pursuant to paragraph (4);
5	"(C) the reduction in emissions from de-
6	forestation has occurred before the issuance of
7	the international offset credit and, taking into
8	consideration relevant international standards
9	has been demonstrated using ground-based in-
10	ventories, remote sensing technology, and other
11	methodologies to ensure that all relevant carbor
12	stocks are accounted;
13	"(D) the Administrator has made appro-
14	priate adjustments, such as discounting for any
15	additional uncertainty, to account for cir-
16	cumstances specific to the country, including its
17	technical capacity described in paragraph
18	(2)(A);
19	"(E) the Administrator has determined
20	that the country within which the activity oc
21	curs has in place a publicly available strategic
22	plan that includes the criteria listed in para-
23	graph $(2)(C)$;
24	"(F) the activity is designed, carried out
25	and managed—

1	"(i) in accordance with forest manage-
2	ment practices that—
3	"(I) improve the livelihoods of
4	forest communities;
5	"(II) maintain the natural bio-
6	diversity, resilience, and carbon stor-
7	age capacity of forests; and
8	"(III) do not adversely impact
9	the permanence of forest carbon
10	stocks or emission reductions;
11	"(ii) to promote or restore native for-
12	est species and ecosystems where prac-
13	ticable, and to avoid the introduction of
14	invasive nonnative species;
15	"(iii) in a manner that gives due re-
16	gard to the rights and interests of local
17	communities, indigenous peoples, forest-de-
18	pendent communities, and vulnerable social
19	groups;
20	"(iv) with consultations with, and full
21	participation of, local communities, indige-
22	nous peoples, and forest-dependent com-
23	munities, in affected areas, as partners
24	and primary stakeholders, prior to and
25	during the design, planning, implementa-

1	tion, and monitoring and evaluation of ac-
2	tivities;
3	"(v) with transparent and equitable
4	sharing of profits and benefits derived
5	from offset credits with local communities,
6	indigenous peoples, and forest-dependent
7	communities;
8	"(vi) with full transparency, third-
9	party independent oversight, and public
10	dissemination of related financial and con-
11	tractual arrangements, and
12	"(vii) so that the social and environ-
13	mental impacts of these activities are mon-
14	itored and reported in sufficient detail to
15	allow appropriate officials to determine
16	compliance with the requirements of this
17	section;
18	"(G) the reduction otherwise satisfies and
19	is consistent with any relevant requirements es-
20	tablished by an agreement reached under the
21	auspices of the United Nations Framework
22	Convention on Climate Change, done at New
23	York on May 9, 1992; and
24	"(H) in the case that offsets are deter-
25	mined by comparing the national emissions

1	from deforestation relative to a national, state-
2	level, or province-level deforestation baseline as
3	provided in paragraph (4) or (5)—
4	"(i) a list of activities to reduce defor-
5	estation is provided to the Administrator
6	and made publicly available;
7	"(ii) the social and environmental im-
8	pacts of these activities are monitored and
9	reported in sufficient detail to allow the
10	Administrator to determine compliance
11	with the requirements of this section; and
12	"(iii) the distribution of revenues for
13	activities to reduce deforestation is trans-
14	parent, subject to independent third-party
15	oversight, and publicly disseminated.
16	"(2) Eligible countries.—The Adminis-
17	trator, in consultation with the Secretary of State
18	and the Administrator of the United States Agency
19	for International Development, and in accordance
20	with an agreement or arrangement described in sub-
21	section (b)(2)(A), shall establish, and periodically re-
22	view and update, a list of the developing countries
23	that have the capacity to participate in deforestation
24	reduction activities at a national level, including—

1	"(A) the technical capacity to monitor,
2	measure, report, and verify forest carbon fluxes
3	for all significant sources of greenhouse gas
4	emissions from deforestation with an acceptable
5	level of uncertainty, as determined taking into
6	account relevant internationally accepted meth-
7	odologies, such as those established by the
8	Intergovernmental Panel on Climate Change;
9	"(B) the institutional capacity to reduce
10	emissions from deforestation, including strong
11	forest governance and mechanisms to ensure
12	transparency and third-party independent over-
13	sight of offset activities and revenues, and the
14	transparent and equitable distribution of offset
15	revenues for local actions; and
16	"(C) a land use or forest sector strategic
17	plan that—
18	"(i) assesses national and local drivers
19	of deforestation and forest degradation and
20	identifies reforms to national policies need-
21	ed to address them;
22	"(ii) estimates the country's emissions
23	from deforestation and forest degradation;
24	"(iii) identifies improvements in and a
25	timeline for data collection, monitoring,

1	and institutional capacity necessary to im-
2	plement an effective national deforestation
3	reduction program that meets the criteria
4	set forth in this section (including a na-
5	tional deforestation baseline);
6	"(iv) establishes a timeline for imple-
7	menting the program and transitioning
8	forest-based economies to low-emissions de-
9	velopment pathways with respect to emis-
10	sions from forest and land use activities;
11	"(v) includes a national policy for con-
12	sultations with, and full participation of,
13	all stakeholders, especially indigenous and
14	forest-dependent communities, in its de-
15	sign, planning, and implementation of ac-
16	tivities, whether at the national or local
17	level, to reduce deforestation in the country
18	(including a national process for address-
19	ing grievances if stakeholders have been
20	caused social, environmental, or economic
21	harm);
22	"(vi) provides for the distribution of
23	revenues for activities to reduce deforest-
24	ation transparently and publicly, subject to
25	independent third-party oversight; and

1	"(vii) includes a national platform or
2	a type of registry for information relating
3	to deforestation and degradation policy and
4	program implementation processes, includ-
5	ing a mechanism for the monitoring and
6	reporting of the social and environmental
7	impacts of those activities.
8	"(3) Protection of interests.—With re-
9	spect to an agreement or arrangement described in
10	subsection (b)(2)(A) with a country that addresses
11	international offset credits under this subsection, the
12	Administrator, in consultation with the Secretary of
13	State and the Administrator of the United States
14	Agency for International Development, shall under-
15	take due diligence to ensure the establishment and
16	enforcement by such country of legal regimes, proc-
17	esses, standards, and safeguards that—
18	"(A) give due regard to the rights and in-
19	terests of local communities, indigenous peoples,
20	forest-dependent communities, and vulnerable
21	social groups;
22	"(B) promote consultations with, and full
23	participation of, forest-dependent communities
24	and indigenous peoples in affected areas, as
25	partners and primary stakeholders, prior to and

1	during the design, planning, implementation,
2	and monitoring and evaluation of activities; and
3	"(C) encourage transparent and equitable
4	sharing of profits and benefits derived from
5	international offset credits with local commu-
6	nities, indigenous peoples, and forest-dependent
7	communities.
8	"(4) National deforestation baseline.—A
9	national deforestation baseline established under this
10	subsection shall—
11	"(A) be national in scope;
12	"(B) be consistent with nationally appro-
13	priate mitigation commitments or actions with
14	respect to deforestation, taking into consider-
15	ation the average annual historical deforestation
16	rates of the country during a period of at least
17	5 years, the applicable drivers of deforestation,
18	and other factors to ensure that only reductions
19	that are in addition to such commitments or ac-
20	tions will generate offsets;
21	"(C) establish a trajectory that would re-
22	sult in zero net deforestation by not later than
23	20 years after the national deforestation base-
24	line has been established, including a spatially
25	explicit land use plan that identifies intact and

1	primary forest areas and managed forest areas
2	that are to remain while the country is reaching
3	the zero net deforestation trajectory;
4	"(D) be adjusted over time to take account
5	of changing national circumstances;
6	"(E) be designed to account for all signifi-
7	cant sources of greenhouse gas emissions from
8	deforestation in the country; and
9	"(F) be consistent with the national defor-
10	estation baseline, if any, established for such
11	country under section 754(d)(1).
12	"(5) State-level or province-level ac-
13	TIVITIES.—
14	"(A) ELIGIBLE STATES OR PROVINCES.—
15	The Administrator, in consultation with the
16	Secretary of State and the Administrator of the
17	United States Agency for International Devel-
18	opment, shall establish, and periodically review
19	and update, a list of states or provinces in de-
20	veloping countries where—
21	"(i) the developing country is not in-
22	cluded on the list of countries established
23	pursuant to paragraph (6)(A);
24	"(ii) the State or province is under-
25	taking deforestation reduction activities;

1	"(iii) the state or province has the ca-
2	pacity to engage in deforestation reduction
3	activities at the state or province level, in-
4	cluding—
5	"(I) the technical capacity to
6	monitor and measure forest carbon
7	fluxes for all significant sources of
8	greenhouse gas emissions from defor-
9	estation with an acceptable amount of
10	uncertainty, including a spatially ex-
11	plicit land use plan that identifies in-
12	tact and primary forest areas and
13	managed forest areas that are to re-
14	main while the country is reaching the
15	zero net deforestation trajectory; and
16	"(II) the institutional capacity to
17	reduce emissions from deforestation,
18	including strong forest governance
19	and mechanisms to deliver forest con-
20	servation resources for local actions;
21	"(iv) the state or province meets the
22	eligibility criteria in paragraphs (2) and
23	(3) for the geographic area under its juris-
24	diction; and
25	"(v) the country—

1	"(I) demonstrates that efforts
2	are underway to transition to a na-
3	tional program within 5 years; or
4	"(II) in the determination of the
5	Administrator, is making a good-faith
6	effort to develop a land use or forest
7	sector strategic national plan or pro-
8	gram that meets the criteria described
9	in paragraph (2)(C).
10	"(B) ACTIVITIES.—The Administrator may
11	issue international offset credits for greenhouse
12	gas emission reductions achieved through activi-
13	ties to reduce deforestation at a state or provin-
14	cial level that meet the requirements of this sec-
15	tion. Such credits shall be determined by com-
16	paring the emissions from deforestation within
17	that state or province relative to the state or
18	province deforestation baseline for that state or
19	province established, in accordance with an
20	agreement or arrangement described in sub-
21	section (b)(2)(A), pursuant to subparagraph
22	(C) of this paragraph.
23	"(C) State-level or province-level
24	DEFORESTATION BASELINE.—A state-level or
25	province-level deforestation baseline shall—

1	"(i) be consistent with any existing
2	nationally appropriate mitigation commit-
3	ments or actions for the country in which
4	the activity is occurring, so that only re-
5	ductions that are in addition to those com-
6	mitments or actions will generate offsets;
7	"(ii) be developed taking into consid-
8	eration the average annual historical defor-
9	estation rates of the state or province dur-
10	ing a period of at least 5 years, relevant
11	drivers of deforestation, and other factors
12	to ensure additionality;
13	"(iii) establish a trajectory that would
14	result in zero net deforestation by not later
15	than 20 years after the state-level or prov-
16	ince-level deforestation baseline has been
17	established; and
18	"(iv) be designed to account for all
19	significant sources of greenhouse gas emis-
20	sions from deforestation in the state or
21	province and adjusted to fully account for
22	emissions leakage outside the state or
23	province through monitoring of major for-
24	ested areas in the host country and other

1	areas of the host country susceptible to
2	leakage.
3	"(D) Phase out.—Beginning 5 years
4	after the first calendar year for which a covered
5	entity must demonstrate compliance with sec-
6	tion 722(a), the Administrator shall issue no
7	further international offset credits for eligible
8	state-level or province-level activities to reduce
9	deforestation pursuant to this paragraph.
10	"(6) Projects and programs to reduce
11	DEFORESTATION.—
12	"(A) ELIGIBLE COUNTRIES.—The Admin-
13	istrator, in consultation with the Secretary of
14	State and the Administrator of the United
15	States Agency for International Development
16	shall establish, and periodically review and up-
17	date, a list of developing countries that—
18	"(i) the Administrator determines
19	based on recent, credible, and reliable
20	emissions data, account for less than 1
21	percent of global greenhouse gas emissions
22	and less than 3 percent of global forest-
23	sector and land use change greenhouse gas
24	emissions;

1	"(ii) have, or in the determination of
2	the Administrator are making a good faith
3	effort to develop, a land use or forest sec-
4	tor strategic plan that meets the criteria
5	described in paragraph (2)(C); and
6	"(iii) has made, or in the determina-
7	tion of the Administrator, is making, a
8	good-faith effort to develop, through the
9	implementation of activities under this sec-
10	tion, a monitoring program for major for-
11	ested areas in a host country and other
12	areas in a host country susceptible to leak-
13	age, including a spatially explicit land use
14	plan that identifies intact and primary for-
15	est areas and managed forest areas that
16	are to remain while country is reaching the
17	zero net deforestation trajectory.
18	"(B) Activities.—The Administrator may
19	issue international offset credits for greenhouse
20	gas emission reductions achieved through
21	project or program level activities to reduce de-
22	forestation in countries listed under subpara-
23	graph (A) that meet the requirements of this
24	section. The quantity of international offset
25	credits shall be determined by comparing the

1	project-level or program-level emissions from
2	deforestation to a deforestation baseline for
3	such project or program established pursuant to
4	subparagraph (C).
5	"(C) Project-level or program-level
6	BASELINE.—A project-level or program-level de-
7	forestation baseline shall—
8	"(i) be consistent with any existing
9	nationally appropriate mitigation commit-
10	ments or actions for the country in which
11	the project or program is occurring, so
12	that only reductions that are in addition to
13	such commitments or actions will generate
14	offsets;
15	"(ii) be developed taking into consid-
16	eration the average annual historical defor-
17	estation rates in the project or program
18	boundary during a period of at least 5
19	years, applicable drivers of deforestation
20	and other factors to ensure additionality;
21	"(iii) be designed to account for all
22	significant sources of greenhouse gas emis-
23	sions from deforestation in the project or
24	program boundary; and

1	"(iv) be adjusted to fully account for
2	emissions leakage outside the project or
3	program boundary, including—
4	"(I) estimation through moni-
5	toring of major forested areas in a
6	host country and other areas in a host
7	country susceptible to leakage, pursu-
8	ant to section 743(e)(5); and
9	"(II) a spatially explicit land use
10	plan that identifies intact and primary
11	forest areas and managed forest areas
12	that are to remain while country is
13	reaching the zero net deforestation
14	trajectory
15	"(D) Phase-out.—
16	"(i) In General.—Beginning on the
17	date that is 8 years after the first calendar
18	year for which a covered entity must dem-
19	onstrate compliance with section 722(a),
20	the Administrator shall issue no further
21	international offset credits for project-level
22	or program-level activities as described in
23	this paragraph, except as provided in
24	clause (ii).

1	"(ii) Extension.—The Administrator
2	may extend the phase out deadline for the
3	issuance of international offset credits
4	under this section by up to 5 years with re-
5	spect to eligible activities taking place in a
6	least developed country, which is a foreign
7	country that the United Nations has iden-
8	tified as among the least developed of de-
9	veloping countries at the time that the Ad-
10	ministrator determines to provide an exten-
11	sion, provided that the Administrator, in
12	consultation with the Secretary of State
13	and the Administrator of the United States
14	Agency for International Development, de-
15	termines the country—
16	"(I) lacks sufficient capacity to
17	adopt and implement effective pro-
18	grams to achieve reductions in defor-
19	estation measured against national
20	baselines;
21	(Π) is receiving support under
22	part E to develop such capacity; and
23	"(III) has developed and is work-
24	ing to implement a credible national

1	strategy or plan to reduce deforest
2	ation.
3	"(7) Expansion of scope.—In implementing
4	this subsection, the Administrator, taking into con-
5	sideration the recommendations of the Advisory
6	Board, may—
7	"(A) expand credible activities to include
8	forest degradation; and
9	"(B) include soil carbon losses associated
10	with forested wetlands or peatlands.
11	"(f) Modification of Requirements.—In promul-
12	gating regulations under subsection $(b)(1)$ with respect to
13	the issuance of international offset credits under sub-
14	section (c), (d), or (e), the Administrator, in consultation
15	with the Secretary of State and the Administrator of the
16	United States Agency for International Development, may
17	modify or omit a requirement of this part (excluding the
18	requirements of this section) if the Administrator deter-
19	mines that the application of that requirement to such
20	subsection is not feasible or would result in the creation
21	of offset credits that would not be eligible to satisfy emis
22	sions reduction commitments made by the United States
23	pursuant to the United Nations Framework Convention
24	on Climate Change, done at New York on May 9, 1992
25	(or any successor agreement). In modifying or omitting

- 1 such a requirement on the basis of infeasibility, the Ad-
- 2 ministrator, in consultation with the Secretary of State
- 3 and the Administrator of the United States Agency for
- 4 International Development, shall ensure, with an adequate
- 5 margin of safety, the integrity of international offset cred-
- 6 its issued under this section and of the greenhouse gas
- 7 emissions cap established pursuant to section 701.
- 8 "(g) AVOIDING DOUBLE COUNTING.—The Adminis-
- 9 trator, in consultation with the Secretary of State, shall
- 10 seek, by whatever means appropriate, including agree-
- 11 ments, arrangements, or technical cooperation, to ensure
- 12 that activities on the basis of which international offset
- 13 credits are issued under this section are not used for com-
- 14 pliance with an obligation to reduce or avoid greenhouse
- 15 gas emissions, or increase greenhouse gas sequestration,
- 16 under a foreign or international regulatory system. In ad-
- 17 dition, no international offset credits shall be issued for
- 18 emission reductions from activities with respect to which
- 19 emission allowances were allocated under section 781 for
- 20 distribution under part E.
- 21 "(h) LIMITATION.—The Administrator shall not issue
- 22 international offset credits generated by projects based on
- 23 the destruction of hydrofluorocarbons.".

1	SEC.	102.	DEFINITIONS.

- 2 Title VII of the Clean Air Act, as added by section
- 3 101 of this division, is amended by inserting before part
- 4 A the following new section:
- 5 "SEC. 700. DEFINITIONS.
- 6 "In this title:

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- 7 "(1) ADDITIONAL.—The term 'additional', 8 when used with respect to reductions or avoidance of greenhouse gas emissions, or to sequestration of 9 10 greenhouse gases, means reductions, avoidance, or 11 sequestration that result in a lower level of net 12 greenhouse gas emissions or atmospheric concentra-13 tions than would occur in the absence of an offset 14 credit.
 - "(2) Additionality.—The term 'additionality' means the extent to which reductions or avoidance of greenhouse gas emissions, or sequestration of greenhouse gases, are additional.
 - "(3) ADVISORY BOARD.—The term 'Advisory Board' means the Offsets Integrity Advisory Board established under section 731.
- 22 "(4) Affiliated.—The term 'affiliated'—
- "(A) when used in relation to an entity, means owned or controlled by, or under common ownership or control with, another entity, as determined by the Administrator; and

1	"(B) when used in relation to a natural
2	gas local distribution company, means owned or
3	controlled by, or under common ownership or
4	control with, another natural gas local distribu-
5	tion company, as determined by the Adminis-
6	trator.
7	"(5) Allowance.—The term 'allowance'
8	means a limited authorization to emit, or have at-
9	tributable greenhouse gas emissions in an amount
10	of, 1 ton of carbon dioxide equivalent of a green-
11	house gas in accordance with this title; it includes an
12	emission allowance, a compensatory allowance, or an
13	international emission allowance.
14	"(6) Attributable greenhouse gas emis-
15	SIONS.—The term 'attributable greenhouse gas emis-
16	sions' means—
17	"(A) for a covered entity that is a fuel pro-
18	ducer or importer described in paragraph
19	(13)(B), greenhouse gases that would be emit-
20	ted from the combustion of any petroleum-
21	based or coal-based liquid fuel, petroleum coke,
22	or natural gas liquid, produced or imported by
23	that covered entity for sale or distribution in
24	interstate commerce, assuming no capture and

sequestration of any greenhouse gas emissions;

1	"(B) for a covered entity that is an indus-
2	trial gas producer or importer described in
3	paragraph (13)(C), the tons of carbon dioxide
4	equivalent of fossil fuel-based carbon dioxide,
5	nitrous oxide, any fluorinated gas, other than
6	nitrogen trifluoride, that is a greenhouse gas, or
7	any combination thereof—
8	"(i) produced or imported by such
9	covered entity during the previous calendar
10	year for sale or distribution in interstate
11	commerce; or
12	"(ii) released as fugitive emissions in
13	the production of fluorinated gas; and
14	"(C) for a natural gas local distribution
15	company described in paragraph (13)(J), green-
16	house gases that would be emitted from the
17	combustion of the natural gas, and any other
18	gas meeting the specifications for commingling
19	with natural gas for purposes of delivery, that
20	such entity delivered during the previous cal-
21	endar year to customers that are not covered
22	entities, assuming no capture and sequestration
23	of that greenhouse gas.
24	"(7) BIOLOGICAL SEQUESTRATION.—The term
25	'biological sequestration' means the removal of

1	greenhouse gases from the atmosphere by terrestrial
2	biological means, such as by growing plants, and the
3	storage of those greenhouse gases in plants or soils.
4	"(8) Capped Emissions.—The term 'capped
5	emissions' means greenhouse gas emissions to which
6	section 722 applies, including emissions from the
7	combustion of natural gas, petroleum-based or coal-
8	based liquid fuel, petroleum coke, or natural gas liq-
9	uid to which section 722(b)(2) or (8) applies.
10	"(9) CAPPED SOURCE.—The term 'capped
11	source' means a source that directly emits capped
12	emissions.
13	"(10) Carbon dioxide equivalent.—The
14	term 'carbon dioxide equivalent' means the unit of
15	measure, expressed in metric tons, of greenhouse
16	gases as provided under section 711 or 712.
17	"(11) CARBON STOCK.—The term 'carbon
18	stock' means the quantity of carbon contained in a
19	biological reservoir or system which has the capacity
20	to accumulate or release carbon.
21	"(12) Compensatory allowance.—The term
22	'compensatory allowance' means an allowance issued
23	under section 721(f).
24	"(13) Covered entity.—The term 'covered
25	entity' means each of the following:

1	"(A) Any electricity source.
2	"(B)(i) Any stationary source that pro-
3	duces petroleum-based or coal-based liquid fuel,
4	petroleum coke, or natural gas liquid, the com-
5	bustion of which would emit 25,000 or more
6	tons of carbon dioxide equivalent, as determined
7	by the Administrator.
8	"(ii) Any entity that (or any group of 2 or
9	more affiliated entities that, in the aggregate)
10	imports petroleum-based or coal-based liquid
11	fuel, petroleum coke, or natural gas liquid, the
12	combustion of which would emit 25,000 or more
13	tons of carbon dioxide equivalent, as determined
14	by the Administrator.
15	"(C) Any stationary source that produces,
16	and any entity that (or any group of two or
17	more affiliated entities that, in the aggregate)
18	imports, for sale or distribution in interstate
19	commerce, in bulk, or in products designated by
20	the Administrator, in 2008 or any subsequent
21	year more than 25,000 tons of carbon dioxide
22	equivalent of—
23	"(i) fossil fuel-based carbon dioxide;
24	"(ii) nitrous oxide;

1	"(iii) except as otherwise provided in
2	section 714, perfluorocarbons;
3	"(iv) sulfur hexafluoride;
4	"(v) any other fluorinated gas, except
5	for nitrogen trifluoride, that is a green-
6	house gas, as designated by the Adminis-
7	trator under section 711(b) or (c); or
8	"(vi) any combination of greenhouse
9	gases described in clauses (i) through (v).
10	"(D) Any stationary source that has emit-
11	ted 25,000 or more tons of carbon dioxide
12	equivalent of nitrogen trifluoride in 2008 or any
13	subsequent year.
14	"(E) Any geologic sequestration site.
15	"(F) Any stationary source in the following
16	industrial sectors:
17	"(i) Adipic 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	"(G) Any stationary source in the chemical
9	or petrochemical sector that, in 2008 or any
10	subsequent year—
11	"(i) produces acrylonitrile, carbon
12	black, ethylene, ethylene dichloride, ethyl-
13	ene oxide, or methanol; or
14	"(ii) produces a chemical or petro-
15	chemical product if producing that product
16	results in annual combustion plus process
17	emissions of 25,000 or more tons of carbon
18	dioxide equivalent.
19	"(H) Any stationary source that—
20	"(i) is in one of the following indus-
21	trial sectors: ethanol production; ferroalloy
22	production; fluorinated gas production;
23	food processing; glass production; hydrogen
24	production; metal ore production or other
25	processing; iron and steel production; lead

1	production; pulp and paper manufacturing;
2	and zinc production; and
3	"(ii) has emitted 25,000 or more tons
4	of carbon dioxide equivalent in 2008 or
5	any subsequent year.
6	"(I) Any fossil fuel-fired combustion device
7	(such as a boiler) or grouping of such devices
8	that—
9	"(i) is all or part of an industrial
10	source not specified in subparagraph (D),
11	(F), (G), or (H); and
12	"(ii) has emitted 25,000 or more tons
13	of carbon dioxide equivalent in 2008 or
14	any subsequent year.
15	"(J) Any natural gas local distribution
16	company that (or any group of 2 or more affili-
17	ated natural gas local distribution companies
18	that, in the aggregate) in 2008 or any subse-
19	quent year, delivers 460,000,000 cubic feet or
20	more of natural gas to customers that are not
21	covered entities.
22	"(14) Crediting Period.—The term 'crediting
23	period' means the period with respect to which an
24	offset project is eligible to earn offset credits under
25	part D, as determined under section 734(c).

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"(15) DESIGNATED REPRESENTATIVE.—The term 'designated representative' means, with respect to a covered entity, a reporting entity, an offset project developer, or any other entity receiving or holding allowances or offset credits under this title, an individual authorized, through a certificate of representation submitted to the Administrator by the owners and operators or similar entity official, to represent the owners and operators or similar entity official in all matters pertaining to this title (including the holding, transfer, or disposition of allowances or offset credits), and to make all submissions to the Administrator under this title. "(16) Developing country.—The term 'developing country' means a country eligible to receive official development assistance according to the income guidelines of the Development Assistance Committee of the Organization for Economic Cooperation and Development. "(17) Domestic offset credit.—The term 'domestic offset credit' means an offset credit issued under part D, other than an international offset

1	"(18) Electricity source.—The term 'elec-
2	tricity source' means a stationary source that in-
3	cludes one or more utility units.
4	"(19) Emission.—The term 'emission' means
5	the release of a greenhouse gas into the ambient air.
6	Such term does not include gases that are captured
7	and sequestered, except to the extent that they are
8	later released into the atmosphere, in which case
9	compliance must be demonstrated pursuant to sec-
10	tion $722(b)(5)$.
11	"(20) Emission allowance.—The term 'emis-
12	sion allowance' means an allowance established
13	under section $721(a)$ or section $726(g)(2)$ or
14	(h)(1)(C).
15	"(21) Fair Market Value.—The term 'fair
16	market value' means the average daily closing price
17	on registered exchanges or, if such a price is un-
18	available, the average price as determined by the Ad-
19	ministrator, during a specified time period, of an
20	emission allowance.
21	"(22) FEDERAL LAND.—The term 'Federal
22	land' means land that is owned by the United
23	States, other than land held in trust for an Indian
24	or Indian tribe.

1	"(23) Fossil fuel.—The term 'fossil fuel'
2	means natural gas, petroleum, or coal, or any form
3	of solid, liquid, or gaseous fuel derived from such
4	material, including consumer products that are de-
5	rived from such materials and are combusted.
6	"(24) Fossil fuel-fired.—The term 'fossil
7	fuel-fired' means powered by combustion of fossil
8	fuel, alone or in combination with any other fuel, re-
9	gardless of the percentage of fossil fuel consumed.
10	"(25) Fugitive emissions.—The term 'fugi-
11	tive emissions' means emissions from leaks, valves,
12	joints, or other small openings in pipes, ducts, or
13	other equipment, or from vents.
14	"(26) Geologic sequestration; geologi-
15	CALLY SEQUESTERED.—The terms 'geologic seques-
16	tration' and 'geologically sequestered' mean the se-
17	questration of greenhouse gases in subsurface geo-
18	logic formations for purposes of permanent storage.
19	"(27) Geologic sequestration site.—The
20	term 'geologic sequestration site' means a site where
21	carbon dioxide is geologically sequestered.
22	"(28) Greenhouse gas.—The term 'green-
23	house gas' means any gas described in section
24	711(a) or designated under section 711(b), (c), or

1	(e), except to the extent that it is regulated under
2	title VI.
3	"(29) High conservation priority land.—
4	The term 'high conservation priority land' means
5	land that is not Federal land and is—
6	"(A) globally or State ranked as critically
7	imperiled or imperiled under a State Natural
8	Heritage Program; or
9	"(B) old-growth or late-successional forest,
10	as identified by the office of the State Forester
11	or relevant State agency with regulatory juris-
12	diction over forestry activities.
13	"(30) Hold.—The term 'hold' means, with re-
14	spect to an allowance or offset credit, to have in the
15	appropriate account in the allowance tracking sys-
16	tem, or submit to the Administrator for recording in
17	such account.
18	"(31) Industrial source.—The term 'indus-
19	trial source' means any stationary source that—
20	"(A) is not an electricity source; and
21	"(B) is in—
22	"(i) the manufacturing sector (as de-
23	fined in North American Industrial Classi-
24	fication System codes 31, 32, and 33); or

1	"(ii) the natural gas processing or
2	natural gas pipeline transportation sector
3	(as defined in North American Industrial
4	Classification System codes 211112 or
5	486210).
6	"(32) International emission allow-
7	ANCE.—The term 'international emission allowance'
8	means a tradable authorization to emit 1 ton of car-
9	bon dioxide equivalent of greenhouse gas that is
10	issued by a national or supranational foreign govern-
11	ment pursuant to a qualifying international program
12	designated by the Administrator pursuant to section
13	728(a).
14	"(33) International offset credit.—The
15	term 'international offset credit' means an offset
16	credit issued by the Administrator under section
17	743.
18	"(34) Leakage.—The term 'leakage' means a
19	significant increase in greenhouse gas emissions, or
20	significant decrease in sequestration, which is caused
21	by an offset project and occurs outside the bound-
22	aries of the offset project.
23	"(35) Mineral sequestration.—The term
24	'mineral sequestration' means sequestration of car-
25	bon dioxide from the atmosphere by capturing car-

735(c)(1).

1 bon dioxide into a permanent mineral, such as the 2 aqueous precipitation of carbonate minerals that re-3 sults in the storage of carbon dioxide in a mineral 4 form. 5 "(36) Natural gas liquid.—The term 'nat-6 ural gas liquid' means ethane, butane, isobutane, 7 natural gasoline, and propane which is ready for 8 commercial sale or use. 9 "(37) NATURAL GAS LOCAL DISTRIBUTION 10 COMPANY.—The term 'natural gas local distribution 11 company' has the meaning given the term 'local dis-12 tribution company' in section 2(17) of the Natural 13 Gas Policy Act of 1978 (15 U.S.C. 3301(17)). 14 "(38) Offset credit.—The term offset cred-15 it' means a credit issued under part D. 16 "(39) Offset Project.—The term offset 17 project' means a project or activity that reduces or 18 avoids greenhouse gas emissions, or sequesters 19 greenhouse gases, and for which offset credits are 20 issued under part D. 21 "(40) Offset PROJECT DEVELOPER.—The 22 term 'offset project developer' means the individual 23 or entity designated as the offset project developer 24 in an offset project approval petition under section

1	"(41) QUALIFIED R&D FACILITY.—The term
2	'qualified R&D facility' means a facility that con-
3	ducts research and development, that was in oper-
4	ation as of the date of enactment of this title, and
5	that is part of a covered entity subject to paragraphs
6	(1) through (8) of section 722(b).
7	"(42) Petroleum.—The term 'petroleum' in-
8	cludes crude oil, tar sands, oil shale, and heavy oils.
9	"(43) Repeated intentional reversals.—
10	The term 'repeated intentional reversals' means at
11	least 3 intentional reversals, as determined by the
12	Administrator or a court under section
13	734(b)(3)(B)(ii).
14	"(44) Research and Development.—The
15	term 'research and development' means activities—
16	"(A) that are conducted in process units or
17	at laboratory bench-scale settings;
18	"(B) whose purpose is to conduct research
19	and development for new processes, tech-
20	nologies, or products that contribute to lower
21	greenhouse gas emissions; and
22	"(C) that do not manufacture products for
23	sale.
24	"(45) Renewable biomass.—The term 're-
25	newable biomass' means any of the following:

1	"(A) Plant material, including waste mate-
2	rial, harvested or collected from actively man-
3	aged agricultural land that was in cultivation,
4	cleared, or fallow and nonforested on January
5	1, 2009.
6	"(B) Plant material, including waste mate-
7	rial, harvested or collected from pastureland
8	that was nonforested on January 1, 2009.
9	"(C) Nonhazardous vegetative matter de-
10	rived from waste, including separated yard
11	waste, landscape right-of-way trimmings, con-
12	struction and demolition debris, or food waste
13	(but not municipal solid waste, recyclable waste
14	paper, painted, treated or pressurized wood, or
15	wood contaminated with plastic or metals).
16	"(D) Animal waste or animal byproducts,
17	including products of animal waste digesters.
18	"(E) Algae.
19	"(F) Trees, brush, slash, residues, or any
20	other vegetative matter removed from within
21	600 feet of any building, campground, or route
22	designated for evacuation by a public official
23	with responsibility for emergency preparedness,
24	or from within 300 feet of a paved road, electric

1	transmission line, utility tower, or water supply
2	line.
3	"(G) Residues from or byproducts of
4	milled logs.
5	"(H) Any of the following removed from
6	forested land that is not Federal and is not
7	high conservation priority land:
8	"(i) Trees, brush, slash, residues,
9	interplanted energy crops, or any other
10	vegetative matter removed from an actively
11	managed tree plantation established—
12	"(I) prior to January 1, 2009; or
13	"(II) on land that, as of January
14	1, 2009, was cultivated or fallow and
15	non-forested.
16	"(ii) Trees, logging residue, thinnings,
17	cull trees, pulpwood, and brush removed
18	from naturally regenerated forests or other
19	non-plantation forests, including for the
20	purposes of hazardous fuel reduction or
21	preventative treatment for reducing or con-
22	taining insect or disease infestation.
23	"(iii) Logging residue, thinnings, cull
24	trees, pulpwood, brush, and species that
25	are non-native and noxious, from stands

1	that were planted and managed after Jan-
2	uary 1, 2009, to restore or maintain native
3	forest types.
4	"(iv) Dead or severely damaged trees
5	removed within 5 years of fire, blowdown,
6	or other natural disaster, and badly in-
7	fested trees.
8	"(I) Materials, pre-commercial thinnings,
9	or removed invasive species from National For-
10	est System land and public lands (as defined in
11	section 103 of the Federal Land Policy and
12	Management Act of 1976 (43 U.S.C. 1702)),
13	including those that are byproducts of preven-
14	tive treatments (such as trees, wood, brush,
15	thinnings, chips, and slash), that are removed
16	as part of a federally recognized timber sale, or
17	that are removed to reduce hazardous fuels, to
18	reduce or contain disease or insect infestation,
19	or to restore ecosystem health, and that are—
20	"(i) not from components of the Na-
21	tional Wilderness Preservation System,
22	Wilderness Study Areas, Inventoried
23	Roadless Areas, old growth or mature for-
24	est stands, components of the National
25	Landscape Conservation System, National

1	Monuments, National Conservation Areas,
2	Designated Primitive Areas; or Wild and
3	Scenic Rivers corridors;
4	"(ii) harvested in environmentally sus-
5	tainable quantities, as determined by the
6	appropriate Federal land manager; and
7	"(iii) are harvested in accordance with
8	Federal and State law, and applicable land
9	management plans.
10	"(46) Retire.—The term 'retire', with respect
11	to an allowance or offset credit established or issued
12	under this title, means to disqualify such allowance
13	or offset credit for any subsequent use under this
14	title, regardless of whether the use is a sale, ex-
15	change, or submission of the allowance or offset
16	credit to satisfy a compliance obligation.
17	"(47) Reversal.—The term 'reversal' means
18	an intentional or unintentional loss of sequestered
19	greenhouse gases to the atmosphere.
20	"(48) Sequestered and sequestration.—
21	The terms 'sequestered' and 'sequestration' mean
22	the separation, isolation, or removal of greenhouse
23	gases from the atmosphere, as determined by the
24	Administrator. The terms include biological, geo-

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- 1 logic, and mineral sequestration, but do not include 2 ocean fertilization techniques. 3 "(49) STATIONARY SOURCE.—The term 'sta-4 tionary source' means any integrated operation com-5 prising any plant, building, structure, or stationary 6 equipment, including support buildings and equip-7 ment, that is located within one or more contiguous 8 or adjacent properties, is under common control of 9 the same person or persons, and emits or may emit 10 a greenhouse gas. 11 "(50) STRATEGIC RESERVE ALLOWANCE.—The 12 term 'strategic reserve allowance' means an emission 13 allowance reserved for, transferred to, or deposited 14 in the strategic reserve, or established, under section 726. 15 16 "(51) Uncapped emissions.—The term 'un-17 capped emissions' means emissions of greenhouse 18 gases emitted after December 31, 2011, that are not 19 capped emissions. 20 "(52) United states greenhouse gas emis-21 SIONS.—The term 'United States greenhouse gas 22
 - emissions' means the total quantity of annual greenhouse gas emissions from the United States, as calculated by the Administrator and reported to the

1	United Nations Framework Convention on Climate
2	Change Secretariat.
3	"(53) UTILITY UNIT.—The term 'utility unit'
4	means a combustion device that, on January 1,
5	2009, or any date thereafter, is fossil fuel-fired and
6	serves a generator that produces electricity for sale,
7	unless such combustion device, during the 12-month
8	period starting the later of January 1, 2009, or the
9	commencement of commercial operation and each
10	calendar year starting after such later date—
11	"(A) is part of an integrated cycle system
12	that cogenerates steam and electricity during
13	normal operation and that supplies one-third or
14	less of its potential electric output capacity and
15	25 MW or less of electrical output for sale; or
16	"(B) combusts materials of which more
17	than 95 percent is municipal solid waste on a
18	heat input basis.
19	"(54) VINTAGE YEAR.—The term 'vintage year'
20	means the calendar year for which an emission al-
21	lowance is established under section 721(a) or which
22	is assigned to an emission allowance under section
23	726(g)(3)(A), except that the vintage year for a
24	strategic reserve allowance shall be the year in which
25	such allowance is purchased at auction.".

1	SEC. 103. OFFSET REPORTING REQUIREMENTS.
2	Section 114 of Clean Air Act (42 U.S.C. 7414) is
3	amended by adding at the end the following:
4	"(e) Recordkeeping for Carbon Offsets Pro-
5	GRAM.—For the purpose of implementing the carbon off-
6	sets program set forth in subtitle D of title VII, the Ad-
7	ministrator shall require any person who is an offset
8	project developer, and may require any person who is a
9	third party verifier, to establish and maintain records, for
10	a period of not less than the crediting period under section
11	734(c) plus 5 years, relating to—
12	"(1) any offset project approval petition sub-
13	mitted to the appropriate officials under section 735;
14	"(2) any reversals which occur with respect to
15	an offset project;
16	"(3) any verification reports; and
17	"(4) any other aspect of the offset project that
18	the appropriate officials determines is appropriate.".
19	Subtitle B—Disposition of
20	Allowances
21	SEC. 111. DISPOSITION OF ALLOWANCES FOR GLOBAL
22	WARMING POLLUTION REDUCTION PRO-
23	GRAM.
24	Title VII of the Clean Air Act, as added by section
25	101 of this division, is amended by adding at the end the
26	following part:

1 "PART H—DISPOSITION OF ALLOWANCES 2 "SEC. 782. ALLOCATION OF EMISSION ALLOWANCES. 3 "(a) Allocation.—The Administrator shall allocate 4 emission allowances for the following purposes: 5 "(1) Supplemental reductions from reduced de-6 forestation pursuant to section 753. 7 "(2) Electricity consumers pursuant to section 783. 8 9 "(3) Natural gas consumers pursuant to section 784. 10 11 "(4) [Home heating oil and propane consumers 12 pursuant to section 785. 13 "(5) Low-income consumers pursuant to section 14 [4]. 15 "(6) Trade-vulnerable industries pursuant to 16 section 765. 17 "(7) Deployment of carbon capture and seques-18 tration technology pursuant to section . 19 "(8) Investment in energy efficiency and renew-20 able energy pursuant to section [4]. 21 "(9) Building code updates pursuant to section 22 [163 of division A of the _____ Act]. "(10) Building retrofit program pursuant to 23 24 section [164 of division A of the Act]. 25 "(11) Advanced energy research pursuant to 26 section [4].

1	"(12) Energy Innovation Hubs pursuant to sec-
2	tion [4].
3	"(13) Domestic fuel production pursuant to sec-
4	tion 787.
5	"(14) Compensation for early actors pursuant
6	to section 795.
7	"(15) International climate change adaptation
8	pursuant to section [334(b) of the Act].
9	"(16) International clean energy technology de-
10	ployment pursuant to section [333(b) of the
11	Act].
12	"(b) Auctions.—The Administrator shall auction,
13	pursuant to section 789, emission allowances for the fol-
14	lowing purposes:
15	"(1) Market Stability Reserve Fund pursuant
16	to section 726.
17	"(2) Investment in workers pursuant to section
18	793.
19	"(3) Nuclear worker training pursuant to sec-
20	tion [4].
21	"(4) Investment in clean vehicle technology pur-
22	suant to section [4].
23	"(5) Green jobs training pursuant to section
24	[4] .

1	"(6) Domestic adaptation pursuant to section
2	[4] .
3	"(7) Climate change health protection pursuant
4	to section [4] .
5	"(8) Wildlife and natural resource adaptation
6	pursuant to section [4].
7	"(9) Supplemental agriculture and renewable
8	energy pursuant to section [4].
9	"(10) Climate change consumer refunds pursu-
10	ant to section [].
11	"(c) Deficit Reduction.—
12	"(1) In General.—The Administrator shall—
13	"(A) auction, pursuant to section 789,
14	emission allowances for deficit reduction, pursu-
15	ant to [section 796], in the amounts described
16	in paragraph (2); and
17	"(B) deposit those proceeds immediately
18	on receipt in the Deficit Reduction Fund estab-
19	lished in [section 796].
20	"(2) Amounts.—For vintage years 2012
21	through 2050, 25.0 percent of emission allowances
22	established for each year under section 721(a) shall
23	be auctioned and the proceeds deposited pursuant to
24	paragraph (1) to ensure that this title does not con-

1	tribute to the deficit for that particular calendar
2	year.
3	"SEC. 783. ELECTRICITY CONSUMERS.
4	"(a) Definitions.—For purposes of this section:
5	"(1) Coal-fueled unit.—The term 'coal-
6	fueled unit' means a utility unit that derives at least
7	85 percent of its heat input from coal, petroleum
8	coke, or any combination of those 2 fuels.
9	"(2) Cost-effective.—The term cost-effec-
10	tive', with respect to an energy efficiency program,
11	means that the program meets the total resource
12	cost test, which requires that the net present value
13	of economic benefits over the life of the program, in-
14	cluding avoided supply and delivery costs and de-
15	ferred or avoided investments, is greater than the
16	net present value of the economic costs over the life
17	of the program, including program costs and incre-
18	mental costs borne by the energy consumer.
19	"(3) Electricity local distribution com-
20	PANY.—The term 'electricity local distribution com-
21	pany' means an electric utility—
22	"(A) that has a legal, regulatory, or con-
23	tractual obligation to deliver electricity directly
24	to retail consumers in the United States, re-
25	gardless of whether that entity or another enti-

1	ty sells the electricity as a commodity to those
2	retail consumers; and
3	"(B) the retail rates of which, except in
4	the case of an electric cooperative, are regulated
5	or set by—
6	"(i) a State regulatory authority;
7	"(ii) a State or political subdivision
8	thereof (or an agency or instrumentality
9	of, or corporation wholly owned by, either
10	of the foregoing); or
11	"(iii) an Indian tribe pursuant to trib-
12	al law.
13	"(4) Electricity savings; renewable en-
14	ERGY RESOURCE.—The terms 'electricity savings'
15	and 'renewable energy resource' shall have the
16	meaning given those terms in section 610 of the
17	Public Utility Regulatory Policies Act of 1978
18	[Legis. Counsel note: This section (which was added
19	by section 101 of the House-passed bill) is not in-
20	cluded in this draft, so this reference should be
21	modified.].
22	"(5) Independent power production fa-
23	CILITY.—The term 'independent power production
24	facility' means a facility—

1	"(A) that is used for the generation of
2	electric energy, at least 80 percent of which is
3	sold at wholesale; and
4	"(B) the sales of the output of which are
5	not subject to retail rate regulation or setting
6	of retail rates by—
7	"(i) a State regulatory authority;
8	"(ii) a State or political subdivision
9	thereof (or an agency or instrumentality
10	of, or corporation wholly owned by, either
11	of the foregoing);
12	"(iii) an electric cooperative; or
13	"(iv) an Indian tribe pursuant to trib-
14	al law.
15	"(6) Long-term contract generator.—The
16	term 'long-term contract generator' means a quali-
17	fying small power production facility, a qualifying
18	cogeneration facility), an independent power pro-
19	duction facility, or a facility for the production of
20	electric energy for sale to others that is owned and
21	operated by an electric cooperative that is—
22	"(A) a covered entity; and
23	"(B) as of the date of enactment of this
24	title—

1 "(i) a facility with 1 or more sales or 2 tolling agreements executed before March 3 1, 2007, that govern the facility's elec-4 tricity sales and provide for sales at a price (whether a fixed price or a price formula) 6 for electricity that does not allow for recov-7 ery of the costs of compliance with the lim-8 itation on greenhouse gas emissions under 9 this title, provided that such agreements 10 are not between entities that are affiliates 11 of one another; or 12 "(ii) a facility consisting of 1 or more 13 cogeneration units that makes useful ther-14 mal energy available to an industrial or 15 commercial process with 1 or more sales 16 agreements executed before March 17 2007, that govern the facility's useful ther-18 mal energy sales and provide for sales at 19 a price (whether a fixed price or price for-20 mula) for useful thermal energy that does 21 not allow for recovery of the costs of com-22 pliance with the limitation on greenhouse 23 gas emissions under this title, provided 24 that such agreements are not between enti-25 ties that are affiliates of one another.

1	"(7) MERCHANT COAL UNIT.—The term 'mer-
2	chant coal unit' means a coal-fueled unit that—
3	"(A) is or is part of a covered entity;
4	"(B) is not owned by a Federal, State, or
5	regional agency or power authority; and
6	"(C) generates electricity solely for sale to
7	others, provided that all or a portion of such
8	sales are made by a separate legal entity that—
9	"(i) has a full or partial ownership or
10	leasehold interest in the unit, as certified
11	in accordance with such requirements as
12	the Administrator shall prescribe; and
13	"(ii) is not subject to retail rate regu-
14	lation or setting of retail rates by—
15	"(I) a State regulatory authority;
16	"(II) a State or political subdivi-
17	sion thereof (or an agency or instru-
18	mentality of, or corporation wholly
19	owned by, either of the foregoing);
20	"(III) an electric cooperative; or
21	"(IV) an Indian tribe pursuant
22	to tribal law.
23	"(8) MERCHANT COAL UNIT SALES.—The term
24	'merchant coal unit sales' means sales to others of
25	electricity generated by a merchant coal unit that

1	are made by the owner or leaseholder described in
2	paragraph (6)(C).
3	"(9) New coal-fueled unit.—The term 'new
4	coal-fueled unit' means a coal-fueled unit that com-
5	menced operation on or after January 1, 2009 and
6	before January 1, 2013.
7	"(10) New Merchant coal unit.—The term
8	'new merchant coal unit' means a merchant coal
9	unit—
10	"(A) that commenced operation on or after
11	January 1, 2009 and before January 1, 2013;
12	and
13	"(B) the actual, on-site construction of
14	which commenced prior to January 1, 2009.
15	"(11) Qualifying small power production
16	FACILITY; QUALIFYING COGENERATION FACILITY.—
17	The terms 'qualifying small power production facil-
18	ity' and 'qualifying cogeneration facility' have the
19	meanings given those terms in section 3(17)(C) and
20	3(18)(B) of the Federal Power Act (16 U.S.C.
21	796(17)(C) and $796(18)(B)$).
22	"(12) SMALL LDC.—The term 'small LDC'
23	means, for any given year, an electricity local dis-
24	tribution company that delivered less than 4,000,000

- 1 megawatt hours of electric energy directly to retail 2 consumers in the preceding year.
- 3 "(13) STATE REGULATORY AUTHORITY.—The 4 term 'State regulatory authority' has the meaning 5 given that term in section 3(17) of the Public Utility
- 6 Regulatory Policies Act of 1978 (16)U.S.C.
- 7 2602(17)).

NIES.—

- "(14) Useful thermal energy.—The term 8 9 'useful thermal energy' has the meaning given that 10 term in section 371(7) of the Energy Policy and 11 Conservation Act (42 U.S.C. 6341(7)).
- 12 "(b) Electricity Local Distribution Compa-13

14 "(1) DISTRIBUTION OF ALLOWANCES.—Not 15 later than September 30, 2011, and each calendar 16 year thereafter through 2028, the Administrator 17 shall distribute to electricity local distribution com-18 panies for the benefit of retail ratepayers the quan-19 tity of emission allowances allocated for the fol-20 lowing vintage year pursuant to section 782(a)(1). 21 Notwithstanding the preceding sentence, the Admin-22 istrator shall withhold from distribution under this 23 subsection a quantity of emission allowances equal to 24 the lesser of 14.3 percent of the quantity of emission 25 allowances allocated under section 782(a)(1) for the

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relevant vintage year, or 105 percent of the emission
allowances for the relevant vintage year that the Ad-
ministrator anticipates will be distributed to mer-
chant coal units and to long-term contract genera-
tors, respectively, under subsections (c) and (d). If
not required by subsections (c) and (d) to distribute
all of these reserved allowances, the Administrator
shall distribute any remaining emission allowances
to electricity local distribution companies in accord-
ance with this subsection.
"(2) Distribution based on emissions.—
"(A) IN GENERAL.—For each vintage year,
50 percent of the emission allowances available
for distribution under paragraph (1), after re-
serving allowances for distribution under sub-
sections (c) and (d), shall be distributed by the

17 Administrator among individual electricity local

distribution companies ratably based on the an-

19 nual average carbon dioxide emissions attrib-

20 utable to generation of electricity delivered at

21 retail by each such company during the base

period determined under subparagraph (B).

"(B) Base Period.—

"(i) VINTAGE YEARS 2012 AND 2013.—
For vintage years 2012 and 2013, an elec-

1	tricity local distribution company's base
2	period shall be—
3	"(I) calendar years 2006 through
4	2008; or
5	"(II) any 3 consecutive calendar
6	years between 1999 and 2008, inclu-
7	sive, that such company selects, pro-
8	vided that the company timely informs
9	the Administrator of such selection.
10	"(ii) Vintage years 2014 and
11	THEREAFTER.—For vintage years 2014
12	and thereafter, the base period shall be—
13	"(I) the base period selected
14	under clause (i); or
15	"(II) calendar year 2012, in the
16	case of an electricity local distribution
17	company that owns, co-owns, or pur-
18	chases through a power purchase
19	agreement (whether directly or
20	through a cooperative arrangement) a
21	substantial portion of the electricity
22	generated by a new coal-fueled unit,
23	provided that such company timely in-
24	forms the Administrator of its election
25	to use 2012 as its base period.

1 "(C) Determination of emissions.— 2 "(i) DETERMINATION FOR 1999 -3 2008.—As part of the regulations promul-4 gated pursuant to subsection (g), the Ad-5 ministrator, after consultation with the 6 Energy Information Administration, shall determine the average amount of carbon 7 8 dioxide emissions attributable to genera-9 tion of electricity delivered at retail by 10 each electricity local distribution company 11 for each of the years 1999 through 2008, 12 taking into account entities' electricity gen-13 eration, electricity purchases, and elec-14 tricity sales. In the case of any electricity 15 local distribution company that owns, co-16 owns, or purchases through a power pur-17 chase agreement (whether directly or 18 through a cooperative arrangement) a sub-19 stantial portion of the electricity generated 20 by, a coal-fueled unit that commenced op-21 eration after January 1, 2006, and before 22 December 31, 2008, the Administrator 23 shall adjust the emissions attributable to 24 such company's retail deliveries in calendar 25 years 2006 through 2008 to reflect the

1	emissions that would have occurred if the
2	relevant unit were in operation during the
3	entirety of such 3-year period.
4	"(ii) Adjustments for New Coal-
5	FUELED UNITS.—
6	"(I) VINTAGE YEARS 2012 AND
7	2013.—For purposes of emission al-
8	lowance distributions for vintage years
9	2012 and 2013, in the case of any
10	electricity local distribution company
11	that owns, co-owns, or purchases
12	through a power purchase agreement
13	(whether directly or through a cooper-
14	ative arrangement) a substantial por-
15	tion of the electricity generated by, a
16	new coal-fueled unit, the Adminis-
17	trator shall adjust the emissions at-
18	tributable to such company's retail de-
19	liveries in the applicable base period
20	to reflect the emissions that would
21	have occurred if the new coal-fueled
22	unit were in operation during such pe-
23	riod.
24	"(II) VINTAGE YEAR 2014 AND
25	THEREAFTER.—Not later than nec-

1 essary for use in making emission al-2 lowance distributions under this sub-3 section for vintage year 2014, the Ad-4 ministrator shall, for any electricity 5 local distribution company that owns, 6 purchases through a co-owns, or7 power purchase agreement (whether 8 directly or through a cooperative ar-9 rangement) a substantial portion of 10 the electricity generated by a new 11 coal-fueled unit and has selected cal-12 endar year 2012 as its base period 13 pursuant to subparagraph (B)(ii)(II), 14 determine the amount of carbon diox-15 ide emissions attributable to genera-16 tion of electricity delivered at retail by 17 such company in calendar year 2012. 18 If the relevant new coal-fueled unit 19 was not yet operational by January 1, 20 2012, the Administrator shall adjust 21 such determination to reflect the 22 emissions that would have occurred if 23 such unit were in operation for all of 24 calendar year 2012.

1	"(iii) Requirements.—Determina-
2	tions under this paragraph shall be as pre-
3	cise as practicable, taking into account the
4	nature of data currently available and the
5	nature of markets and regulation in effect
6	in various regions of the country. The fol-
7	lowing requirements shall apply to such de-
8	terminations:
9	"(I) The Administrator shall de-
10	termine the amount of fossil fuel-
11	based electricity delivered at retail by
12	each electricity local distribution com-
13	pany, and shall use appropriate emis-
14	sion factors to calculate carbon diox-
15	ide emissions associated with the gen-
16	eration of such electricity.
17	"(II) Where it is not practical to
18	determine the precise fuel mix for the
19	electricity delivered at retail by an in-
20	dividual electricity local distribution
21	company, the Administrator may use
22	the best available data, including aver-
23	age data on a regional basis with ref-
24	erence to Regional Transmission Or-
25	ganizations or regional entities (as

1 is defined that term insection 2 215(a)(7) of the Federal Power Act (16 U.S.C. 824o(a)(7)), to estimate3 4 fuel mix and emissions. Different 5 methodologies may be applied in dif-6 ferent regions if appropriate to obtain 7 the most accurate estimate. 8 "(3) Distribution based on deliveries.— 9 "(A) Initial formula.—Except as pro-10 vided in subparagraph (B), for each vintage 11 year, the Administrator shall distribute 50 per-12 cent of the emission allowances available for 13 distribution under paragraph (1), after reserv-14 ing allowances for distribution under sub-15 sections (c) and (d), among individual elec-16 tricity local distribution companies ratably 17 based on each electricity local distribution com-18 pany's annual average retail electricity deliv-19 eries for calendar years 2006 through 2008, un-20 less the owner or operator of the company se-21 lects 3 other consecutive years between 1999 22 and 2008, inclusive, and timely notifies the Ad-23 ministrator of its selection. 24 "(B) UPDATING.—Prior to distributing

2015 vintage year emission allowances under

1	this paragraph and at 3-year intervals there-
2	after, the Administrator shall update the dis-
3	tribution formula under this paragraph to re-
4	flect changes in each electricity local distribu-
5	tion company's service territory since the most
6	recent formula was established. For each suc-
7	cessive 3-year period, the Administrator shall
8	distribute allowances ratably among individual
9	electricity local distribution companies based on
10	the product of—
11	"(i) each electricity local distribution
12	company's average annual deliveries per
13	customer during calendar years 2006
14	through 2008, or during the 3 alternative
15	consecutive years selected by such company
16	under subparagraph (A); and
17	"(ii) the number of customers of such
18	electricity local distribution company in the
19	most recent year in which the formula is
20	updated under this subparagraph.
21	"(4) Prohibition against excess distribu-
22	TIONS.—The regulations promulgated under sub-
23	section (g) shall ensure that, notwithstanding para-
24	graphs (2) and (3), no electricity local distribution
25	company shall receive a greater quantity of allow-

ances under this subsection than is necessary to offset any increased electricity costs to such company's retail ratepayers, including increased costs attributable to purchased power costs, due to enactment of this title. Any emission allowances withheld from distribution to an electricity local distribution company pursuant to this paragraph shall be distributed among all remaining electricity local distribution companies ratably based on emissions pursuant to paragraph (2).

"(5) Use of allowances.—

"(A) RATEPAYER BENEFIT.—Emission allowances distributed to an electricity local distribution company under this subsection shall be used exclusively for the benefit of retail ratepayers of such electricity local distribution company and may not be used to support electricity sales or deliveries to entities or persons other than such ratepayers.

"(B) RATEPAYER CLASSES.—In using emission allowances distributed under this subsection for the benefit of ratepayers, an electricity local distribution company shall ensure that ratepayer benefits are distributed—

1	"(i) among ratepayer classes ratably
2	based on electricity deliveries to each class
3	and
4	"(ii) equitably among individual rate-
5	payers within each ratepayer class, includ-
6	ing entities that receive emission allow-
7	ances pursuant to part F.
8	"(C) Limitation.—In general, an elec-
9	tricity local distribution company shall not use
10	the value of emission allowances distributed
11	under this subsection to provide to any rate-
12	payer a rebate that is based solely on the quan-
13	tity of electricity delivered to such ratepayer
14	To the extent an electricity local distribution
15	company uses the value of emission allowances
16	distributed under this subsection to provide re-
17	bates, it shall, to the maximum extent prac-
18	ticable, provide such rebates with regard to the
19	fixed portion of ratepayers' bills or as a fixed
20	credit or rebate on electricity bills.
21	"(D) RESIDENTIAL AND INDUSTRIAL
22	RATEPAYERS.—Notwithstanding subparagraph
23	(C), if compliance with the requirements of this
24	title results (or would otherwise result) in an
25	increase in electricity costs for residential or in-

1	dustrial retail ratepayers of any given electricity
2	local distribution company (including entities
3	that receive emission allowances pursuant to
4	part F), such electricity local distribution com-
5	pany—
6	"(i) shall pass through to residential
7	retail ratepayers as a class their ratable
8	share (based on deliveries to each rate
9	payer class) of the value of the emission al-
10	lowances that reduce electricity cost im-
11	pacts on such ratepayers; and
12	"(ii) shall pass through to industria
13	ratepayers as a class their ratable share
14	(based on deliveries to each ratepayer
15	class) of the value of the emission allow-
16	ances that reduce electricity cost impacts
17	on such ratepayers. The electricity local
18	distribution company may do so based or
19	the quantity of electricity delivered to indi-
20	vidual industrial retail ratepayers.
21	"(E) Guidelines.—As part of the regula-
22	tions promulgated under subsection (g), the Ad-
23	ministrator shall, after consultation with State
24	regulatory authorities, prescribe guidelines for

1	the implementation of the requirements of this
2	paragraph. Such guidelines shall include—
3	"(i) requirements to ensure that resi-
4	dential and industrial retail ratepayers (in-
5	cluding entities that receive emission allow-
6	ances under part F) receive their ratable
7	share of the value of the allowances dis-
8	tributed to each electricity local distribu-
9	tion company pursuant to this subsection;
10	and
11	"(ii) requirements for measurement,
12	verification, reporting, and approval of
13	methods used to assure the use of allow-
14	ance values to benefit retail ratepayers.
15	"(6) Regulatory proceedings.—
16	"(A) Requirement.—No electricity local
17	distribution company shall be eligible to receive
18	emission allowances under this subsection or
19	subsection (e) unless the State regulatory au-
20	thority with authority over such company's re-
21	tail rates, or the entity with authority to regu-
22	late or set retail electricity rates of an elec-
23	tricity local distribution company not regulated
24	by a State regulatory authority, has—

1	"(i) after public notice and an oppor-
2	tunity for comment, promulgated a regula-
3	tion or completed a rate proceeding (or the
4	equivalent, in the case of a ratemaking en-
5	tity other than a State regulatory author-
6	ity) that provides for the full implementa-
7	tion of the requirements of paragraph (5)
8	of this subsection and the requirements of
9	subsection (e); and
10	"(ii) made available to the Adminis-
11	trator and the public a report describing,
12	in adequate detail, the manner in which
13	the requirements of paragraph (5) and the
14	requirements of subsection (e) will be im-
15	plemented.
16	"(B) Updating.—The Administrator shall
17	require, as a condition of continued receipt of
18	emission allowances under this subsection by an
19	electricity local distribution company, that a
20	new regulation be promulgated or rate pro-
21	ceeding be completed, after public notice and
22	an opportunity for comment, and a new report
23	be made available to the Administrator and the
24	public, pursuant to subparagraph (A), not less
25	frequently than every 5 years.

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592 1 "(7) Plans and reporting.— 2 "(A) REGULATIONS.—As part of the regu-3 lations promulgated under subsection (g), the 4 Administrator shall prescribe requirements gov-5 erning plans and reports to be submitted in ac-6 cordance with this paragraph. 7 "(B) Plans.—Not later than April 30 of 8 2011 and every 5 years thereafter through 9 2026, each electricity local distribution com-10 pany shall submit to the Administrator a plan, 11 approved by the State regulatory authority or 12 other entity charged with regulating tor setting 13 the retail rates of such company, describing 14 such company's plans for the disposition of the 15 value of emission allowances to be received pur-16 suant to this subsection and subsection (e), in 17 accordance with the requirements of this sub-

"(C) Reports.—Not later than June 30, 2013, and each calendar year thereafter

the value of such allowances.

section and subsection (e). Such plan shall in-

clude a description of the manner in which the

company will provide to industrial retail rate-

payers (including entities that receive emission

allowances under part F) their ratable share of

1	through 2031, each electricity local distribution
2	company shall submit a report to the Adminis-
3	trator, and to the relevant State regulatory au-
4	thority or other entity charged with regulating
5	or setting the retail electricity rates of such
6	company, describing the disposition of the value
7	of any emission allowances received by such
8	company in the prior calendar year pursuant to
9	this subsection and subsection (e), including—
10	"(i) a description of sales, transfer,
11	exchange, or use by the company for com-
12	pliance with obligations under this title, of
13	any such emission allowances;
14	"(ii) the monetary value received by
15	the company, whether in money or in some
16	other form, from the sale, transfer, or ex-
17	change of any such emission allowances;
18	"(iii) the manner in which the com-
19	pany's disposition of any such emission al-
20	lowances complies with the requirements of
21	this subsection and of subsection (e), in-
22	cluding each of the requirements of para-
23	graph (5) of this subsection, including the
24	requirement that industrial retail rate-
25	payers (including entities that receive

1	emission allowances under part F) receive
2	their ratable share of the value of such al-
3	lowances; and
4	"(iv) such other information as the
5	Administrator may require pursuant to
6	subparagraph (A).
7	"(D) Publication.—The Administrator
8	shall make available to the public all plans and
9	reports submitted under this subsection, includ-
10	ing by publishing such plans and reports on the
11	Internet.
12	"(8) Administrator audit reports.—
13	"(A) IN GENERAL.—Each year, the Ad-
14	ministrator shall audit a representative sample
15	of electricity local distribution companies to en-
16	sure that emission allowances distributed under
17	this subsection have been used exclusively for
18	the benefit of retail ratepayers and that such
19	companies are complying with the requirements
20	of this subsection and of subsection (e), includ-
21	ing the requirement that residential and indus-
22	trial retail ratepayers (including entities that
23	receive emission allowances under part F) re-
24	ceive their ratable share of the value of such al-
25	lowances. The Administrator shall assess the

degree to which electric local distribution companies have maintained a marginal electric price signal while protecting consumers on total cost using the value of emissions allowances. In selecting companies for audit, the Administrator shall take into account any credible evidence of noncompliance with such requirements. The Administrator shall make available to the public a report describing the results of each such audit, including by publishing such report on the Internet.

"(B) GAO AUDIT REPORT.—Not later than April 30, 2015, and every 3 years thereafter through 2026, the Comptroller General of the United States, incorporating results from the Administrators' audit report and other relevant information including distribution company reports, shall conduct an in-depth evaluation and make available to the public a report on the investments made pursuant to paragraph (5). Said report shall be made available to the State regulatory authority, or the entity with authority to regulate or set retail electricity rates in the case of an electricity distribution company that is not regulated by a State regu-

latory authority, and shall include a description of how the distribution companies in the audit meet or fail to meet the requirement of paragraph (5), including for investments made in cost-effective end-use energy efficiency programs, the lifetime and annual energy saving benefits, and capacity benefits of said programs.

"(C) Administrator cost containment Report.—Not later than April 30, 2015 and every 3 years thereafter through 2026, the Administrator shall transmit a report to Congress containing an evaluation of the disposition of the value of emission allowances received pursuant to this subsection and subsection (e) and recommendations of ways to more effectively direct the value of allowances to reduce costs for consumers, contain the overall costs of the greenhouse gas emissions reduction program, and meet the pollution reduction targets of the Act. The Administrator shall make available to the public such report, including by publishing such report on the Internet.

"(9) Enforcement.—A violation of any requirement of this subsection or of subsection (e), ir-

respective of approval by a State regulatory author-
ity, shall be a violation of this Act. Each emission
allowance the value of which is used in violation of
the requirements of this subsection or of subsection
(e) shall be a separate violation.
"(c) MERCHANT COAL UNITS.—
"(1) Qualifying emissions.—The qualifying
emissions for a merchant coal unit for a given cal-
endar year shall be the product of the number of
megawatt hours of merchant coal unit sales gen-
erated by such unit in such calendar year and the
average carbon dioxide emissions per megawatt hour
generated by such unit during the base period under
paragraph (2), provided that the number of mega-
watt hours in a given calendar year for purposes of
such calculation shall be reduced in proportion to
the portion of such unit's carbon dioxide emissions
that are either—
"(A) captured and sequestered in such cal-
endar year; or
"(B) attributable to the combustion or gas-
ification of biomass, to the extent that the
owner or operator of the unit is not required to

hold emission allowances for such emissions.

1	(2) Base Period.—For purposes of this sub-
2	section, the base period for a merchant coal unit
3	shall be—
4	"(A) calendar years 2006 through 2008; or
5	"(B) in the case of a new merchant coal
6	unit—
7	"(i) the first full calendar year of op-
8	eration of such unit, if such unit com-
9	mences operation before January 1, 2012
10	"(ii) calendar year 2012, if such unit
11	commences operation on or after January
12	1, 2012, and before October 1, 2012; or
13	"(iii) calendar year 2013, if such unit
14	commences operation on or after October
15	1, 2012, and before January 1, 2013.
16	"(3) Phase-down schedule.—The Adminis-
17	trator shall identify an annual phase-down factor
18	applicable to distributions to merchant coal units for
19	each of vintage years 2012 through 2029, that cor-
20	responds to the overall decline in the amount of
21	emission allowances allocated to the electricity sector
22	in such years pursuant to section 782(a)(1). Such
23	factor shall—
24	"(A) for vintage year 2012, be equal to
25	1.0;

1	"(B) for each of vintage years 2013
2	through 2029, correspond to the quotient of—
3	"(i) the quantity of emission allow-
4	ances allocated under section 782(a)(1) for
5	such vintage year; divided by
6	"(ii) the quantity of emission allow-
7	ances allocated under section 782(a)(1) for
8	vintage year 2012.
9	"(4) Distribution of Emission allow-
10	ANCES.—Not later than March 1 of 2013 and each
11	calendar year through 2030, the Administrator shall
12	distribute emission allowances of the preceding vin-
13	tage year to the owner or operator of each merchant
14	coal unit described in subsection (a)(6)(C) in an
15	amount equal to the product of—
16	"(A) 0.5;
17	"(B) the qualifying emissions for such
18	merchant coal unit for the preceding year, as
19	determined under paragraph (1); and
20	"(C) the phase-down factor for the pre-
21	ceding calendar year, as identified under para-
22	graph (3).
23	"(5) Adjustment.—
24	"(A) Study.—Not later than July 1
25	2014, the Administrator, in consultation with

1 the Federal Energy Regulatory Commission, 2 shall complete a study to determine whether the 3 allocation formula under paragraph (3) is resulting in, or is likely to result in, windfall prof-4 5 its to merchant coal generators or substantially 6 disparate treatment of merchant coal genera-7 tors operating in different markets or regions. 8 "(B) REGULATION.—If the Administrator, 9 in consultation with the Federal Energy Regu-10 latory Commission, makes an affirmative find-11 ing of windfall profits or disparate treatment 12 under subparagraph (A), the Administrator 13 shall, not later than 18 months after the com-14 pletion of the study described in subparagraph 15 (A), promulgate regulations providing for the 16 adjustment of the allocation formula under 17 paragraph (3) to mitigate, to the extent prac-18 ticable, such windfall profits, if any, and such 19 disparate treatment, if any. "(6) Limitation on allowances.—Notwith-20 21 standing paragraph (4) or (5), for each vintage year 22 the Administrator shall distribute under this sub-23 section no more than 10 percent of the total quan-24 tity of emission allowances available for such vintage 25 year for distribution to the electricity sector under

1	section 782(a)(1). If the quantity of emission allow-
2	ances that would otherwise be distributed pursuant
3	to paragraph (4) or (5) for any vintage year would
4	exceed such limit, the Administrator shall distribute
5	10 percent of the total emission allowances available
6	for distribution under section 782(a)(1) for such vin-
7	tage year ratably among merchant coal generators
8	based on the applicable formula under paragraph (4)
9	or (5).
10	"(7) ELIGIBILITY.—The owner or operator of a
11	merchant coal unit shall not be eligible to receive
12	emission allowances under this subsection for any
13	vintage year for which such owner or operator has
14	elected to receive emission allowances for the same
15	unit under subsection (d).
16	"(d) Long-term Contract Generators.—
17	"(1) DISTRIBUTION.—Not later than March 1,
18	2013, and each calendar year through 2030, the Ad-
19	ministrator shall distribute to the owner or operator
20	of each long-term contract generator a quantity of
21	emission allowances of the preceding vintage year
22	that is equal to the sum of—
23	"(A) the number of tons of carbon dioxide
24	emitted as a result of a qualifying electricity

1	sales agreement referred to in subsection
2	(a)(5)(B)(i); and
3	"(B) the incremental number of tons of
4	carbon dioxide emitted solely as a result of a
5	qualifying thermal sales agreement referred to
6	in subsection (a)(5)(B)(ii), provided that in no
7	event shall the Administrator distribute more
8	than 1 emission allowance for the same ton of
9	emissions.
10	"(2) Limitation on allowances.—Notwith-
11	standing paragraph (1), for each vintage year the
12	Administrator shall distribute under this subsection
13	no more than 4.3 percent of the total quantity of
14	emission allowances available for such vintage year
15	for distribution to the electricity sector under section
16	782(a)(1). If the quantity of emission allowances
17	that would otherwise be distributed pursuant to
18	paragraph (1) for any vintage year would exceed
19	such limit, the Administrator shall distribute 4.3
20	percent of the total emission allowances available for
21	distribution under section 782(a)(1) for such vintage
22	year ratably among long-term contract generators
23	based on paragraph (1).
24	"(3) Eligibility.—

1	"(A) Facility eligibility.—The owner
2	or operator of a facility shall cease to be eligible
3	to receive emission allowances under this sub-
4	section upon the earliest date on which the fa-
5	cility no longer meets each and every element of
6	the definition of a long-term contract generator
7	under subsection (a)(5).
8	"(B) CONTRACT ELIGIBILITY.—The owner
9	or operator of a facility shall cease to be eligible
10	to receive emission allowances under this sub-
11	section based on an electricity or thermal sales
12	agreement referred to in subsection (a)(5)(B)
13	upon the earliest date that such agreement—
14	"(i) expires;
15	"(ii) is terminated; or
16	"(iii) is amended in any way that
17	changes the location of the facility, the
18	price (whether a fixed price or price for-
19	mula) for electricity or thermal energy sold
20	under such agreement, the quantity of
21	electricity or thermal energy sold under the
22	agreement, or the expiration or termi-
23	nation date of the agreement.
24	"(4) Demonstration of eligibility.—To be
25	eligible to receive allowance distributions under this

subsection, the owner or operator of a long-term
contract generator shall submit each of the following
in writing to the Administrator within 180 days
after the date of enactment of this title, and not
later than September 30 of each vintage year for
which such generator wishes to receive emission al-
lowances:
"(A) A certificate of representation de-
scribed in section 700(15).
"(B) An identification of each owner and
each operator of the facility.
"(C) An identification of the units at the
facility and the location of the facility.
"(D) A written certification by the des-
ignated representative that the facility meets all
the requirements of the definition of a long-
term contract generator.
"(E) The expiration date of each quali-
fying electricity or thermal sales agreement re-
ferred to in subsection (a)(5)(B).
"(F) A copy of each qualifying electricity
or thermal sales agreement referred to in sub-
section $(a)(5)(B)$.
"(5) Notification.—Not later than 30 days
after, in accordance with paragraph (3), a facility or

an agreement ceases to meet the eligibility requirements for distribution of emission allowances pursuant to this subsection, the designated representative of such facility shall notify the Administrator in writing when, and on what basis, such facility or agreement ceased to meet such requirements.

"(e) Small LDCs.—

"(1) DISTRIBUTION.—Not later than September 30 of each calendar year from 2011 through 2028, the Administrator shall, in accordance with this subsection, distribute emission allowances allocated pursuant to section 782(a)(2) for the following vintage year. Such allowances shall be distributed ratably among small LDCs based on historic emissions in accordance with the same measure of such emissions applied to each such small LDC for the relevant vintage year under subsection (b)(2) of this section.

- "(2) USES.—A small LDC receiving allowances under this section shall use such allowances exclusively for the following purposes:
 - "(A) Cost-effective programs to achieve electricity savings, provided that such savings shall not be transferred or used for compliance with section 610 of the Public Utility Regu-

1	latory Policies Act of 1978 [see above Legis.
2	Counsel note].
3	"(B) Deployment of technologies to gen-
4	erate electricity from renewable energy re-
5	sources, provided that any Federal renewable
6	electricity credits issued based on generation
7	supported under this section shall be submitted
8	to the Federal Energy Regulatory Commission
9	for voluntary retirement and shall not be used
10	for compliance with section 610 of the Public
11	Utility Regulatory Policies Act of 1978 [see
12	above note].
13	"(C) Assistance programs to reduce elec-
14	tricity costs for low-income residential rate-
15	payers of such small LDC, provided that such
16	assistance is made available equitably to all res-
17	idential ratepayers below a certain income level,
18	which shall not be higher than 200 percent of
19	the poverty line (as that term is defined in sec-
20	tion 673(2) of the Community Services Block
21	Grant Act (42 U.S.C. 9902(2)).
22	"(3) Requirements.—As part of the regula-
23	tions promulgated under subsection (g), the Admin-
24	istrator shall prescribe—

1	"(A) after consultation with the Federal
2	Energy Regulatory Commission, requirements
3	to ensure that programs and projects under
4	paragraph (2)(A) and (B) are consistent with
5	the standards established by, and effectively
6	supplement electricity savings and generation of
7	electricity from renewable energy resources
8	achieved by, the Combined Efficiency and Re-
9	newable Electricity Standard established under
10	section 610 of the Public Utility Regulatory
11	Policies Act of 1978 [see above note];
12	"(B) eligibility criteria and guidelines for
13	consumer assistance programs for low-income
14	residential ratepayers under paragraph (2)(C);
15	and
16	"(C) such other requirements as the Ad-
17	ministrator determines appropriate to ensure
18	compliance with the requirements of this sub-
19	section.
20	"(4) Reporting.—Reports submitted under
21	subsection (b)(7) shall include, in accordance with
22	such requirements as the Administrator may pre-
23	scribe—
24	"(A) a description of any facilities de-
25	ployed under paragraph (2)(A), the quantity of

1	resulting electricity generation from renewable
2	energy resources;
3	"(B) an assessment demonstrating the
4	cost-effectiveness of, and electricity savings
5	achieved by, programs supported under para-
6	graph $(2)(B)$; and
7	"(C) a description of assistance provided to
8	low-income retail ratepayers under paragraph
9	(2)(C).
10	"(f) CERTAIN COGENERATION FACILITIES.—
11	"(1) Eligible cogeneration facilities.—
12	For purposes of this subsection, an 'eligible cogen-
13	eration facility' is a facility that—
14	"(A) is a qualifying co-generation facility
15	(as that term is defined in section 3(18)(B) of
16	the Federal Power Act (16 U.S.C. $796(18)(B)$);
17	"(B) derives 80 percent or more of its heat
18	input from coal, petroleum coke, or any com-
19	bination of these 2 fuels;
20	"(C) has a nameplate capacity of 100
21	megawatts or greater;
22	"(D) was in operation as of January 1,
23	2009, and remains in operation as of the date
24	of any distribution of emission allowances under
25	this subsection;

1	"(E) in calendar years 2006 through 2008
2	sold, and as of the date of any distribution of
3	emission allowances under this section sells
4	steam or electricity directly and solely to mul-
5	tiple, separately-owned industrial or commercial
6	facilities co-located at the same site with the co-
7	generation facility; and
8	"(F) is not eligible to receive allowances
9	under any other subsection of this section or
10	under part F of this title.
11	"(2) DISTRIBUTION.—The Administrator shall
12	distribute the emission allowances allocated pursuant
13	to section 782(a)(3) to owners or operators of eligi-
14	ble cogeneration facilities ratably based on the car-
15	bon dioxide emissions of each such facility in cal-
16	endar years 2006 through 2008. The Adminis-
17	trator—
18	"(A) shall not, in any year, distribute
19	emission allowances under this subsection to the
20	owner or operator of any eligible cogeneration
21	facility in excess of the amount necessary to
22	offset such facility's cost of compliance with the
23	requirements of this title in that year; and
24	"(B) may distribute such allowances over a
25	period of years if annual distributions under

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this subsection would otherwise exceed the limitation in subparagraph (A), provided that in no event shall distributions be made under this subsection after calendar year 2025.

"(3) Requirements.—The Administrator shall, by regulation, establish requirements to ensure that the value of any emission allowances distributed pursuant to this subsection are passed through, on an equitable basis, to the facilities to which the relevant cogeneration facility provides electricity or steam deliveries, including any facility owned or operated by the owner or operator of the cogeneration facility.

"(g) Regulations.—Not later than 2 years after the date of enactment of this title, the Administrator, in consultation with the Federal Energy Regulatory Commission, shall promulgate regulations to implement the requirements of this section.

19 "SEC. 784. NATURAL GAS CONSUMERS.

"(a) DEFINITION.—For purposes of this section, the term 'cost-effective', with respect to an energy efficiency program, means that the program meets the Total Resource Cost Test, which requires that the net present value of economic benefits over the life of the program, including avoided supply and delivery costs and deferred

- 1 or avoided investments, is greater than the net present
- 2 value of the economic costs over the life of the program,
- 3 including program costs and incremental costs borne by
- 4 the energy consumer.
- 5 "(b) Allocation.—Not later than June 30, 2015,
- 6 and each calendar year thereafter through 2028, the Ad-
- 7 ministrator shall distribute to natural gas local distribu-
- 8 tion companies for the benefit of retail ratepayers the
- 9 quantity of emission allowances allocated for the following
- 10 vintage year pursuant to section 782(b). Such allowances
- 11 shall be distributed among local natural gas distribution
- 12 companies based on the following formula:
- 13 "(1) Initial formula.—Except as provided in
- paragraph (2), for each vintage year, the Adminis-
- 15 trator shall distribute emission allowances among
- natural gas local distribution companies on a pro
- 17 rata basis based on each such company's annual av-
- erage retail natural gas deliveries for 2006 through
- 19 2008, unless the owner or operator of the company
- selects 3 other consecutive years between 1999 and
- 21 2008, inclusive, and timely notifies the Adminis-
- trator of its selection.
- "(2) UPDATING.—Prior to distributing 2019
- vintage emission allowances and at 3-year intervals
- 25 thereafter, the Administrator shall update the dis-

1	tribution formula under this subsection to reflect
2	changes in each natural gas local distribution com-
3	pany's service territory since the most recent for-
4	mula was established. For each successive 3-year pe-
5	riod, the Administrator shall distribute allowances
6	on a pro rata basis among natural gas local distribu-
7	tion companies based on the product of—
8	"(A) each natural gas local distribution
9	company's average annual natural gas deliveries
10	per customer during calendar years 2006
11	through 2008, or during the 3 alternative con-
12	secutive years selected by such company under
13	paragraph (1); and
14	"(B) the number of customers of such nat-
15	ural gas local distribution company in the most
16	recent year in which the formula is updated
17	under this paragraph.
18	"(c) Use of Allowances.—
19	"(1) Ratepayer benefit.—Emission allow-
20	ances distributed to a natural gas local distribution
21	company under this section shall be used exclusively
22	for the benefit of retail ratepayers of such natural
23	gas local distribution company and may not be used
24	to support natural gas sales or deliveries to entities

or persons other than such rate payers. $\,$

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1	"(2) Ratepayer classes.—In using emission
2	allowances distributed under this section for the ben-
3	efit of ratepayers, a natural gas local distribution
4	company shall ensure that ratepayer benefits are
5	distributed—
6	"(A) among ratepayer classes on a pro
7	rata basis based on natural gas deliveries to
8	each class; and
9	"(B) equitably among individual ratepayers
10	within each ratepayer class.
11	"(3) Limitation.—A natural gas local dis-
12	tribution company shall not use the value of emis-
13	sion allowances distributed under this section to pro-
14	vide to any ratepayer a rebate that is based solely
15	on the quantity of natural gas delivered to such
16	ratepayer. To the extent a natural gas local distribu-
17	tion company uses the value of emission allowances
18	distributed under this section to provide rebates, it
19	shall, to the maximum extent practicable, provide
20	such rebates with regard to the fixed portion of rate-
21	payers' bills or as a fixed creditor rebate on natural
22	gas bills.
23	"(4) Energy efficiency programs.—The
24	value of no less than one-third of the emission allow-
25	ances distributed to natural gas local distribution

companies pursuant to this section in any calendar year shall be used for cost-effective energy efficiency programs for natural gas consumers. Such programs must be authorized and overseen by the State regulatory authority, or by the entity with regulatory authority over retail natural gas rates in the case of a natural gas local distribution company that is not regulated by a State regulatory authority.

"(5) Guidelines—As part of the regulations

"(5) GUIDELINES.—As part of the regulations promulgated under subsection (h), the Administrator shall prescribe specific guidelines for the implementation of the requirements of this subsection.

"(d) REGULATORY PROCEEDINGS.—

"(1) Requirement.—No natural gas local distribution company shall be eligible to receive emission allowances under this section unless the State regulatory authority with authority over such company, or the entity with authority to regulate retail rates of a natural gas local distribution company not regulated by a State regulatory authority, has—

"(A) promulgated a regulation or completed a rate proceeding (or the equivalent, in the case of a ratemaking entity other than a State regulatory authority) that provides for

1	the full implementation of the requirements of
2	subsection (c); and
3	"(B) made available to the Administrator
4	and the public a report describing, in adequate
5	detail, the manner in which the requirements of
6	subsection (c) will be implemented.
7	"(2) UPDATING.—The Administrator shall re-
8	quire, as a condition of continued receipt of emission
9	allowances under this section, that a new regulation
10	be promulgated or rate proceeding be completed, and
11	a new report be made available to the Administrator
12	and the public, pursuant to paragraph (1), not less
13	frequently than every 5 years.
14	"(e) Plans and Reporting.—
15	"(1) Regulations.—As part of the regulations
16	promulgated under subsection (h), the Administrator
17	shall prescribe requirements governing plans and re-
18	ports to be submitted in accordance with this sub-
19	section.
20	"(2) Plans.—Not later than April 30, 2015,
21	and every 5 years thereafter through 2025, each
22	natural gas local distribution company shall submit
23	to the Administrator a plan, approved by the State
24	regulatory authority or other entity charged with
25	regulating the retail rates of such company, describ-

1	ing such company's plans for the disposition of the
2	value of emission allowances to be received pursuant
3	to this section, in accordance with the requirements
4	of this section.
5	"(3) Reports.—Not later than June 30, 2017,
6	and each calendar year thereafter through 2031.
7	each natural gas local distribution company shall
8	submit a report to the Administrator, approved by
9	the relevant State regulatory authority or other enti-
10	ty charged with regulating the retail natural gas
11	rates of such company, describing the disposition of
12	the value of any emission allowances received by
13	such company in the prior calendar year pursuant to
14	this subsection, including—
15	"(A) a description of sales, transfer, ex-
16	change, or use by the company for compliance
17	with obligations under this title, of any such
18	emission allowances;
19	"(B) the monetary value received by the
20	company, whether in money or in some other
21	form, from the sale, transfer, or exchange of
22	emission allowances received by the company
23	under this section;
24	"(C) the manner in which the company's
25	disposition of emission allowances received

1	under this subsection complies with the require-
2	ments of this section, including each of the re-
3	quirements of subsection (c);
4	"(D) the cost-effectiveness of, and energy
5	savings achieved by, energy efficiency programs
6	supported through such emission allowances;
7	and
8	"(E) such other information as the Admin-
9	istrator may require pursuant to paragraph (1).
10	"(4) Publication.—The Administrator shall
11	make available to the public all plans and reports
12	submitted by natural gas local distribution compa-
13	nies under this subsection, including by publishing
14	such plans and reports on the Internet.
15	"(f) Auditing.—
16	"(1) Administrator audit report.—Each
17	year, the Administrator shall audit a significant rep-
18	resentative sample of natural gas local distribution
19	companies to ensure that emission allowances dis-
20	tributed under this section have been used exclu-
21	sively for the benefit of retail ratepayers and that
22	such companies are complying with the requirements
23	of this section. In selecting companies for audit, the
24	Administrator shall take into account any credible
25	evidence of noncompliance with such requirements.

1 The Administrator shall make available to the public 2 a report describing the results of each such audit, 3 including by publishing such report on the Internet. 4 "(2) GAO AUDIT REPORT.—Not later April 30, 5 2015 and every 3 years thereafter through April 30, 6 2026, the Comptroller General of the United States, 7 incorporating results from the Administrators' audit 8 report and other relevant information including dis-9 tribution company reports, shall conduct an in-depth 10 evaluation and make available to the public a report 11 on the investments made pursuant to subsection (c). 12 Said report shall be made available to the State reg-13 ulatory authority, or the entity with authority to 14 regulate or set retail natural gas rates in the case 15 of a natural gas distribution company that is not 16 regulated by a State regulatory authority, and shall 17 include a description how the distribution companies 18 in the audit meet or fail to meet the requirement of 19 subsection (c), including for investments made in 20 cost-effective end-use energy efficiency programs, the 21 lifetime and annual energy saving benefits, and ca-22 pacity benefits of said programs. 23 "(3) Administrator cost containment re-24 PORT.—Not later April 30, 2015, and every 3 years 25 thereafter through April 30, 2026, the Adminis-

trator shall transmit a report to Congress containing 1 an evaluation of the disposition of the value of emis-2 3 sion allowances received pursuant to this subsection 4 and recommendations of ways to more effectively di-5 rect the value of allowances to reduce costs for con-6 sumers, contain the overall costs of the greenhouse 7 gas emissions reduction program, and meet the pol-8 lution reduction targets of the Act. The Adminis-9 trator shall make available to the public such report, 10 including by publishing such report on the Internet. 11 "(g) Enforcement.—A violation of any require-12 ment of this section, irrespective of approval by a State 13 regulatory authority, shall be a violation of this Act. Each emission allowance the value of which is used in violation 14 15 of the requirements of this section shall be a separate violation. 16 17 "(h) REGULATIONS.—Not later than January 1, 18 2014, the Administrator, in consultation with the Federal Energy Regulatory Commission, shall promulgate regula-19 20 tions to implement the requirements of this section. 21 "SEC. 785. HOME HEATING OIL AND PROPANE CONSUMERS. 22 "(a) Definitions.—For purposes of this section: 23 "(1) Carbon content.—The term 'carbon

content' means the amount of carbon dioxide that

1 would be emitted as a result of the combustion of a 2 fuel. 3 "(2) Cost-effective.—The term 'cost-effec-4 tive' has the meaning given that term in section 5 784(a)(2). 6 "(b) Allocation.—Not later than September 30 of each of calendar years 2012 through 2029, the Adminis-8 trator shall distribute among the States, in accordance with this section, the quantity of emission allowances allo-10 cated pursuant to section 782(c). The Administrator shall 11 distribute a percentage of such allowances determined by 12 the Administrator, after consultation with the Secretary 13 of the Interior, pursuant to subsection (f). 14 "(c) Distribution Among States.—The Adminis-15 trator shall distribute emission allowances among the States under this section each year on a pro rata basis 16 17 based on the ratio of— 18 "(1) the carbon content of home heating oil and 19 propane sold to consumers within each State in the 20 preceding year for residential or commercial uses; to 21 "(2) the carbon content of home heating oil and 22 propane sold to consumers within the United States 23 in the preceding year for residential or commercial 24 uses. "(d) Use of Allowances.— 25

1	"(1) IN GENERAL.—States shall use emission
2	allowances distributed under this section exclusively
3	for the benefit of consumers of home heating oil or
4	propane for residential or commercial purposes.
5	Such proceeds shall be used exclusively for—
6	"(A) cost-effective energy efficiency pro-
7	grams for consumers that use home heating oil
8	or propane for residential or commercial pur-
9	poses; or
10	"(B) rebates or other direct financial as-
11	sistance programs for consumers of home heat-
12	ing oil or propane used for residential or com-
13	mercial purposes.
14	"(2) Administration and delivery mecha-
15	NISMS.—In administering programs supported by
16	this section, States shall—
17	"(A) use no less than 50 percent of the
18	value of emission allowances received under this
19	section for cost-effective energy efficiency pro-
20	grams to reduce consumers' overall fuel costs;
21	"(B) to the extent practicable, deliver con-
22	sumer support under this section through exist-
23	ing energy efficiency and consumer energy as-
24	sistance programs or delivery mechanisms, in-
25	cluding, where appropriate, programs or mecha-

1	nisms administered by parties other than the
2	State; and
3	"(C) seek to coordinate the administration
4	and delivery of energy efficiency and consumer
5	energy assistance programs supported under
6	this section, with one another and with existing
7	programs for various fuel types, so as to deliver
8	comprehensive, fuel-blind, coordinated programs
9	to consumers.
10	"(e) Reporting.—Each State receiving emission al-
11	lowances under this section shall submit to the Adminis-
12	trator, within 12 months of each receipt of such allow-
13	ances, a report, in accordance with such requirements as
14	the Administrator may prescribe, that—
15	"(1) describes the State's use of emission allow-
16	ances distributed under this section, including a de-
17	scription of the energy efficiency and consumer as-
18	sistance programs supported with such allowances;
19	"(2) demonstrates the cost-effectiveness of, and
20	the energy savings achieved by, energy efficiency
21	programs supported under this section; and
22	"(3) includes a report prepared by an inde-
23	pendent third party, in accordance with such regula-
24	tions as the Administrator may promulgate, evalu-
25	ating the performance of the energy efficiency and

- 1 consumer assistance programs supported under this
- 2 section.
- 3 "(f) Enforcement.—If the Administrator deter-
- 4 mines that a State is not in compliance with this section,
- 5 the Administrator may withhold a portion of the emission
- 6 allowances, the quantity of which is equal to up to twice
- 7 the quantity of the allowances that the State failed to use
- 8 in accordance with the requirements of this section, that
- 9 such State would otherwise be eligible to receive under this
- 10 section in later years. Allowances withheld pursuant to
- 11 this subsection shall be distributed among the remaining
- 12 States on a pro rata basis in accordance with the formula
- 13 in subsection (c).
- 14 "SEC. 786. ALLOCATIONS TO REFINERIES.
- 15 "(a) Purpose.—The purpose of this section is to
- 16 provide emission allowance rebates to petroleum refiners
- 17 in the United States in a manner that promotes energy
- 18 efficiency and a reduction in greenhouse gas emissions at
- 19 such facilities.
- 20 "(b) Definitions.—In this section:
- 21 "(1) Emissions.—The term 'emissions' means
- the greenhouse gas emissions in the calendar year
- preceding the calendar year in which emission allow-
- ances are being distributed. The term includes direct
- emissions from fuel combustion, process emissions,

1	and indirect emissions from the generation of elec-
2	tricity used to produce the output of the petroleum
3	refinery or sector.
4	"(2) Intensity.—The term 'intensity' means
5	tons of carbon dioxide equivalent emissions per unit
6	of output in a given year.
7	"(3) Intensity factor.—The term intensity
8	factor' means the intensity of the petroleum refining
9	sector divided by the intensity for an individual pe-
10	troleum refinery.
11	"(4) Output.—The term 'output' means the
12	average annual number of gallons of refined fuel
13	produced in the three calendar years preceding the
14	calendar year in which emission allowances are being
15	distributed.
16	"(5) Petroleum refinery.—The term 'petro-
17	leum refinery' means a facility classified under
18	324110 of the North American Industrial Classifica-
19	tion System of 2002.
20	"(6) Production factor.—The term 'produc-
21	tion factor' means the output of an individual petro-
22	leum refinery divided by the output of the petroleum
23	refining sector.
24	"(c) DISTRIBUTION OF ALLOWANCES.—For each vin-
25	tage year between 2014 and 2026, the Administrator shall

- 1 distribute allowances pursuant to this section to owners
- 2 and operators of petroleum refineries in the United States.
- 3 "(d) Distribution Schedule.—The Administrator
- 4 shall distribute emission allowances of each vintage year
- 5 no later than October 31 of the preceding calendar year.
- 6 "(e) Calculation of Emission Allowance Re-
- 7 BATES.—
- 8 "(1) For each petroleum refinery, the Adminis-
- 9 trator shall calculate an individual allocation factor
- for each vintage year, based upon the product of the
- intensity factor for such refinery multiplied by the
- 12 production factor for such refinery.
- 13 "(2) The Administrator shall also calculate a
- total allocation factor for each vintage year, based
- upon the sum of all of the individual allocation fac-
- tors.
- 17 "(3) The Administrator shall calculate the
- number of emission allowances to be provided to
- each petroleum refinery in each vintage year by di-
- viding the individual allocation factor for such refin-
- ery by the total allocation factor, then multiplying
- 22 the result by the number of emission allowances allo-
- cated to the program under this section for that vin-
- tage year.
- 25 "(f) Data Sources.—

1	"(1) The Administrator shall use data from the
2	greenhouse gas registry, established under section
3	713, where it is available.
4	"(2) The Administrator shall determine, by
5	rule, the methodology by which to calculate indirect
6	emissions for a refinery. The Administrator shall
7	also determine, by rule, the methodology by which to
8	take into account the value of allowances provided at
9	no cost to local distribution companies that is passed
10	through to a refinery. Each person selling electricity
11	to the owner or operator of a petroleum refinery
12	shall provide the owner or operator and the Adminis-
13	trator, on an annual basis, such data as the Admin-
14	istrator determines is necessary to implement this
15	section.
16	"SEC. 787. CONSUMER PROTECTION.
17	"(a) Climate Change Consumer Rebates.—
18	"(1) Establishment of fund.—There is es-
19	tablished in the Treasury a separate account, to be
20	known as the 'Climate Change Consumer Fund' (re-
21	ferred to in this subsection as the 'Fund').
22	"(2) Availability of amounts.—All amounts
23	deposited in the Fund shall be available without fur-
24	ther appropriation or fiscal year limitation.

1	"(3) DISTRIBUTION OF AMOUNTS.—For each
2	year after deposits are made to the Consumer Cli-
3	mate Rebate Fund Account pursuant to section
4	782(b)(), the Secretary of the Treasury shall use
5	the funds to provide relief to consumers and others
6	affected by the enactment of the
7	[Act (and amendments made
8	by that Act).
9	"(b) Energy Refund Program.—
10	"(1) Establishment of fund.—There is es-
11	tablished in the Treasury a separate account, to be
12	known as the 'Low-Income Consumer Fund' (re-
13	ferred to in this subsection as the 'Fund').
14	"(2) AVAILABILITY OF AMOUNTS.—All amounts
15	deposited in the Fund shall be available without fur-
16	ther appropriation or fiscal year limitation.
17	"(3) Distribution of amounts.—For each
18	year after deposits are made to the Consumer Cli-
19	mate Rebate Fund Account pursuant to section
20	782(b)(), the Administrator, or the head of such
21	other agency as the President may designate, shall
22	use the funds to alleviate energy cost impacts on
23	low-ingoma housaholds

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2	"(a) In General.—Not later than 1 year after the
3	date of enactment of this title, the Administrator shall
4	issue regulations allowing any person in the United States
5	to exchange greenhouse gas emission allowances issued be-
6	fore the later of December 31, 2011, or the date that is
7	9 months after the first auction under section 789, by the
8	State of California or for the Regional Greenhouse Gas
9	Initiative, or the Western Climate Initiative (in this sec-
10	tion referred to as 'State allowances') for emission allow-
11	ances established by the Administrator under section
12	721(a).
13	"(b) Regulations.—Regulations issued under sub-
14	section (a) shall—
15	"(1) provide that a person exchanging State al-
16	lowances under this section receive emission allow-
17	ances established under section 721(a) in the
18	amount that is sufficient to compensate for the cost
19	of obtaining and holding such State allowances;
20	"(2) establish a deadline by which persons must
21	exchange the State allowances;
22	"(3) provide that the Federal emission allow-
23	ances disbursed pursuant to this section shall be de-
24	ducted from the allowances to be auctioned pursuant
25	to section 782(d); and

31, 2011.

1 "(4) require that, once exchanged, the credit or 2 other instrument be retired for purposes of use 3 under the program by or for which it was originally 4 issued. 5 "(c) Cost of Obtaining State Allowance.—For purposes of this section, the cost of obtaining a State allowance shall be the average auction price, for emission 8 allowances issued in the year in which the State allowance was issued, under the program under which the State al-10 lowance was issued. "SEC. 789. AUCTION PROCEDURES. 12 "(a) IN GENERAL.—To the extent that auctions of 13 emission allowances by the Administrator are authorized by this part, such auctions shall be carried out pursuant 14 15 to this section and the regulations established hereunder. 16 "(b) Initial Regulations.—Not later than 12 months after the date of enactment of this title, the Ad-18 ministrator, in consultation with other agencies, as appro-19 priate, shall promulgate regulations governing the auction 20 of allowances under this section. Such regulations shall in-21 clude the following requirements: 22 "(1) Frequency; first auction.—Auctions 23 shall be held four times per year at regular intervals, 24 with the first auction to be held no later than March

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"(2) Auction schedule; current and fu-TURE VINTAGES.—The Administrator shall, at each quarterly auction under this section, offer for sale both a portion of the allowances with the same vintage year as the year in which the auction is being conducted and a portion of the allowances with vintage years from future years. The preceding sentence shall not apply to auctions held before 2012, during which period, by necessity, the Administrator shall auction only allowances with a vintage year that is later than the year in which the auction is held. Beginning with the first auction and at each quarterly auction held thereafter, the Administrator may offer for sale allowances with vintage years of up to four years after the year in which the auction is being conducted.

- "(3) Auction format.—Auctions shall follow a single-round, sealed-bid, uniform price format.
- "(4) Participation; Financial assurance.—
 Auctions shall be open to any person, except that
 the Administrator may establish financial assurance
 requirements to ensure that auction participants can
 and will perform on their bids.
- "(5) DISCLOSURE OF BENEFICIAL OWNER-SHIP.—Each bidder in the auction shall be required

than the bidder.

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- to disclose the person or entity sponsoring or benefitting from the bidder's participation in the auction if such person or entity is, in whole or in part, other
- 5 "(6) Purchase limits.—No person may, di-6 rectly or in concert with another participant, pur-7 chase more than 5 percent of the allowances offered 8 for sale at any quarterly auction.
 - "(7) Publication of information.—After the auction, the Administrator shall, in a timely fashion, publish the identities of winning bidders, the quantity of allowances obtained by each winning bidder, and the auction clearing price.
 - "(8) OTHER REQUIREMENTS.—The Administrator may include in the regulations such other requirements or provisions as the Administrator, in consultation with other agencies, as appropriate, considers appropriate to promote effective, efficient, transparent, and fair administration of auctions under this section.
- "(c) REVISION OF REGULATIONS.—The Administrator may, in consultation with other agencies, as appropriate, at any time, revise the initial regulations promulgated under subsection (b). Such revised regulations need not meet the requirements identified in subsection (b) if

- 1 the Administrator determines that an alternative auction
- 2 design would be more effective, taking into account factors
- 3 including costs of administration, transparency, fairness,
- 4 and risks of collusion or manipulation. In determining
- 5 whether and how to revise the initial regulations under
- 6 this subsection, the Administrator shall not consider maxi-
- 7 mization of revenues to the Federal Government.
- 8 "(d) Reserve Auction Price.—The minimum re-
- 9 serve auction price shall be \$10 (in constant 2009 dollars)
- 10 for auctions occurring in 2012. The minimum reserve
- 11 price for auctions occurring in years after 2012 shall be
- 12 the minimum reserve auction price for the previous year
- 13 increased by 5 percent plus the rate of inflation (as meas-
- 14 ured by the Consumer Price Index for all urban con-
- 15 sumers).
- 16 "(e) Delegation or Contract.—Pursuant to reg-
- 17 ulations under this section, the Administrator may by del-
- 18 egation or contract provide for the conduct of auctions
- 19 under the Administrator's supervision by other depart-
- 20 ments or agencies of the Federal Government or by non-
- 21 governmental agencies, groups, or organizations.
- 22 "SEC. 790. AUCTIONING ALLOWANCES FOR OTHER ENTI-
- 23 TIES.
- "(a) Consignment.—Any entity holding emission al-
- 25 lowances or compensatory allowances may request that the

- 1 Administrator auction, pursuant to section 789, the allow-
- 2 ances on consignment.
- 3 "(b) Pricing.—When the Administrator acts under
- 4 this section as the agent of an entity in possession of emis-
- 5 sion allowances, the Administrator is not obligated to ob-
- 6 tain the highest price possible for the emission allowances,
- 7 and instead shall auction consignment allowances in the
- 8 same manner and pursuant to the same rules as auctions
- 9 of other allowances under section 789. The Administrator
- 10 may permit the entity offering the allowance for sale to
- 11 condition the sale of its allowances pursuant to this section
- 12 on a minimum reserve price that is different than the re-
- 13 serve auction price set pursuant to section 789(d).
- 14 "(c) Proceeds.—For emission allowances and com-
- 15 pensatory allowances auctioned pursuant to this section,
- 16 notwithstanding section 3302 of title 31, United States
- 17 Code, or any other provision of law, within 90 days of re-
- 18 ceipt, the United States shall transfer the proceeds from
- 19 the auction to the entity which held the allowances auc-
- 20 tioned. No funds transferred from a purchaser to a seller
- 21 of emission allowances or compensatory allowances under
- 22 this subsection shall be held by any officer or employee
- 23 of the United States or treated for any purpose as public
- 24 monies.

1	"(d) Regulations.—The Administrator shall issue
2	regulations within 24 months after the date of enactment
3	of this title to implement this section.
4	"SEC. 791. COMMERCIAL DEPLOYMENT OF CARBON CAP-
5	TURE AND STORAGE TECHNOLOGIES.
6	"(a) Definitions.—In this section:
7	"(1) CARBON CAPTURE AND STORAGE.—The
8	term 'carbon capture and storage' shall—
9	"(A) have such term as Administrator
10	shall determine by regulation; and
11	"(B) include—
12	"(i) geological sequestration; and
13	"(ii) alternative uses of captured car-
14	bon dioxide.
15	"(2) Qualifying electric generating
16	UNIT.—The term 'qualifying electric generating unit'
17	means an electric utility unit that—
18	"(A) derives at least 50 percent of the an-
19	nual fuel input of the unit from—
20	"(i) coal or waste coal;
21	"(ii) petroleum coke; or
22	"(iii) any combination of those 2
23	fuels; and
24	"(B)(i) has a nameplate capacity of 200
25	megawatts or more; or

1	"(11) in the case of retrofit applications, the
2	carbon capture and storage technology is ap-
3	plied to the flue gas or fuel gas stream from at
4	least 200 megawatts of the total nameplate
5	generating capacity of the unit.
6	"(3) Qualifying industrial source.—The
7	term 'qualifying industrial source' means a source
8	that—
9	"(A) is not a qualifying electric generating
10	unit; and
11	"(B) absent carbon capture and storage.
12	would emit greater than 50,000 tons per year
13	of carbon dioxide.
14	"(4) Treated generating capacity.—
15	"(A) IN GENERAL.—The term 'treated
16	generating capacity' means the portion of the
17	total generating capacity of an electric gener-
18	ating unit (or industrial source, measured by
19	such method as the Administrator may des-
20	ignate to be equivalent to the calculation under
21	subparagraph (B)) for which the flue gas or
22	fuel gas is treated by the carbon capture and
23	storage technology.
24	"(B) CALCULATION.—In determining the
25	treated portion of flue gas or fuel gas of an

1	electric generating unit under subparagraph
2	(A), the Administrator shall multiply the name-
3	plate capacity of the unit by the ratio that—
4	"(i) the mass of flue gas or fuel gas
5	that is treated by the carbon capture and
6	storage technology; bears to
7	"(ii) the total mass of the flue gas or
8	fuel gas that is produced when the unit is
9	operating at maximum capacity.
10	"(b) Regulations.—Not later than 2 years after
11	the date of enactment of this title, the Administrator shall
12	promulgate regulations providing for the distribution of
13	emission allowances allocated under section 782(f), pursu-
14	ant to the requirements of this section, to support the
15	commercial deployment of carbon capture and storage
16	technologies in electric power generation and industrial
17	operations.
18	"(c) Eligibility Criteria and Method of Dis-
19	TRIBUTION.—
20	"(1) Eligibility.—For an owner or operator
21	of a project to be eligible to receive emission allow-
22	ances under this section, the project shall—
23	"(A) implement carbon capture and stor-
24	age technology—

1	"(i) at a qualifying electric generating
2	unit that, upon implementation of the car-
3	bon capture and storage technology, will
4	achieve an emission limitation that is at
5	least a 50-percent reduction in emissions
6	of the carbon dioxide produced by—
7	"(I) the unit, measured on an
8	annual basis, as determined by the
9	Administrator; or
10	"(II) in the case of retrofit appli-
11	cations described in subsection
12	(a)(2)(B)(ii), the treated portion of
13	flue gas from the unit, measured on
14	an annual basis, as determined by the
15	Administrator; or
16	"(ii) at a qualifying industrial source
17	that, upon implementation, will achieve an
18	emission limitation that is at least a 50-
19	percent reduction in emissions of the car-
20	bon dioxide produced by the emission
21	point, measured on an annual basis, as de-
22	termined by the Administrator;
23	"(B)(i) geologically sequester carbon diox-
24	ide at a site that meets all applicable permitting

1	and certification requirements for geological
2	storage; or
3	"(ii) pursuant to such requirements as the
4	Administrator may prescribe by regulation, con-
5	vert captured carbon dioxide to a stable form
6	that will safely and permanently sequester the
7	carbon dioxide;
8	"(C) meet all other applicable State, tribal,
9	and Federal permitting requirements; and
10	"(D) be located in the United States.
11	"(2) Method of distribution.—
12	"(A) Period.—The Administrator shall
13	distribute emission allowances allocated under
14	section 782(f) to eligible projects for each of the
15	first 10 calendar years for which each eligible
16	project is in commercial operation.
17	"(B) Bonus allowance formula for
18	ELECTRIC GENERATING UNITS.—
19	"(i) Phase I distribution.—For
20	each project that is certified under sub-
21	section (h), the quantity of emission allow-
22	ances that the Administrator shall dis-
23	tribute for a calendar year to the owner or
24	operator of the eligible project shall be

1	equal to the quotient obtained by divid-
2	ing—
3	"(I) the product obtained by mul-
4	tiplying—
5	"(aa) the number of metric
6	tons of carbon dioxide emissions
7	avoided through capture and
8	storage of emissions by the
9	project for a particular year, as
10	determined pursuant to such
11	methodology as the Adminis-
12	trator shall prescribe by regula-
13	tion; and
14	"(bb) a bonus allowance
15	value that is assigned to the
16	project under subsection (d)(2);
17	by
18	"(II) the average fair market
19	value of an emission allowance during
20	the calendar year preceding the earlier
21	of—
22	"(aa) the year during which
23	the project captured and stored
24	the carbon dioxide emissions; or

1	"(bb) the year in which the
2	project receives an advanced dis-
3	tribution of emissions allowances
4	under subsection (h)(3)(B).
5	"(ii) Phase II distribution.—For
6	each project that qualifies under subsection
7	(e), the quantity of emission allowances
8	that the Administrator shall distribute for
9	a calendar year to the owner or operator of
10	the eligible project shall be determined
11	through—
12	"(I) reverse auction, as pre-
13	scribed by regulation under subsection
14	(e)(3); or
15	"(II) if the Administrator decides
16	not to distribute allowances through a
17	reverse auction, an alternate distribu-
18	tion method established by regulation
19	under subsection (e)(4).
20	"(C) FORMULA FOR INDUSTRIAL
21	Sources.—For each project that qualifies
22	under subsection (g), the quantity of emission
23	allowances that the Administrator shall dis-
24	tribute for a calendar year to the owner or op-

1	erator of the eligible project shall be determined
2	in accordance with subsection $(g)(2)$.
3	"(D) Consistency.—The Administrator
4	shall develop a method of distribution for each
5	category of eligible projects under this para-
6	graph in a manner that is consistent with the
7	certification and distribution requirements
8	under subsection (h).
9	"(d) Phase I Distribution to Electric Gener-
10	ATING UNITS.—
11	"(1) Applicability.—
12	"(A) In General.—Subject to subpara-
13	graph (B), this subsection shall apply to
14	projects that are undertaken at qualifying elec-
15	tric generating units that the Administrator de-
16	termines to be eligible to receive emission allow-
17	ances under this section.
18	"(B) Capacity.—The total cumulative
19	generating capacity of the projects described in
20	subparagraph (A) shall be equal to approxi-
21	mately 20 gigawatts of the treated generating
22	capacity.
23	"(2) Bonus allowance values.—
24	"(A) FIRST TRANCHE.—

1	(1) IN GENERAL.—The first tranche
2	shall include the first 10 gigawatts of
3	treated generating capacity undertaken at
4	qualifying electric generating units that re-
5	ceive emission allowances under this sec-
6	tion.
7	"(ii) Certain units.—For an eligible
8	project achieving capture and storage of 90
9	percent or more of the carbon dioxide that
10	otherwise would be emitted by the unit, the
11	bonus allowance value shall be \$96 per tor
12	[of carbon dioxide emitted by the unit].
13	"(iii) Bonus allowance value.—
14	The Administrator shall establish, by regu-
15	lation, a bonus allowance value for each
16	rate of capture and storage achieved by an
17	eligible project—
18	"(I) beginning at a minimum of
19	\$50 per ton for a 50-percent rate; and
20	"(II) varying in direct proportion
21	with increasing rates of capture and
22	storage up to \$96 per ton for an 90-
23	percent rate.
24	"(B) SECOND TRANCHE.—

1	"(i) In General.—The second
2	tranche shall include the second 10
3	gigawatts of treated generating capacity
4	undertaken at qualifying electric gener-
5	ating units that receive emission allow-
6	ances under this section.
7	"(ii) CERTAIN UNITS.—For an eligible
8	project achieving the capture and storage
9	of 90 percent or more of the carbon diox-
10	ide that otherwise would be emitted by the
11	eligible project, the bonus allowance value
12	shall be \$85 per ton [of carbon dioxide
13	emitted by the eligible project].
14	"(iii) Bonus allowance value.—
15	The Administrator shall establish, by regu-
16	lation, a bonus allowance value for each
17	rate of capture and storage achieved by an
18	eligible project—
19	"(I) beginning at a minimum of
20	\$50 per ton for a 50-percent rate; and
21	"(II) varying in direct proportion
22	with increasing rates of capture and
23	storage up to \$85 per ton for a 90-
24	percent rate.

VALUE.—For an eligible project that commences commercial operation by not later than January 1, 2017, and that meets the eligibility criteria under subsection (c), the otherwise-applicable bonus allowance value under this paragraph shall be increased by \$10, if the owner or operator of the eligible project submits to the Administrator by not later than January 1, 2012, a notification of the intent to implement carbon capture and storage technology at a qualifying electric generating unit in accordance with subsection (c).

"(D) REDUCTION.—

"(i) IN GENERAL.—For a carbon capture and storage project sequestering in a geological formation for purposes of enhanced hydrocarbon recovery, the Administrator, by regulation, shall reduce the applicable bonus allowance value under this paragraph to reflect the lower net cost of the project, as compared to storage into geological formations solely for purposes of storage.

1	"(ii) Assessment of Net Cost.—
2	For the purpose of this subparagraph, an
3	assessment of net cost of a project shall
4	account for the cost of the injection of car-
5	bon dioxide, or other method of enhanced
6	hydrocarbon recovery, that would have oth-
7	erwise been undertaken in the absence of
8	the carbon capture and storage project
9	under consideration.
10	"(E) Adjustments.—The Administrator
11	shall annually adjust for monetary inflation the
12	bonus allowance values established under this
13	paragraph.
14	"(F) Measurement.—The Administrator
15	shall measure the tranches and capture levels
16	for assigning the bonus allowance values under
17	this subsection based on the treated of gener-
18	ating capacity of the qualifying electric gener-
19	ating units and qualifying industrial sources
20	that receive emission allowances under this sub-
21	section.
22	"(G) Average fair market value.—
23	"(i) In General.—The Administrator
24	and the Secretary of Energy may jointly
25	determine that the average fair market

1	value for emission allowances or the bonus
2	allowances have been too low or too high to
3	achieve efficient and cost-effective commer-
4	cial deployment of carbon capture and
5	storage technology in a given calendar
6	year.
7	"(ii) Action on Determination.—
8	On making a determination under clause
9	(i), the Administrator may—
10	"(I) promulgate regulations to
11	adjust the bonus allowance value
12	under this paragraph; or
13	"(II) distribute an appropriate
14	quantity of emission allowances allo-
15	cated under section 782(f) from any
16	future vintage year.
17	"(e) Phase II Distribution to Electric Generation
18	ATING UNITS.—
19	"(1) Application.—This subsection shall
20	apply only to the distribution of emission allowances
21	for carbon capture and storage projects undertaken
22	at qualifying electric generating units and qualifying
23	industrial sources after the treated generating ca-
24	pacity threshold identified under subsection $(d)(1)$ is
25	reached.

1	"(2) REGULATIONS.—Not later than 2 years
2	before the date on which the capacity threshold iden-
3	tified in subsection $(d)(1)$ is projected to be reached,
4	the Administrator shall promulgate regulations to
5	govern the distribution of emission allowances to the
6	owners or operators of eligible projects under this
7	subsection.
8	"(3) Reverse auctions.—
9	"(A) IN GENERAL.—Except as provided in
10	paragraph (4), the regulations promulgated
11	pursuant to paragraph (2) shall provide for the
12	distribution of emission allowances to the own-
13	ers or operators of eligible projects under this
14	subsection through at least 2 reverse auctions,
15	each of which shall be held not less frequently
16	than once each calendar year.
17	"(B) Requirements.—
18	"(i) Projects at industrial
19	SOURCES.—The Administrator shall annu-
20	ally establish a reverse auction for projects
21	at industrial sources, which may not par-
22	ticipate in other auctions.
23	"(ii) Other Auctions.—The Admin-
24	istrator may establish a separate auction

1	for each of not more than 5 different
2	project categories, as defined based on—
3	"(I) coal type;
4	"(II) capture technology;
5	"(III) geological formation type;
6	"(IV) new unit versus retrofit ap-
7	plication;
8	"(V) such other factors as the
9	Administrator may prescribe; or
10	"(VI) any combination of the fac-
11	tors described in subclauses (I)
12	through (V).
13	"(iii) Efficient distribution.—
14	The Administrator shall establish proce-
15	dures for the auction of emission allow-
16	ances under this subparagraph to ensure
17	that the establishment of separate auctions
18	for different project categories will not un-
19	duly impede the efficient and expeditious
20	distribution of emission allowances to eligi-
21	ble projects under this subsection.
22	"(iv) MINIMUM RATES.—The Admin-
23	istrator may establish appropriate min-
24	imum rates of capture and storage for the

1	treated generating capacity of a project in
2	implementing this subparagraph.
3	"(C) AUCTION PROCESS.—At each reverse
4	auction under this paragraph—
5	"(i) the Administrator shall solicit
6	bids from eligible projects;
7	"(ii) owners or operators of eligible
8	projects participating in the auction shall
9	submit a bid, including the desired level of
10	carbon dioxide storage incentive per ton
11	and the estimated quantity of carbon diox-
12	ide that the project will permanently se-
13	quester during a 10-year period; and
14	"(iii) the Administrator shall select
15	bids within each auction for the storage
16	quantity submitted, beginning with the eli-
17	gible project for which the bid is submitted
18	for the lowest level of storage incentive on
19	a per-ton basis and meeting such other re-
20	quirements as the Administrator may
21	specify, until the amounts available for the
22	reverse auction are committed.
23	"(D) FORM OF DISTRIBUTION.—The Ad-
24	ministrator shall distribute emission allowances
25	to the owners or operators of eligible projects

1	selected through a reverse auction under this
2	paragraph pursuant to a formula equivalent to
3	the formula contained in subsection $(c)(2)(B)$,
4	except that the bonus allowance value that is
5	bid by the applicable entity shall be substituted
6	for the bonus allowance values described in sub-
7	section $(c)(2)$.
8	"(4) Alternative distribution method.—
9	"(A) IN GENERAL.—If the Administrator
10	determines that a reverse auction will not result
11	in efficient and cost-effective commercial de-
12	ployment of carbon capture and storage tech-
13	nologies, the Administrator, pursuant to regula-
14	tions under paragraph (2) or (5), shall pre-
15	scribe a schedule for the provision of bonus al-
16	lowances to the owners or operators of eligible
17	projects under this subsection, in accordance
18	with the requirements of this paragraph.
19	"(B) MULTIPLE TRANCHES.—The Admin-
20	istrator shall divide emission allowances avail-
21	able for distribution to the owners or operators
22	of eligible projects into a series of tranches,
23	each of which—
24	"(i) shall support the deployment of a
25	specified quantity of cumulative electric

1	generating capacity using carbon capture
2	and storage technology; and
3	"(ii) shall not be greater than 10
4	gigawatts of treated generating capacity.
5	"(C) METHOD OF DISTRIBUTION.—The
6	Administrator shall distribute emission allow-
7	ances within each tranche, on a first-come,
8	first-served basis—
9	"(i) based on the date of full-scale op-
10	eration of capture and storage technology;
11	and
12	"(ii) pursuant to a formula that—
13	"(I) is similar to the formula
14	contained in subsection $(c)(2)(C)$, ex-
15	cept that the Administrator may pre-
16	scribe bonus allowance values dif-
17	ferent than those described in sub-
18	section (c)(2) based on the criteria es-
19	tablished under subparagraph (E);
20	and
21	(Π) establishes the number of
22	emission allowances to be distributed
23	per ton of carbon dioxide sequestered
24	by the project.

1	"(D) REQUIREMENTS.—For each tranche
2	established pursuant to subparagraph (B), the
3	Administrator shall establish a schedule for dis-
4	tributing emission allowances that—
5	"(i) is based on a sliding scale that
6	provides higher bonus allowance values for
7	projects achieving higher rates of capture
8	and storage for the treated generation ca-
9	pacity at the unit;
10	"(ii) for each capture and storage
11	rate, establishes a bonus allowance value
12	that is lower than that established for the
13	applicable rate for the previous tranche
14	(or, in the case of the first tranche, than
15	that established for the applicable rate
16	under subsection $(d)(2)$; and
17	"(iii) may establish different bonus al-
18	lowance levels for not more than 5 dif-
19	ferent project categories, as defined based
20	on—
21	"(I) coal type;
22	"(II) capture and transportation
23	technology;
24	"(III) geological formation type;

1	"(IV) new unit versus retrofit ap-
2	plication;
3	"(V) such other factors as the
4	Administrator may prescribe; or
5	"(VI) any combination of the fac-
6	tors described in subclauses (I)
7	through (V).
8	"(E) Criteria for establishing bonus
9	ALLOWANCE VALUES.—In establishing bonus al-
10	lowance values under this paragraph, the Ad-
11	ministrator shall seek to cover not more than
12	the reasonable incremental capital and oper-
13	ating costs of a project that are attributable to
14	implementation of carbon capture, transpor-
15	tation, and storage technologies, taking into ac-
16	count—
17	"(i) the reduced cost of compliance
18	with section 722;
19	"(ii) the reduced cost associated with
20	sequestering in a geological formation for
21	purposes of enhanced hydrocarbon recov-
22	ery, as compared to storage into geological
23	formations solely for purposes of storage;
24	"(iii) the relevant factors defining the
25	project category; and

1	"(iv) such other factors as the Admin-
2	istrator determines to be appropriate.
3	"(5) REVISION OF REGULATIONS.—The Admin-
4	istrator shall review and, as appropriate, revise the
5	applicable regulations under this subsection not less
6	frequently than once every 8 years.
7	"(f) Limits for Certain Electric Generating
8	Units.—
9	"(1) Definitions.—In this subsection, the
10	terms 'covered EGU' and 'initially permitted' have
11	the meanings given those terms in section 812.
12	"(2) Covered egus initially permitted
13	FROM 2009 THROUGH 2014.—For a covered EGU
14	that is initially permitted during the period begin-
15	ning on January 1, 2009, and ending on December
16	31, 2014, the Administrator shall reduce the quan-
17	tity of emission allowances that the owner or oper-
18	ator of the covered EGU would otherwise be eligible
19	to receive under this section as follows:
20	"(A) In the case of a covered EGU com-
21	mencing operation on or before January 1,
22	2019, if the date in clause (ii)(I) is earlier than
23	the date in clause (ii)(II), by the product ob-
24	tained by multiplying—
25	"(i) 20 percent; and

1	(ii) the number of years, if any, that
2	have elapsed between—
3	"(I) the earlier of—
4	"(aa) January 1, 2020; and
5	"(bb) the date that is 5
6	years after the commencement of
7	operation of the covered EGU;
8	and
9	"(II) the first year that the cov-
10	ered EGU achieves (and thereafter
11	maintains) an emission limitation that
12	is at least a 50-percent reduction in
13	emissions of carbon dioxide produced
14	by the unit, measured on an annual
15	basis, as determined in accordance
16	with section $812(b)(2)$.
17	"(B) In the case of a covered EGU com-
18	mencing operation after January 1, 2019, by
19	the product obtained by multiplying—
20	"(i) 20 percent; and
21	"(ii) the number of years, if any, that
22	have elapsed between—
23	"(I) the commencement of oper-
24	ation of the covered EGU; and

1	"(II) the first year that the cov-
2	ered EGU achieves (and thereafter
3	maintains) an emission limitation that
4	is at least a 50-percent reduction in
5	emissions of carbon dioxide produced
6	by the unit, measured on an annual
7	basis, as determined in accordance
8	with section $812(b)(2)$.
9	"(3) Covered egus initially permitted
10	FROM 2015 THROUGH 2019.—The owner or operator
11	of a covered EGU that is initially permitted during
12	the period beginning on January 1, 2015, and end-
13	ing on December 31, 2019, shall be ineligible to re-
14	ceive emission allowances under this section if the
15	covered EGU, on commencement of operations (and
16	thereafter), does not achieve and maintain an emis-
17	sion limitation that is at least a 50-percent reduction
18	in emissions of carbon dioxide produced by the cov-
19	ered EGU, measured on an annual basis, as deter-
20	mined in accordance with section $812(b)(2)$.
21	"(g) Industrial Sources.—
22	"(1) Emission allowances.—The Adminis-
23	trator—
24	"(A) may distribute not more than 15 per-
25	cent of the emission allowances allocated under

1	section 782(f) for any vintage year to the own-
2	ers or operators of eligible industrial sources to
3	support the commercial-scale deployment of car-
4	bon capture and storage technologies at those
5	sources; and
6	"(B) notwithstanding any other provision
7	of law—
8	"(i) may distribute to eligible indus-
9	trial sources not more than 15 percent of
10	the emission allowances allocated under
11	section 782(f) for any vintage year in the
12	second tranche of phase I; but
13	"(ii) may not distribute those allow-
14	ances for any vintage year in the first
15	tranche of phase I.
16	"(2) Distribution.—
17	"(A) In General.—The Administrator
18	shall prescribe, by regulation, requirements for
19	the distribution of emission allowances to the
20	owners or operators of industrial sources under
21	this subsection, based on a bonus allowance for-
22	mula that awards emission allowances to quali-
23	fying projects on the basis of tons of carbon di-
24	oxide captured and permanently sequestered.

1	"(B) METHOD.—The Administrator may
2	provide for the distribution of emission allow-
3	ances pursuant to—
4	"(i) a reverse auction method similar
5	to the method described in subsection
6	(e)(3), including the use of separate auc-
7	tions for different project categories; or
8	"(ii) an incentive schedule similar to
9	the schedule described in subsection (e)(4),
10	which shall ensure that incentives are es-
11	tablished so as to satisfy the requirement
12	described in subsection $(e)(4)(E)$.
13	"(3) Revision of regulations.—The Admin-
14	istrator shall review and, as appropriate, revise the
15	regulations under this subsection not less frequently
16	than once every 8 years.
17	"(h) Certification and Distribution.—
18	"(1) CERTIFICATION.—
19	"(A) Request.—
20	"(i) Phase I; alternative dis-
21	TRIBUTION METHOD.—In the case of a
22	qualifying project that is eligible to receive
23	allowances under phase I or under sub-
24	section (e)(4), at any time prior to placing
25	a carbon capture and storage project into

1	commercial operation, the owner or oper-
2	ator of the planned project may request
3	from the Administrator a certification that
4	the project is eligible to receive emission
5	allowances under this section.
6	"(ii) REVERSE AUCTIONS.—In the
7	case of a qualifying project that wins a re-
8	verse auction under subsection (e) or (g),
9	within a reasonably brief period following
10	completion of the auction (as specified by
11	the Administrator), the owner or operator
12	of the qualifying project shall request from
13	the Administrator a certification that the
14	project is eligible to receive emission allow-
15	ances under this section.
16	"(iii) Eligible projects.—Eligible
17	projects in phase I and phase II may re-
18	ceive certification under this paragraph.
19	"(iv) Issuance.—The Administrator
20	shall issue a certification described in this
21	subparagraph if the owner or operator
22	demonstrates a commitment to construct
23	and operate a project that satisfies—
24	"(I) the eligibility criteria of sub-
25	section (c); and

1	"(II) the requirements of this
2	paragraph.
3	"(B) Documentation.—
4	"(i) In General.—The Administrator
5	shall prescribe, by regulation, the docu-
6	mentation necessary for making a deter-
7	mination of project eligibility for the cer-
8	tification under subparagraph (A), includ-
9	ing—
10	"(I) technical information re-
11	garding the capture and storage tech-
12	nology, coal type, geological formation
13	type (if applicable), and other relevant
14	design features that are planned for
15	the project;
16	"(II) the annual reductions in
17	carbon dioxide emissions that the cap-
18	ture and storage technology is pro-
19	jected to achieve during each of the
20	first 10 years that the project
21	achieves commercial operation;
22	"(III) a demonstration that the
23	owner or operator is committed to
24	both constructing and operating the
25	planned project on a timeline marked

1	by reasonable milestones, through the
2	completion of 1 of the actions speci-
3	fied in subparagraph (C)(iii); and
4	"(IV) an assessment of the costs
5	of constructing the project, which
6	shall serve as the basis for the deter-
7	mination of the Administrator regard-
8	ing advanced distributions under
9	paragraph (3)(C).
10	"(ii) Nonretrofit application.—
11	In the case of a project that is not a ret-
12	rofit application, the assessment of costs
13	shall include an assessment of the costs for
14	constructing the electric generating unit or
15	industrial source that will produce the flue
16	gas or fuel gas to be treated by the carbon
17	capture and storage technology.
18	"(C) Commitment.—
19	"(i) In general.—Subject to clause
20	(ii), the completion of any 1 of the quali-
21	fying actions specified under clause (iii)
22	shall constitute a commitment to construct
23	and operate a planned carbon capture and
24	storage project.

1	"(ii) Condition.—In the case of a
2	qualifying action specified in subclause (I)
3	or (II) of clause (iii), the completion of
4	such an action may be subject to a condi-
5	tion that the Administrator will issue a
6	certification under this paragraph for the
7	distribution of emission allowances to the
8	project.
9	"(iii) Qualifying actions.—Quali-
10	fying actions under this subparagraph
11	shall include—
12	"(I) the execution of—
13	"(aa) a commitment by
14	lenders or other appropriate enti-
15	ties to finance the project, which
16	may be subject to customary
17	closing conditions that are associ-
18	ated with the execution of the
19	commitment; and
20	"(bb) a commitment by the
21	owner or operator of the project
22	to execute a surety bond in suffi-
23	cient amounts by not later than 2
24	years after the date on which the

1	Administrator issues the certifi-
2	cation for the project; or
3	"(II) an authorization by a State
4	regulatory authority to allow recovery,
5	from the retail customers of such elec-
6	tric utility, of the costs of the project
7	by a State-regulated electric utility
8	that plans to construct the project.
9	"(D) Failure to request certifi-
10	CATION.—
11	"(i) In general.—An owner or oper-
12	ator may elect not to request a certifi-
13	cation on the eligibility of a planned
14	project under subparagraph (A) prior to
15	the commercial operation of the project.
16	"(ii) Determination by adminis-
17	TRATOR.—If an owner or operator elects
18	not to request a certification under clause
19	(i), the Administrator shall make a deter-
20	mination regarding whether the project
21	satisfies the eligibility requirements of sub-
22	section (c) at the time that the Adminis-
23	trator makes a determination regarding
24	the annual distribution of emission allow-
25	ances under paragraph (3)(A).

1	"(2) Reservation of emission allow-
2	ANCES.—
3	"(A) Amount.—
4	"(i) In general.—For each project
5	that receives a certification of eligibility
6	under paragraph (1), the Administrator
7	shall reserve on a first-come, first-served
8	basis a portion of the emission allowances
9	that are allocated for the deployment of
10	carbon capture and storage technology
11	under section 782(f).
12	"(ii) Determination.—The reserva-
13	tion of emission allowances for a particular
14	eligible project under this paragraph shall
15	be equal to the number of emission allow-
16	ances that the project is entitled to receive
17	under the applicable distribution method
18	under this section upon commercial oper-
19	ation of the carbon capture and storage
20	technology, as determined by the Adminis-
21	trator based on—
22	"(I) the applicable bonus allow-
23	ance value;
24	"(II) the number of tons of car-
25	bon dioxide emissions projected to be

1	captured and stored each calendar
2	year under paragraph $(1)(B)(i)(II);$
3	and
4	"(III) a discount rate to account
5	for the monetary inflation that may
6	be expected to occur during each of
7	the relevant 10 calendar years, as de-
8	termined by the Administrator.
9	"(B) Termination of reservation.—
10	"(i) In general.—A reservation of
11	emission allowances for a particular project
12	under subparagraph (A) shall terminate if
13	the owner or operator fails to achieve rea-
14	sonable milestones for commencing con-
15	struction or commercial operation of the
16	project, as specified under paragraph
17	(1)(B)(i)(III).
18	"(ii) Reduced quantity of carbon
19	DIOXIDE CAPTURED AND STORED.—If the
20	quantity of carbon dioxide captured and
21	stored by a project on average over 3 con-
22	secutive vintage years is less than the
23	quantity estimated for those vintage years
24	under subparagraph (A), the reservation of
25	emission allowances for the project under

1	subparagraph (A) shall be reduced in fu-
2	ture years by the difference between—
3	"(I) the quantity of carbon diox-
4	ide captured and stored on average
5	over the applicable 3 consecutive
6	years; and
7	"(II) the quantity estimated
8	under subparagraph (A) for the appli-
9	cable years.
10	"(iii) Availability.—The Adminis-
11	trator shall immediately make available to
12	other eligible projects emission allowances
13	for which the Administrator has termi-
14	nated an emission allowance reservation
15	for a particular project under this subpara-
16	graph.
17	"(3) Distribution process.—
18	"(A) ANNUAL DISTRIBUTION.—
19	"(i) In General.—The Administrator
20	shall distribute the emission allowances to
21	eligible projects on an annual basis.
22	"(ii) Basis.—The annual distribution
23	of emission allowances shall be based on
24	the total tons of carbon dioxide that the
25	project annually captures and sequesters

1	during each of the first 10 years of com-
2	mercial operation, in accordance with sub-
3	section $(c)(2)$.
4	"(iii) Total distribution
5	AMOUNT.—The total amount of emission
6	allowances distributed to an eligible project
7	for each of the first 10 years of commer-
8	cial operation may be greater than, or less
9	than, the quantity of emissions allowances
10	that the Administrator has reserved for the
11	eligible project under paragraph (2).
12	"(iv) Reports.—
13	"(I) In general.—Except as
14	provided in subparagraph (B), the Ad-
15	ministrator shall make each annual
16	distribution of emission allowances by
17	not later than 90 days after the date
18	on which the owner or operator of a
19	project submits to the Administrator
20	a report regarding the carbon dioxide
21	emissions captured and sequestered
22	for a particular year by the project.
23	"(II) REQUIREMENT.—A report
24	under subclause (I) shall be verified in

accordance with regulations to be pro-
mulgated by the Administrator.
"(B) Advanced distribution.—
"(i) In general.—The Administrator
may provide an advanced distribution of
emission allowances to the projects—
"(I) that receive emission allow-
ances under the phase I distributions
authorized by subsection (d); and
"(II) for which the Administrator
has issued a certification of eligibility
under paragraph (1).
"(ii) Requirements.—An advanced
distribution of emission allowances for a
particular project shall be provided—
"(I) prior to the operational
phase of the project, at an appro-
priate milestone that best ensures the
expeditious deployment of the carbon
capture and storage technology;
"(II) in a quantity that equals a
percentage, as specified in subpara-
graph (C), of the total number of
emission allowances that the Adminis-
trator has reserved for that project

1	during the 10-year period of commer-
2	cial operation; and
3	"(III) using allowances that are
4	drawn—
5	"(aa) from the current vin-
6	tage year; or
7	"(bb) if the allowances are
8	exhausted from the current vin-
9	tage year, in order from success
10	sive vintage years, beginning with
11	the most proximate future vin-
12	tage year.
13	"(C) Percentages.—
14	"(i) In general.—Subject to clauses
15	(ii) and (iii), the Administrator shall apply
16	the following percentages for determining
17	the advanced distribution of emission al-
18	lowances:
19	"(I) 70 percent of the emission
20	allowance reservation for the first
21	tranche under subsection $(d)(2)(A)$.
22	"(II) 50 percent of the emission
23	allowance reservation for the second
24	tranche under subsection $(d)(2)(B)$.

1	"(ii) Costs less than value of al-
2	LOWANCES.—If the costs described in
3	clause (iii) are less than the monetary
4	value of allowances represented by the per-
5	centages described in clause (i) at the time
6	of advanced distribution, the advanced dis-
7	tribution shall be limited to an amount
8	that is equivalent to the costs described in
9	clause (iii).
10	"(iii) Costs.—
11	"(I) In general.—Subject to
12	subclause (II), for retrofit projects
13	and for projects at new electric gener-
14	ating units or industrial sources, the
15	advanced distribution shall equate to
16	100 percent of the costs of labor, ma-
17	terials, and equipment associated with
18	the construction and installation of
19	the system to capture, compress,
20	transport, and store carbon dioxide.
21	"(II) NEW ELECTRIC GENER-
22	ATING UNITS.—For projects at new
23	electric generating units, the advanced
24	distribution shall equate to the sum of
25	the costs described in subclause (I)

1	and a portion of the costs of con-
2	structing a project, as documented
3	under paragraph $(1)(B)(i)(IV)$, but in
4	no case shall the advanced distribu-
5	tion under this subclause equate to a
6	dollar value that exceeds [80] percent
7	of the construction costs of a new
8	electric generating unit.
9	"(D) RECONCILIATION.—
10	"(i) In general.—In the case of a
11	project that receives an advanced distribu-
12	tion of emission allowances under this
13	paragraph, the Administrator shall dis-
14	tribute annually the remainder of emission
15	allowances reserved under subsection
16	(h)(2) once the carbon capture and storage
17	technology begins commercial operation.
18	"(ii) TIMING OF DISTRIBUTION.—The
19	annual distribution of emission allowances
20	under clause (i) shall take place not later
21	than 60 days after the end of each cal-
22	endar year.
23	"(iii) Amount of reduction.—Sub-
24	ject to clause (iv), the distribution shall an-

1	nually be reduced by the difference be-
2	tween—
3	"(I) the number of allowances
4	that were reserved for the project in
5	the relevant calendar year under para-
6	graph $(2)(A)(ii)(II)$; and
7	"(II) the number of allowances
8	that the project would be eligible to
9	receive under the bonus allowance for-
10	mula described in subsection
11	(c)(2)(B)(i) based on the tons of car-
12	bon dioxide emissions that were actu-
13	ally captured and stored by each
14	project during the relevant calendar
15	year.
16	"(iv) Number of Allowances.—For
17	purposes of clauses (iii)(II) and (viii)(I),
18	for the purposes of calculating the number
19	of allowances under subsection
20	(c)(2)(B)(i), the Administrator shall enter
21	the average fair market value of emission
22	allowances in the year specified under sub-
23	section $(e)(2)(B)(i)(II)(bb)$).
24	"(v) Repayment by owner or op-
25	FRATOR OF PROJECT —

1	"(I) In General.—If, in any
2 ca	dendar year, the number of tons of
3 ca	arbon dioxide emissions projected to
4 be	e captured and stored for that year
5 un	nder paragraph $(1)(B)(i)(II)$ is
6 gr	reater than the number of tons of
7 ca	arbon dioxide emissions that were ac-
8 tu	ally captured and stored by a
9 pr	roject during that year, the owner or
10 ор	perator of the project may repay the
11 di	fference by—
12	"(aa) repaying in accordance
13	with clause (vi); or
14	"(bb) capturing and storing
15	an additional quantity of emis-
16	sions that cumulatively exceeds
17	the difference between—
18	"(AA) the number of
19	tons of carbon dioxide emis-
20	sions that were projected to
21	be captured and stored for
22	the relevant calendar year
23	under paragraph
24	(1)(B)(i)(II); and

1	"(BB) the number of
2	tons of carbon dioxide emis-
3	sions that were actually cap-
4	tured and stored by the
5	project during that year.
6	"(II) Period.—Repayment
7	under this clause shall occur over a
8	period to be specified by the Adminis-
9	trator, but not to exceed 18 months.
10	"(III) ALTERNATIVE METHOD.—
11	The owner or operator may elect to
12	forego the method of repayment under
13	this clause and alternatively make re-
14	payment in accordance with clause
15	(viii).
16	"(vi) Repayment by allowances
17	OR CASH.—If the owner or operator of the
18	project elects to comply by repaying in ac-
19	cordance with clause $(v)(I)$, following the
20	period specified by the Administrator
21	under clause $(v)(II)$, the owner or operator
22	shall repay the Administrator an amount
23	of allowances or cash (as calculated under
24	clause (viii)) if—

1	"(I) the number of tons of car-
2	bon dioxide emissions that were actu-
3	ally captured and stored by a project
4	during that period is less than the
5	number necessary to rectify the dif-
6	ference described under clause (v)(I);
7	or
8	"(II) the number of allowances
9	remaining reserved for a project is in-
10	sufficient to adjust for the difference
11	under clause (iii).
12	"(vii) Milestones.—If the Adminis-
13	trator determines that the owner or oper-
14	ator failed to achieve reasonable milestones
15	for commencing construction or commer-
16	cial operation of the project (as specified
17	under paragraph (1)(B), the owner or op-
18	erator shall repay the Administrator an
19	amount of allowances or cash calculated
20	under clause (viii).
21	"(viii) Calculation.—The repay-
22	ments required under clauses (vi)(I)(aa)
23	and (vii) shall be equal to, at the option of
24	the owner or operator of the project—

1 "(I) the difference between sub-
2 clauses (I) and (II) of clause (iii); or
3 "(II) a cash payment in an
4 amount equal to the product obtained
5 by multiplying—
6 "(aa) the quotient obtained
by dividing the bonus allowance
8 value that was originally assigned
9 under subsection (d) (in accord-
ance with paragraph
(1)(B)(i)(II)) by the average fair
market value of an emission al-
lowance during the year specified
under subsection
(e)(2)(B)(i)(II)(bb);
16 "(bb) the average fair mar-
ket value of an emission allow-
ance during the year in which the
repayment would be made under
clause (vi); and
"(cc) the difference between
the number of tons of carbon di-
oxide emissions capture and stor-
age that was projected for the
relevant calendar year under

1	paragraph $(1)(B)(i)(II)$ and the
2	number of tons of carbon dioxide
3	emissions that was actually cap-
4	tured and stored by a project
5	during that year.
6	"(ix) USE OF REPAID AMOUNTS.—The
7	Administrator shall use amounts received
8	as repayments under this clause to support
9	the deployment of carbon capture and stor-
10	age.
l 1	"(i) Limitations.—
12	"(1) In general.—Emission allowances shall
13	be distributed under this section only for tons of car-
14	bon dioxide emissions that are captured and seques-
15	tered in accordance with this section.
16	"(2) Period.—A qualifying project may receive
17	annual emission allowances under this section only
18	for the first 10 years of operation.
19	"(3) Capacity.—
20	"(A) In General.—Approximately 72
21	gigawatts of total cumulative treated generating
22	capacity may receive emission allowances under
23	this section.
24	"(B) Allowance surplus.—On reaching
25	the cumulative capacity described in subpara-

1	graph (A), any emission allowances that are al-
2	located for carbon capture and storage deploy-
3	ment under section 782(f) and are not yet obli-
4	gated under this section shall be treated as
5	emission allowances not designated for distribu-
6	tion for purposes of section 782(r).
7	"(j) Exhaustion of Account and Annual Roll-
8	OVER OF SURPLUS EMISSION ALLOWANCES.—
9	"(1) In general.—In distributing emission al-
10	lowances under this section, the Administrator shall
11	ensure that eligible projects receive distributions of
12	emission allowances for the first 10 years of com-
13	mercial operation.
14	"(2) Different vintage years.—
15	"(A) Determination.—If the Adminis-
16	trator determines that the emission allowances
17	allocated under section 782(f) with a vintage
18	year that matches the year of distribution will
19	be exhausted once the estimated full 10-year
20	distributions will be provided to current eligible
21	participants, the Administrator shall provide to
22	new eligible projects emission allowances from
23	vintage years after the year of the distribution.
24	"(B) DIVERSITY FACTORS.—If the Admin-
25	istrator provides allowances to new eligible

1	projects under subparagraph (A), the Adminis-
2	trator shall promulgate regulations to prioritize
3	new eligible projects that are distinguished from
4	prior recipients of allowances by 1 or more of
5	the following diversity factors (without regard
6	to order):
7	"(i) Location in a coal-producing re-
8	gion that provides a majority of coal to the
9	project.
10	"(ii) Coal type, including waste coal.
11	"(iii) Capture and transportation
12	technologies.
13	"(iv) Geological formations.
14	"(v) New units and retrofit applica-
15	tions.
16	"(k) Allocation of Allowances for Deploy-
17	MENT OF CARBON CAPTURE AND STORAGE TECH-
18	NOLOGY.—
19	"(1) Annual allocation.—The Adminis-
20	trator shall allocate emission allowances for the de-
21	ployment of carbon capture and storage technology
22	in accordance with this section in the following
23	quantities:
24	"(A) For [each of] vintage years 2014
25	through 2017, 1.75 percent of the emission al-

1	lowances established for each year under section
2	721(a).
3	"(B) For [each of] vintage years 2018
4	and 2019, 4.75 percent of the emission allow-
5	ances established for each year under section
6	721(a).
7	"(C) For [each of] vintage years 2020
8	through 2050, 5 percent of the emission allow-
9	ances established for each year under section
10	721(a).
11	"(2) Carryover.—If the Administrator has
12	not distributed all of the allowances allocated pursu-
13	ant to this subsection for a given vintage year by the
14	end of that year, the Administrator shall—
15	"(A) auction those emission allowances in
16	accordance with section 791 by not later than
17	March 31 of the year following that vintage
18	year; and
19	"(B) increase the allocation under this
20	subsection for the vintage year after the vintage
21	year for which emission allowances were
22	undisbursed by the quantity of undisbursed
23	emission allowances, but only to the extent that
24	allowances for that later year are to be auc-
25	tioned.

- 1 "(l) Davis-Bacon Compliance.—
- 2 "(1) IN GENERAL.—All laborers and mechanics
- 3 employed on projects funded directly by or assisted
- 4 in whole or in part by this section through the use
- 5 of emission allowances shall be paid wages at rates
- 6 not less than those prevailing on projects of a char-
- 7 acter similar in the locality as determined by the
- 8 Secretary of Labor in accordance with subchapter
- 9 IV of chapter 31 of title 40, United States Code.
- 10 "(2) AUTHORITY.—With respect to the labor
- standards specified in this subsection, the Secretary
- of Labor shall have the authority and functions set
- forth in Reorganization Plan Numbered 14 of 1950
- 14 (64 Stat. 1267; 5 U.S.C. App.) and section 3145 of
- title 40, United States Code.

16 "SEC. 792. OVERSIGHT OF ALLOCATIONS.

- 17 "(a) IN GENERAL.—Not later than January 1, 2014,
- 18 and every 2 years thereafter, the Comptroller General of
- 19 the United States shall carry out a review of programs
- 20 administered by the Federal Government that distribute
- 21 emission allowances or funds from any Federal auction of
- 22 allowances.
- "(b) Contents.—Each such report shall include a
- 24 comprehensive evaluation of the administration and effec-
- 25 tiveness of each program, including—

1	"(1) the efficiency, transparency, and sound-
2	ness of the administration of each program;
3	"(2) the performance of activities receiving as-
4	sistance under each program;
5	"(3) the cost-effectiveness of each program in
6	achieving the stated purposes of the program; and
7	"(4) recommendations, if any, for regulatory or
8	administrative changes to each program to improve
9	its effectiveness.
10	"(c) Focus.—In evaluating program performance,
11	each review under this section review shall address the ef-
12	fectiveness of such programs in—
13	"(1) creating and preserving jobs;
13 14	"(1) creating and preserving jobs; "(2) ensuring a manageable transition for
14	"(2) ensuring a manageable transition for
14 15	"(2) ensuring a manageable transition for working families and workers;
141516	"(2) ensuring a manageable transition for working families and workers; "(3) reducing the emissions, or enhancing se-
14151617	"(2) ensuring a manageable transition for working families and workers; "(3) reducing the emissions, or enhancing sequestration, of greenhouse gases;
14 15 16 17 18	"(2) ensuring a manageable transition for working families and workers; "(3) reducing the emissions, or enhancing sequestration, of greenhouse gases; "(4) developing clean technologies; and
14 15 16 17 18 19	"(2) ensuring a manageable transition for working families and workers; "(3) reducing the emissions, or enhancing sequestration, of greenhouse gases; "(4) developing clean technologies; and "(5) building resilience to the impacts of cli-
14 15 16 17 18 19 20	"(2) ensuring a manageable transition for working families and workers; "(3) reducing the emissions, or enhancing sequestration, of greenhouse gases; "(4) developing clean technologies; and "(5) building resilience to the impacts of climate change.
1415161718192021	"(2) ensuring a manageable transition for working families and workers; "(3) reducing the emissions, or enhancing sequestration, of greenhouse gases; "(4) developing clean technologies; and "(5) building resilience to the impacts of climate change. "SEC. 793. EARLY ACTION RECOGNITION.

1	than 1 year after the date of enactment of this title, the
2	Administrator shall issue regulations allowing—
3	"(1) any person in the United States to ex-
4	change instruments in the nature of offset credits
5	issued before January 1, 2009, by a State, local, or
6	voluntary offset program with respect to which the
7	Administrator has made an affirmative determina-
8	tion under [section 740(a)(2)], for emission allow-
9	ances established by the Administrator under [sec-
10	tion 721(a)()]; and
11	"(2) the Administrator to provide compensation
12	in the form of emission allowances to entities that
13	do not meet the criteria of paragraph (1) and meet
14	the criteria of this paragraph for documented early
15	reductions or avoidance of greenhouse gas emissions
16	or greenhouse gases sequestered before January 1,
17	2009, from projects or process improvements begun
18	before January 1, 2009, where—
19	"(A) the entity publicly stated greenhouse
20	gas reduction goals and publicly reported
21	against those goals;
22	"(B) the entity demonstrated entity-wide
23	net greenhouse gas reductions; and
24	"(C) the entity demonstrates the actual
25	projects or process improvements undertaken to

1	make reductions and documents the reductions
2	(such as through documentation of engineering
3	projects).
4	"(b) Regulations.—Regulations issued under sub-
5	section (a) shall—
6	"(1) provide that a person exchanging credits
7	under subsection $(a)(1)$ receive emission allowances
8	established under [section $721(a)(\underline{\hspace{0.3cm}})$] in an
9	amount for which the monetary value is equivalent
10	to the average monetary value of the credits during
11	the period from January 1, 2006, to January 1,
12	2009, as adjusted for inflation to reflect current dol-
13	lar values at the time of the exchange;
14	"(2) provide that a person receiving compensa-
15	tion for documented early action under subsection
16	(a)(2) shall receive emission allowances established
17	under [section 721(a)] in an amount that is ap-
18	proximately equivalent in value to the carbon dioxide
19	equivalent per ton value received by entities in ex-
20	change for credits under paragraph (1) (as adjusted
21	for inflation to reflect current dollar values at the
22	time of the exchange), as determined by the Admin-
23	istrator;
24	"(3) provide that only reductions or avoidance
25	of greenhouse gas emissions, or sequestration of

1 greenhouse gases, achieved by activities in the 2 United States between January 1, 2001, and Janu-3 ary 1, 2009, may be compensated under this section, 4 and only credits issued for such activities may be ex-5 changed under this section; "(4) provide that only credits that have not 6 7 been retired or otherwise used to meet a voluntary 8 or mandatory commitment, and have not expired, 9 may be exchanged under subsection (a)(1); 10 "(5) require that, once exchanged, the credit be 11 retired for purposes of use under the program by or 12 for which it was originally issued; and 13 "(6) establish a deadline by which persons must 14 exchange the credits or request compensation for 15 early action under this section. 16 "(c) Participation.—Participation in an exchange 17 of credits for allowances or compensation for early action 18 authorized by this section shall not preclude any person 19 from participation in an offset credit program established under the 20 Act. 21 "(d) DISTRIBUTION.—Of the emission allowances 22 distributed under this section, a quantity equal to 0.75 percent of vintage year 2012 emission allowances established under [section 721(a)] shall be distributed pursu-25 ant to subsection (a)(1), and a quantity equal to 0.25 per-

- 1 cent of vintage year 2012 emission allowances established
- 2 under [section 721(a)] shall be distributed pursuant to
- 3 subsection (a)(2).
- 4 "SEC. 794. ESTABLISHMENT OF FUNDS.
- 5 "(a) Deficit Reduction.—
- 6 "(1) Deficit reduction fund.—There is es-
- 7 tablished in the Treasury of the United States a
- 8 fund, to be known as the 'Deficit Reduction Fund'.
- 9 "(2) DISBURSEMENTS.—No disbursement shall
- be made from the Deficit Reduction Fund except
- pursuant to an appropriation Act.
- 12 "(b) Market Stability Reserve Fund.—There
- 13 are established in the Treasury of the United States a
- 14 fund to be known as the 'Market Stability Reserve
- 15 Fund'.".

16 Subtitle C—Additional Greenhouse 17 Gas Standards

- 18 SEC. 121. GREENHOUSE GAS STANDARDS.
- The Clean Air Act (42 U.S.C. 7401 et seq.), as
- 20 amended by subtitles A and B of this title, is further
- 21 amended by adding the following new title after title VII:

"TITLE VIII—ADDITIONAL GREENHOUSE GAS STANDARDS

2	"CTO	001	DEFINITIONS.
7	"SEC.	801.	DEFINITIONS.

- 4 "For purposes of this title, terms that are defined
- 5 in title VII, except for the term 'stationary source', shall
- 6 have the meanings given those terms in title VII.

7 "PART A—STATIONARY SOURCE STANDARDS

8 ["SEC. 811. STANDARDS OF PERFORMANCE.]

- 9 "(a) Standards.—In promulgating standards of
- 10 performance under section 111, the Administrator shall—
- "(1) give priority to the setting of performance
- standards for the largest stationary sources of
- 13 greenhouse gas emissions;
- 14 "(2) take into account the greenhouse gas re-
- ductions achievable through the application of en-
- ergy efficiency measures, carbon capture and storage
- technologies, and measures available to achieve off-
- sets from methane sources under section 733;
- 19 "(3) consider the findings of the report required
- under subsection (b).
- 21 "(b) Report.—Not later than 3 years after the date
- 22 of enactment of this title, the Administrator shall issue
- 23 a report on achievable reductions in methane from sta-
- 24 tionary sources that individually had greenhouse gas emis-
- 25 sions of greater than 10,000 tons of carbon dioxide equiva-

- 1 lent and that in the aggregate were responsible for emit-
- 2 ting at least 20 percent annually of the uncapped green-
- 3 house gas emissions, taking into account measures avail-
- 4 able to achieve offsets from methane sources, as provided
- 5 under section 733.".

6 SEC. 122. HFC REGULATION.

- 7 (a) IN GENERAL.—Title VI of the Clean Air Act (42)
- 8 U.S.C. 7671 et seq.) (relating to stratospheric ozone pro-
- 9 tection) is amended by adding at the end the following:
- 10 "SEC. 619. HYDROFLUOROCARBONS (HFCS).
- 11 "(a) Treatment as Class II, Group II Sub-
- 12 STANCES.—Except as otherwise provided in this section,
- 13 hydrofluorocarbons shall be treated as class II substances
- 14 for purposes of applying the provisions of this title. The
- 15 Administrator shall establish two groups of class II sub-
- 16 stances. Class II, group I substances shall include all
- 17 hydrochlorofluorocarbons (HCFCs) listed pursuant to sec-
- 18 tion 602(b). Class II, group II substances shall include
- 19 each of the following:
- 20 "(1) Hydrofluorocarbon-23 (HFC-23).
- 21 "(2) Hydrofluorocarbon-32 (HFC-32).
- "(3) Hydrofluorocarbon-41 (HFC-41).
- "(4) Hydrofluorocarbon-125 (HFC-125).
- 24 "(5) Hydrofluorocarbon-134 (HFC-134).
- 25 "(6) Hydrofluorocarbon-134a (HFC–134a).

1 "(7) Hydrofluorocarbon-143 (HFC-143). 2 "(8) Hydrofluorocarbon-143a (HFC-143a). "(9) Hydrofluorocarbon-152 (HFC-152). 3 4 "(10) Hydrofluorocarbon-152a (HFC-152a). 5 "(11) Hydrofluorocarbon-227ea (HFC-227ea). 6 "(12) Hydrofluorocarbon-236cb (HFC-236cb). 7 "(13) Hydrofluorocarbon-236ea (HFC-236ea). 8 "(14) Hydrofluorocarbon-236fa (HFC-236fa). 9 "(15) Hydrofluorocarbon-245ca (HFC-245ca). "(16) Hydrofluorocarbon-245fa (HFC-245fa). 10 11 "(17) Hydrofluorocarbon-365mfc (HFC-12 365mfc). 13 "(18) Hydrofluorocarbon-43-10mee (HFC-43-14 10mee). 15 "(19) Hydrofluoroolefin-1234yf (HFO-1234yf). 16 "(20) Hydrofluoroolefin-1234ze (HFO-1234ze). Not later than 6 months after the date of enactment of 18 this title, the Administrator shall publish an initial list of class II, group II substances, which shall include the sub-19 20 stances listed in this subsection. The Administrator may 21 add to the list of class II, group II substances any other 22 substance used as a substitute for a class I or II substance 23 if the Administrator determines that 1 metric ton of the substance makes the same or greater contribution to glob-25 al warming over 100 years as 1 metric ton of carbon diox-

- 1 ide. Within 24 months after the date of enactment of this
- 2 section, the Administrator shall amend the regulations
- 3 under this title (including the regulations referred to in
- 4 sections 603, 608, 609, 610, 611, 612, and 613) to apply
- 5 to class II, group II substances.
- 6 "(b) Consumption and Production of Class II,
- 7 Group II Substances.—

8 "(1) In General.—

9 "(A) Consumption phase down.—In the 10 case of class II, group II substances, in lieu of 11 applying section 605 and the regulations there-12 under, the Administrator shall promulgate reg-13 ulations phasing down the consumption of class 14 II, group II substances in the United States, 15 and the importation of products containing any 16 class II, group II substance, in accordance with 17 this subsection within 18 months after the date 18 of enactment of this section. Effective January 19 1, 2012, it shall be unlawful for any person to 20 produce any class II, group II substance, im-21 port any class II, group II substance, or import 22 any product containing any class II, group II 23 substance without holding one consumption al-24 lowance or one destruction offset credit for each

carbon dioxide equivalent ton of the class II,

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group II substance. Any person who exports a class II, group II substance for which a consumption allowance was retired may receive a refund of that allowance from the Administrator following the export.

"(B) PRODUCTION.—If the United States becomes a party or otherwise adheres to a multilateral agreement, including any amendment to the Montreal Protocol on Substances That Deplete the Ozone Layer, that restricts the production of class II, group II substances, the Administrator shall promulgate regulations establishing a baseline for the production of class II, group II substances in the United States and phasing down the production of class II, group II substances in the United States, in accordance with such multilateral agreement and subject to the same exceptions and other provisions as are applicable to the phase down of consumption of class II, group II substances under this section (except that the Administrator shall not require a person who obtains production allowances from the Administrator to make payment for such allowances if the person is making payment for a corresponding quantity of

1 consumption allowances of the same vintage 2 year). Upon the effective date of such regula-3 tions, it shall be unlawful for any person to 4 produce any class II, group II substance with-5 out holding one consumption allowance and one 6 production allowance, or one destruction offset 7 credit, for each carbon dioxide equivalent ton of 8 the class II, group II substance. 9 "(C) Integrity of Cap.—To maintain 10 the integrity of the class II, group II cap, the 11 Administrator may, through rulemaking, limit 12 the percentage of each person's compliance obligation that may be met through the use of de-13 14 struction offset credits or banked allowances. 15 "(D) COUNTING OF VIOLATIONS.—Each 16 consumption allowance, production allowance, 17 or destruction offset credit not held as required 18 by this section shall be a separate violation of 19 this section. 20 "(2) Schedule.—Pursuant to the regulations 21 promulgated pursuant to paragraph (1)(A), the 22 number of class II, group II consumption allowances 23 established by the Administrator for each calendar

year beginning in 2012 shall be the following per-

- 1 centage of the baseline, as established by the Admin-
- 2 istrator pursuant to paragraph (3):

"Calendar Year	Percent of Baseline
2012	90
2013	87.5
2014	85
2015	82.5
2016	80
2017	77.5
2018	75
2019	71
2020	67
2021	63
2022	59
2023	54
2024	50
2025	46
2026	42
2027	38
2028	34
2029	30
2030	25
2031	21
2032	17
after 2032	15

- 3 "(3) Baseline.—(A) Within 12 months after
- 4 the date of enactment of this section, the Adminis-

1	trator shall promulgate regulations to establish the
2	baseline for purposes of paragraph (2). The baseline
3	shall be the sum, expressed in metric tons of carbon
4	dioxide equivalents, of—
5	"(i) the annual average consumption of all
6	class II substances in calendar years 2004,
7	2005, and 2006; plus
8	"(ii) the annual average quantity of all
9	class II substances contained in imported prod-
10	ucts in calendar years 2004, 2005, and 2006.
11	"(B) Notwithstanding subparagraph (A), if the
12	Administrator determines that the baseline is higher
13	than 370 million metric tons of carbon dioxide
14	equivalents, then the Administrator shall establish
15	the baseline at 370 million metric tons of carbon di-
16	oxide equivalents.
17	"(C) Notwithstanding subparagraph (A), if the
18	Administrator determines that the baseline is lower
19	than 280 million metric tons of carbon dioxide
20	equivalents, then the Administrator shall establish
21	the baseline at 280 million metric tons of carbon di-
22	oxide equivalents.
23	"(4) Distribution of Allowances.—
24	"(A) In general.—Pursuant to the regu-
25	lations promulgated under paragraph (1)(A),

for each calendar year beginning in 2012, the Administrator shall sell consumption allowances in accordance with this paragraph.

"(B) ESTABLISHMENT OF POOLS.—The Administrator shall establish two allowance pools. Eighty percent of the consumption allowances available for a calendar year shall be placed in the producer-importer pool, and 20 percent of the consumption allowances available for a calendar year shall be placed in the secondary pool.

"(C) Producer-importer pool.—

"(i) Auction.—(I) For each calendar year, the Administrator shall offer for sale at auction the following percentage of the consumption allowances in the producer-importer pool:

"Calendar Year	Percent Available for Auction
2012	10
2013	20
2014	30
2015	40
2016	50
2017	60
2018	70
2019	80

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"Calendar Year	Percent Available for Auction
2020 and thereafter	90

"(II) Any person who produced or imported any class II substance during calendar year 2004, 2005, or 2006 may participate in the auction. No other persons may participate in the auction unless permitted to do so pursuant to subclause (III).

"(III) Not later than 3 years after the date of the initial auction and from time to time thereafter, the Administrator shall determine through rulemaking whether any persons who did not produce or import a class II substance during calendar year 2004, 2005, or 2006 will be permitted to participate in future auctions. The Administrator shall base this determination on the duration, consistency, and scale of such person's purchases of consumption allowances in the secondary pool under subparagraph (D)(ii)(III), as well as economic or technical hardship and other factors deemed relevant by the Administrator.

1	"(IV) The Administrator shall set a
2	minimum bid per consumption allowance of
3	the following:
4	"(aa) For vintage year 2012,
5	\$1.00.
6	"(bb) For vintage year 2013,
7	\$1.20.
8	"(cc) For vintage year 2014,
9	\$1.40.
10	"(dd) For vintage year 2015,
11	\$1.60.
12	"(ee) For vintage year 2016,
13	\$1.80.
14	"(ff) For vintage year 2017,
15	\$2.00.
16	"(gg) For vintage year 2018 and
17	thereafter, \$2.00 adjusted for infla-
18	tion after vintage year 2017 based
19	upon the producer price index as pub-
20	lished by the Department of Com-
21	merce.
22	"(ii) Non-Auction sale.—(I) For
23	each calendar year, as soon as practicable
24	after auction, the Administrator shall offer
25	for sale the remaining consumption allow-

1	ances in the producer-importer pool at the
2	following prices:
3	"(aa) A fee of \$1.00 per vintage
4	year 2012 allowance.
5	"(bb) A fee of \$1.20 per vintage
6	year 2013 allowance.
7	"(cc) A fee of \$1.40 per vintage
8	year 2014 allowance.
9	"(dd) For each vintage year
10	2015 allowance, a fee equal to the av-
11	erage of \$1.10 and the auction clear-
12	ing price for vintage year 2014 allow-
13	ances.
14	"(ee) For each vintage year 2016
15	allowance, a fee equal to the average
16	of \$1.30 and the auction clearing
17	price for vintage year 2015 allow-
18	ances.
19	"(ff) For each vintage year 2017
20	allowance, a fee equal to the average
21	of \$1.40 and the auction clearing
22	price for vintage year 2016 allow-
23	ances.
24	"(gg) For each allowance of vin-
25	tage year 2018 and subsequent vin-

1	tage years, a fee equal to the auction
2	clearing price for that vintage year.
3	"(II) The Administrator shall offer to
4	sell the remaining consumption allowances
5	in the producer-importer pool to producers
6	of class II, group II substances and im-
7	porters of class II, group II substances in
8	proportion to their relative allocation
9	share.
10	"(III) Such allocation share for such
11	sale shall be determined by the Adminis-
12	trator using such producer's or importer's
13	annual average data on class II substances
14	from calendar years 2004, 2005, and
15	2006, on a carbon dioxide equivalent basis,
16	and—
17	"(aa) shall be based on a pro-
18	ducer's production, plus importation,
19	plus acquisitions and purchases from
20	persons who produced class II sub-
21	stances in the United States during
22	calendar year 2004, 2005, or 2006,
23	less exportation, less transfers and
24	sales to persons who produced class II
25	substances in the United States dur-

1	ing calendar year 2004, 2005, or
2	2006; and
3	"(bb) for an importer of class II
4	substances that did not produce in the
5	United States any class II substance
6	during calendar years 2004, 2005,
7	and 2006, shall be based on the im-
8	porter's importation less exportation.
9	For purposes of item (aa), the Adminis-
10	trator shall account for 100 percent of
11	class II, group II substances and 60 per-
12	cent of class II, group I substances. For
13	purposes of item (bb), the Administrator
14	shall account for 100 percent of class II,
15	group II substances and 100 percent of
16	class II, group I substances.
17	"(IV) Any consumption allowances
18	made available for nonauction sale to a
19	specific producer or importer of class II,
20	group II substances but not purchased by
21	the specific producer or importer shall be
22	made available for sale to any producer or
23	importer of class II substances during cal-
24	endar year 2004, 2005, or 2006. If de-
25	mand for such consumption allowances ex-

1	ceeds supply of such consumption allow-
2	ances, the Administrator shall develop and
3	utilize criteria for the sale of such con-
4	sumption allowances that may include pro
5	rata shares, historic production and impor-
6	tation, economic or technical hardship, or
7	other factors deemed relevant by the Ad-
8	ministrator. If the supply of such con-
9	sumption allowances exceeds demand, the
10	Administrator may offer such consumption
11	allowances for sale in the secondary pool as
12	set forth in subparagraph (D).
13	"(D) Secondary Pool.—(i) For each cal-
14	endar year, as soon as practicable after the auc-
15	tion required in subparagraph (C), the Adminis-
16	trator shall offer for sale the consumption al-
17	lowances in the secondary pool at the prices
18	listed in subparagraph (C)(ii).
19	"(ii) The Administrator shall accept appli-
20	cations for purchase of secondary pool con-
21	sumption allowances from—
22	"(I) importers of products containing
23	class II, group II substances;
24	"(II) persons who purchased any class
25	II, group II substance directly from a pro-

1	ducer or importer of class II, group II sub-
2	stances for use in a product containing a
3	class II, group II substance, a manufac-
4	turing process, or a reclamation process;
5	"(III) persons who did not produce or
6	import a class II substance during cal-
7	endar year 2004, 2005, or 2006, but who
8	the Administrator determines have subse-
9	quently taken significant steps to produce
10	or import a substantial quantity of any
11	class II, group II substance; and
12	"(IV) persons who produced or im-
13	ported any class II substance during cal-
14	endar year 2004, 2005, or 2006.
15	"(iii) If the supply of consumption allow-
16	ances in the secondary pool equals or exceeds
17	the demand for consumption allowances in the
18	secondary pool as presented in the applications
19	for purchase, the Administrator shall sell the
20	consumption allowances in the secondary pool
21	to the applicants in the amounts requested in
22	the applications for purchase. Any consumption
23	allowances in the secondary pool not purchased
24	in a calendar year may be rolled over and added

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1	to the quantity available in the secondary pool
2	in the following year.
3	"(iv) If the demand for consumption allow-
4	ances in the secondary pool as presented in the
5	applications for purchase exceeds the supply of
6	consumption allowances in the secondary pool,
7	the Administrator shall sell the consumption al-
8	lowances as follows:
9	"(I) The Administrator shall first sell
0	the consumption allowances in the sec-
1	ondary pool to any importers of products
2	containing class II, group II substances in
3	the amounts requested in their applications
4	for purchase. If the demand for such con-
5	sumption allowances exceeds supply of
.6	such consumption allowances, the Adminis-
7	trator shall develop and utilize criteria for
8	the sale of such consumption allowances
9	among importers of products containing
20	class II, group II substances that may in-
21	clude pro rata shares, historic importation,
22	economic or technical hardship, or other

factors deemed relevant by the Adminis-

trator.

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"(II) The Administrator shall next sell any remaining consumption allowances to persons identified in subclauses (II) and (III) of clause (ii) in the amounts requested in their applications for purchase. If the demand for such consumption allowances exceeds remaining supply of such consumption allowances, the Administrator shall develop and utilize criteria for the sale ofsuch consumption allowances among subclauses (II) and (III) applicants that may include pro rata shares, historic use, economic or technical hardship, or other factors deemed relevant by the Administrator. "(III) The Administrator shall then sell any remaining consumption allowances to persons who produced or imported any class II substance during calendar year 2004, 2005, or 2006 in the amounts requested in their applications for purchase. If demand for such consumption allowances exceeds remaining supply of such consumption allowances, the Administrator shall develop and utilize criteria for the

1	sale of such consumption allowances that
2	may include pro rata shares, historic pro-
3	duction and importation, economic or tech-
4	nical hardship, or other factors deemed rel-
5	evant by the Administrator.
6	"(IV) Each person who purchases
7	consumption allowances in a non-auction
8	sale under this subparagraph shall be re-
9	quired to disclose the person or entity
10	sponsoring or benefitting from the pur-
11	chases if such person or entity is, in whole
12	or in part, other than the purchaser or the
13	purchaser's employer.
14	"(E) DISCRETION TO WITHHOLD ALLOW-
15	ANCES.—Nothing in this paragraph prevents
16	the Administrator from exercising discretion to
17	withhold and retire consumption allowances
18	that would otherwise be available for auction or
19	nonauction sale. Not later than 18 months after
20	the date of enactment of this section, the Ad-
21	ministrator shall promulgate regulations estab-
22	lishing criteria for withholding and retiring con-
23	sumption allowances.
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.
10	"(v) Publication of Informa-
11	TION.—After the auction, the Adminis-
12	trator shall, in a timely fashion, publish
13	the number of bidders, number of winning
14	bidders, the quantity of allowances sold,
15	and the auction clearing price.
16	"(vi) Bidding limits in 2012.—In
17	the vintage year 2012 auction, no auction
18	participant may, directly or in concert with
19	another participant, bid for or purchase
20	more allowances offered for sale at the
21	auction than the greater of—
22	"(I) the number of allowances
23	which, when added to the number of
24	allowances available for purchase by
25	the participant in the producer-im-

1	porter pool non-auction sale, would
2	equal the participant's annual average
3	consumption of class II, group II sub-
4	stances in calendar years 2004, 2005,
5	and 2006; or
6	"(II) the number of allowances
7	equal to the product of—
8	"(aa) 1.20 multiplied by the
9	participant's allocation share of
10	the producer-importer pool non-
11	auction sale as determined under
12	paragraph (4)(C)(ii); and
13	"(bb) the number of vintage
14	year 2012 allowances offered at
15	auction.
16	"(vii) Bidding limits in 2013.—In
17	the vintage year 2013 auction, no auction
18	participant may, directly or in concert with
19	another participant, bid for or purchase
20	more allowances offered for sale at the
21	auction than the product of—
22	"(I) 1.15 multiplied by the ratio
23	of the total number of vintage year
24	2012 allowances purchased by the
25	participant from the auction and from

1	the producer-importer pool non-auc-
2	tion sale to the total number of vin-
3	tage year 2012 allowances in the pro-
4	ducer-importer pool; and
5	"(II) the number of vintage year
6	2013 allowances offered at auction.
7	"(viii) Bidding limits in subse-
8	QUENT YEARS.—In the auctions for vin-
9	tage year 2014 and subsequent vintage
10	years, no auction participant may, directly
11	or in concert with another participant, bid
12	for or purchase more allowances offered
13	for sale at the auction than the product
14	of—
15	"(I) 1.15 multiplied by the ratio
16	of the highest number of allowances
17	required to be held by the participant
18	in any of the three prior vintage years
19	to meet its compliance obligation
20	under paragraph (1) to the total num-
21	ber of allowances in the producer-im-
22	porter pool for such vintage year; and
23	"(II) the number of allowances
24	offered at auction for that vintage
25	year.

ernment.

1 "(ix)OTHER REQUIREMENTS.—The 2 Administrator may include in the regula-3 tions such other requirements or provisions 4 as the Administrator considers necessary 5 to promote effective, efficient, transparent, 6 and fair administration of auctions under 7 this section. 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 by 13 promulgating new regulations. Such revised reg-14 ulations need not meet the requirements identi-15 fied in subparagraph (A) if the Administrator determines that an alternative auction design 16 17 would be more effective, taking into account 18 factors including costs of administration, trans-19 parency, fairness, and risks of collusion or ma-20 nipulation. In determining whether and how to 21 revise the initial regulations under this para-22 graph, the Administrator shall not consider 23 maximization of revenues to the Federal Gov-

"(C) Delegation or contract.—Pursuant to regulations under this section, the Administrator may, by delegation or contract, provide for the conduct of auctions under the Administrator's supervision by other departments or agencies of the Federal Government or by nongovernmental agencies, groups, or organizations.

"(7) Payments for allowances.—

"(A) Initial regulations.—Not later than 18 months after the date of enactment of this section, the Administrator shall promulgate regulations governing the payment for allowances purchased in auction and non-auction sales under this section. Such regulations shall include the requirement that, in the event that full payment for purchased allowances is not made on the date of purchase, equal payments shall be made one time per calendar quarter with all payments for allowances of a vintage year made by the end of that vintage year.

"(B) REVISION OF REGULATIONS.—The Administrator may, at any time, revise the initial regulations promulgated under subparagraph (A) based on the Administrator's experi-

ence in administering collection of payments by promulgating new regulations. Such revised regulations need not meet the requirements identified in subparagraph (A) if the Administrator determines that an alternative payment structure or frequency would be more effective, taking into account factors including cost of administration, transparency, and fairness. In determining whether and how to revise the initial regulations under this paragraph, the Administrator shall not consider maximization of revenues to the Federal Government.

"(C) Penalties for non-payment.— Failure to pay for purchased allowances in accordance with the regulations promulgated pursuant to this paragraph shall be a violation of the requirements of subsection (b). Section 113(c)(3) shall apply in the case of any person who knowingly fails to pay for purchased allowances in accordance with the regulations promulgated pursuant to this paragraph.

"(8) IMPORTED PRODUCTS.—If the United States becomes a party or otherwise adheres to a multilateral agreement, including any amendment to the Montreal Protocol on Substances That Deplete

the Ozone Layer, which restricts the production or consumption of class II, group II substances—

"(A) as of the date on which such agreement or amendment enters into force, it shall no longer be unlawful for any person to import from a party to such agreement or amendment any product containing any class II, group II substance whose production or consumption is regulated by such agreement or amendment without holding one consumption allowance or one destruction offset credit for each carbon dioxide equivalent ton of the class II, group II substance;

"(B) the Administrator shall promulgate regulations within 12 months of the date the United States becomes a party or otherwise adheres to such agreement or amendment, or the date on which such agreement or amendment enters into force, whichever is later, to establish a new baseline for purposes of paragraph (2), which new baseline shall be the original baseline less the carbon dioxide equivalent of the annual average quantity of any class II substances regulated by such agreement or amendment contained in products imported from parties to

1	such agreement or amendment in calendar
2	years 2004, 2005, and 2006;
3	"(C) as of the date on which such agree-
4	ment or amendment enters into force, no per-
5	son importing any product containing any class
6	II, group II substance may, directly or in con-
7	cert with another person, purchase any con-
8	sumption allowances for sale by the Adminis
9	trator for the importation of products from a
10	party to such agreement or amendment that
11	contain any class II, group II substance re-
12	stricted by such agreement or amendment; and
13	"(D) the Administrator may adjust the
14	two allowance pools established in paragraph
15	(4) such that up to 90 percent of the consump-
16	tion allowances available for a calendar year are
17	placed in the producer-importer pool with the
18	remaining consumption allowances placed in the
19	secondary pool.
20	"(9) Offsets.—
21	"(A) Chlorofluorocarbon destruc-
22	TION.—Within 18 months after the date of en-
23	actment of this section, the Administrator shall
24	promulgate regulations to provide for the
25	issuance of offset credits for the destruction, in

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the calendar 2012 year orlater, of chlorofluorocarbons in the United States. The Administrator shall establish and distribute to the destroying entity a quantity of destruction offset credits equal to 0.8 times the number of metric tons of carbon dioxide equivalents of reduction achieved through the destruction. No destruction offset credits shall be established for the destruction of a class II, group II substance.

"(B) DEFINITION.—For purposes of this paragraph, the term 'destruction' means the conversion of a substance by thermal, chemical, or other means to another substance with little or no carbon dioxide equivalent value and no ozone depletion potential.

"(C) REGULATIONS.—The regulations promulgated under this paragraph shall include standards and protocols for project eligibility, certification of destroyers, monitoring, tracking, destruction efficiency, quantification of project and baseline emissions and carbon dioxide equivalent value, and verification. The Administrator shall ensure that destruction offset credits represent real and verifiable destruction of

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chlorofluorocarbons or other class I or class II, group I, substances authorized under subparagraph (D).

> "(D) OTHER SUBSTANCES.—The Administrator may promulgate regulations to add to the list of class I and class II, group I, substances that may be destroyed for destruction offset credits, taking into account a candidate substance's carbon dioxide equivalent value, ozone depletion potential, prevalence in banks in the United States, and emission rates, as well as the need for additional cost containment under the class II, group II cap and the integrity of the class II, group II cap. The Administrator shall not add a class I or class II, group I substance to the list if the consumption of the substance has not been completely phased-out internationally (except for essential use exemptions or other similar exemptions) pursuant to the Montreal Protocol.

> "(E) EXTENSION OF OFFSETS.—(i) At any time after the Administrator promulgates regulations pursuant to subparagraph (A), the Administrator may, pursuant to the requirements of part D of title VII and based on the carbon

dioxide equivalent value of the substance destroyed, add the types of destruction projects authorized to receive destruction offset credits under this paragraph to the list of types of projects eligible for offset credits under section 733. If such projects are added to the list under section 733, the issuance of offset credits for such projects under part D of title VII shall be governed by the requirements of such part D, while the issuance of offset credits for such projects under this paragraph shall be governed by the requirements of this paragraph. Nothing in this paragraph shall affect the issuance of offset credits under section 740.

"(ii) The Administrator shall not make the addition under clause (i) unless the Administrator finds that insufficient destruction is occurring or is projected to occur under this paragraph and that the addition would increase destruction.

"(iii) In no event shall more than one destruction offset credit be issued under title VII and this section for the destruction of the same quantity of a substance.

1	"(10) Legal status of allowances and
2	CREDITS.—None of the following constitutes a prop-
3	erty right:
4	"(A) A production or consumption allow-
5	ance.
6	"(B) A destruction offset credit.
7	"(c) Deadlines for Compliance.—Notwith-
8	standing the deadlines specified for class II substances in
9	sections 608, 609, 610, 612, and 613 that occur prior to
10	January 1, 2009, the deadline for promulgating regula-
11	tions under those sections for class II, group II substances
12	shall be January 1, 2012.
13	"(d) Exceptions for Essential Uses.—Notwith-
14	standing any phase down of production and consumption
15	required by this section, to the extent consistent with any
16	applicable multilateral agreement to which the United
17	States is a party or otherwise adheres, the Administrator
18	shall consider providing exceptions for essential uses under
19	paragraph (1) and may provide exceptions for essential
20	uses under paragraph (2), as follows:
21	"(1) Medical Devices.—If the Administrator
22	makes the determination under this subsection that
23	a medical device is eligible for an exception, after no-
24	tice and opportunity for public comment, and in con-
25	sultation with the Commissioner of Food and Drugs,

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the Administrator shall provide an exception for the production and consumption of class II, group II substances solely for use in medical devices, such as metered dose inhalers.

"(2) AVIATION AND SPACE VEHICLE SAFETY.—
The Administrator, after notice and opportunity for public comment, may authorize the production and consumption of limited quantities of class II, group II substances solely for the purposes of aviation or space vehicle safety if either the Administrator of the Federal Aviation Administration or the Administrator of the National Aeronautics and Space Administration, in consultation with the Administrator, determines that no safe and effective substitute has been developed and that such authorization is necessary for aviation or space flight safety purposes.

17 "(e) DEVELOPING COUNTRIES.—Notwithstanding 18 any phase down of production required by this section, the 19 Administrator, after notice and opportunity for public 20 comment, may authorize the production of limited quan-21 tities of class II, group II substances in excess of the 22 amounts otherwise allowable under this section solely for 23 export to, and use in, developing countries. Any production authorized under this subsection shall be solely for purposes of satisfying the basic domestic needs of such

- 1 countries as provided in applicable international agree-
- 2 ments, if any, to which the United States is a party or
- 3 otherwise adheres.
- 4 "(f) National Security; Fire Suppression,
- 5 ETC.—The provisions of subsection (f) and paragraphs (1)
- 6 and (2) of subsection (g) of section 604 shall apply to any
- 7 consumption and production phase down of class II, group
- 8 II substances in the same manner and to the same extent,
- 9 consistent with any applicable international agreement to
- 10 which the United States is a party or otherwise adheres,
- 11 as such provisions apply to the substances specified in
- 12 such subsection.
- 13 "(g) Accelerated Schedule.—In lieu of section
- 14 606, the provisions of paragraphs (1), (2), and (3) of this
- 15 subsection shall apply in the case of class II, group II sub-
- 16 stances.
- 17 "(1) IN GENERAL.—The Administrator shall
- promulgate initial regulations not later than 18
- months after the date of enactment of this section,
- and revised regulations any time thereafter, which
- establish a schedule for phasing down the consump-
- 22 tion (and, if the condition in subsection (b)(1)(B) is
- 23 met, the production) of class II, group II substances
- 24 that is more stringent than the schedule set forth in
- 25 this section if, based on the availability of sub-

stitutes, 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, allowance rollover, or 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, allowance rollover, or destruction offset

- 1 credits to the extent necessary to avoid such incon-
- 2 sistency.
- 3 "(h) EXCHANGE.—Section 607 shall not apply in the
- 4 case of class II, group II substances. Production and con-
- 5 sumption allowances for class II, group II substances may
- 6 be freely exchanged or sold but may not be converted into
- 7 allowances for 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 from the requirements of section 611 products
- 16 containing or manufactured with class II, group II sub-
- 17 stances determined to have little or no carbon dioxide
- 18 equivalent value compared to other substances used in
- 19 similar products.
- 20 "(j) Nonessential Products.—For the purposes
- 21 of section 610, class II, group II substances shall be regu-
- 22 lated under section 610(b), except that in applying section
- 23 610(b) the word 'hydrofluorocarbon' shall be substituted
- 24 for the word 'chlorofluorocarbon' and the term 'class II,
- 25 group II' shall be substituted for the term 'class I'. Class

- 1 II, group II substances shall not be subject to the provi-
- 2 sions of section 610(d).
- 3 "(k) International Transfers.—In the case of
- 4 class II, group II substances, in lieu of section 616, this
- 5 subsection shall apply. To the extent consistent with any
- 6 applicable international agreement to which the United
- 7 States is a party or otherwise adheres, including any
- 8 amendment to the Montreal Protocol, the United States
- 9 may engage in transfers with other parties to such agree-
- 10 ment or amendment under the following conditions:
- 11 "(1) The United States may transfer produc-
- tion allowances to another party to such agreement
- or amendment if, at the time of the transfer, the
- 14 Administrator establishes revised production limits
- for the United States accounting for the transfer in
- 16 accordance with regulations promulgated pursuant
- to this subsection.
- 18 "(2) The United States may acquire production
- allowances from another party to such agreement or
- amendment if, at the time of the transfer, the Ad-
- 21 ministrator finds that the other party has revised its
- domestic production limits in the same manner as
- provided with respect to transfers by the United
- States in the regulations promulgated pursuant to
- 25 this subsection.

1 "(l) Relationship to Other Laws.—

"(1) State laws.—For purposes of section 116, the requirements of this section for class II, group II substances shall be treated as requirements for the control and abatement of air pollution.

"(2) Multilateral agreements.—Section 614 shall apply to the provisions of this section concerning class II, group II substances, except that for the words 'Montreal Protocol' there shall be substituted the words 'Montreal Protocol, or any applicable multilateral agreement to which the United States is a party or otherwise adheres that restricts the production or consumption of class II, group II substances,' and for the words 'Article 4 of the Montreal Protocol' there shall be substituted 'any provision of such multilateral agreement regarding trade with non-parties'.

"(3) FEDERAL FACILITIES.—For purposes of section 118, the requirements of this section for class II, group II substances and corresponding State, interstate, and local requirements, administrative authority, and process and sanctions shall be treated as requirements for the control and abatement of air pollution within the meaning of section 118.

1 "(m) Carbon Dioxide Equivalent Value.—(1) 2 In lieu of section 602(e), the provisions of this subsection 3 shall apply in the case of class II, group II substances. 4 Simultaneously with establishing the list of class II, group 5 II substances, and simultaneously with any addition to that list, the Administrator shall publish the carbon diox-6 ide equivalent value of each listed class II, group II sub-8 stance, based on a determination of the number of metric tons of carbon dioxide that makes the same contribution 10 to global warming over 100 years as 1 metric ton of each class II, group II substance. 11 12 "(2) Not later than February 1, 2017, and not less 13 than every 5 years thereafter, the Administrator shall— 14 "(A) review, and if appropriate, revise the car-15 bon dioxide equivalent values established for class II, 16 group II substances based on a determination of the 17 number of metric tons of carbon dioxide that makes 18 the same contributions to global warming over 100 19 years as 1 metric ton of each class II, group II sub-20 stance; and 21 "(B) publish in the Federal Register the results 22 of that review and any revisions. 23 "(3) A revised determination published in the Federal Register under paragraph (2)(B) shall take effect for pro-25 duction of class II, group II substances, consumption of

- 1 class II, group II substances, and importation of products
- 2 containing class II, group II substances starting on Janu-
- 3 ary 1 of the first calendar year starting at least 9 months
- 4 after the date on which the revised determination was pub-
- 5 lished.
- 6 "(4) The Administrator may decrease the frequency
- 7 of review and revision under paragraph (2) if the Adminis-
- 8 trator determines that such decrease is appropriate in
- 9 order to synchronize such review and revisions with any
- 10 similar review process carried out pursuant to the United
- 11 Nations Framework Convention on Climate Change, an
- 12 agreement negotiated under that convention, The Vienna
- 13 Convention for the Protection of the Ozone Layer, or an
- 14 agreement negotiated under that convention, except that
- 15 in no event shall the Administrator carry out such review
- 16 and revision any less frequently than every 10 years.
- 17 "(n) Reporting Requirements.—In lieu of sub-
- 18 sections (b) and (c) of section 603, paragraphs (1) and
- 19 (2) of this subsection shall apply in the case of class II,
- 20 group II substances:
- 21 "(1) IN GENERAL.—On a quarterly basis, or
- such other basis (not less than annually) as deter-
- 23 mined by the Administrator, each person who pro-
- 24 duced, imported, or exported a class II, group II
- 25 substance, or who imported a product containing a

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class II, group II substance, shall file a report with the Administrator setting forth the carbon dioxide equivalent amount of the substance that such person produced, imported, or exported, as well as the amount that was contained in products imported by that person, during the preceding reporting period. Each such report shall be signed and attested by a responsible officer. If all other reporting is complete, no such report shall be required from a person after April 1 of the calendar year after such person permanently ceases production, importation, and exportation of the substance, as well as importation of products containing the substance, and so notifies the Administrator in writing. If the United States becomes a party or otherwise adheres to a multilateral agreement, including any amendment to the Montreal Protocol on Substances That Deplete the Ozone Layer, that restricts the production or consumption of class II, group II substances, then, if all other reporting is complete, no such report shall be required from a person with respect to importation from parties to such agreement or amendment of products containing any class II, group II substance restricted by such agreement or amendment, after April 1 of the calendar year following the year dur-

1	ing which such agreement or amendment enters into
2	force.
3	"(2) Baseline reports for class II, group
4	II SUBSTANCES.—
5	"(A) In general.—Unless such informa-
6	tion has been previously reported to the Admin-
7	istrator, on the date on which the first repor
8	under paragraph (1) of this subsection is re-
9	quired to be filed, each person who produced
10	imported, or exported a class II, group II sub-
11	stance, or who imported a product containing a
12	class II substance, (other than a substance
13	added to the list of class II, group II substances
14	after the publication of the initial list of such
15	substances under this section), shall file a re-
16	port with the Administrator setting forth the
17	amount of such substance that such person pro-
18	duced, imported, exported, or that was con-
19	tained in products imported by that person
20	during each of calendar years 2004, 2005, and
21	2006.
22	"(B) Producers.—In reporting under
23	subparagraph (A), each person who produced in
24	the United States a class II substance during
25	calendar year 2004, 2005, or 2006 shall—

1	"(i) report all acquisitions or pur-
2	chases of class II substances during each
3	of calendar years 2004, 2005, and 2006
4	from all other persons who produced in the
5	United States a class II substance during
6	calendar year 2004, 2005, or 2006, and
7	supply evidence of such acquisitions and
8	purchases as deemed necessary by the Ad-
9	ministrator; and
10	"(ii) report all transfers or sales of
11	class II substances during each of calendar
12	years 2004, 2005, and 2006 to all other
13	persons who produced in the United States
14	a class II substance during calendar year
15	2004, 2005, or 2006, and supply evidence
16	of such transfers and sales as deemed nec-
17	essary by the Administrator.
18	"(C) ADDED SUBSTANCES.—In the case of
19	a substance added to the list of class II, group
20	II substances after publication of the initial list
21	of such substances under this section, each per-
22	son who produced, imported, exported, or im-
23	ported products containing such substance in
24	calendar year 2004, 2005, or 2006 shall file a
25	report with the Administrator within 180 days

1	after the date on which such substance is added
2	to the list, setting forth the amount of the sub-
3	stance that such person produced, imported,
4	and exported, as well as the amount that was
5	contained in products imported by that person,
6	in calendar years 2004, 2005, and 2006.
7	"(o) Stratospheric Ozone and Climate Protec-
8	TION FUND.—
9	"(1) IN GENERAL.—There is established in the
10	Treasury of the United States a Stratospheric Ozone
11	and Climate Protection Fund.
12	"(2) Deposits.—The Administrator shall de-
13	posit all proceeds from the auction and non-auction
14	sale of allowances under this section into the Strato-
15	spheric Ozone and Climate Protection Fund.
16	"(3) Use.—Amounts deposited into the Strato-
17	spheric Ozone and Climate Protection Fund shall be
18	available, subject to appropriations, exclusively for
19	the following purposes:
20	"(A) RECOVERY, RECYCLING, AND REC-
21	LAMATION.—The Administrator may utilize
22	funds to establish a program to incentivize the
23	recovery, recycling, and reclamation of any
24	Class II substances in order to reduce emissions
25	of such substances.

1	"(B) MULTILATERAL FUND.—If the
2	United States becomes a party or otherwise ad-
3	heres to a multilateral agreement, including any
4	amendment to the Montreal Protocol on Sub-
5	stances That Deplete the Ozone Layer, which
6	restricts the production or consumption of class
7	II, group II substances, the Administrator may
8	utilize funds to meet any related contribution
9	obligation of the United States to the Multilat-
10	eral Fund for the Implementation of the Mon-
11	treal Protocol or similar multilateral fund es-
12	tablished under such multilateral agreement.
13	"(C) Best-in-class appliances deploy-
14	MENT PROGRAM.—The Secretary of Energy is
15	authorized to utilize funds to carry out the pur-
16	poses of [section 214 of the
17	Act. [Legis. Counsel
18	note: this references a section of the House-passed
19	bill that is not included in this draft, so this ref-
20	erence should be modified.]]
21	"(D) Low global warming product
22	TRANSITION ASSISTANCE PROGRAM.—
23	"(i) In General.—The Adminis-
24	trator, in consultation with the Secretary
25	of Energy, may utilize funds in fiscal years

1	2012 through 2022 to establish a program
2	to provide financial assistance to manufac-
3	turers of products containing class II,
4	group II substances to facilitate the transi-
5	tion to products that contain or utilize al-
6	ternative substances with no or low carbon
7	dioxide equivalent value and no ozone de-
8	pletion potential.
9	"(ii) Definition.—In this subpara-
10	graph, the term 'products' means refrig-
11	erators, freezers, dehumidifiers, air condi-
12	tioners, foam insulation, technical aerosols,
13	fire protection systems, and semiconduc-
14	tors.
15	"(iii) Financial assistance.—The
16	Administrator may provide financial assist-
17	ance to manufacturers pursuant to clause
18	(i) for—
19	"(I) the design and configuration
20	of new products that use alternative
21	substances with no or low carbon di-
22	oxide equivalent value and no ozone
23	depletion potential; and
24	"(II) the redesign and retooling
25	of facilities for the manufacture of

1	products in the United States that use
2	alternative substances with no or low
3	carbon dioxide equivalent value and
4	no ozone depletion potential.
5	"(iv) Reports.—For any fiscal year
6	during which the Administrator provides
7	financial assistance pursuant to this sub-
8	paragraph, the Administrator shall submit
9	a report to the Congress within 3 months
10	of the end of such fiscal year detailing the
11	amounts, recipients, specific purposes, and
12	results of the financial assistance pro-
13	vided.".
14	(b) Table of Contents.—The table of contents of
15	title VI of the Clean Air Act (42 U.S.C. 7671 et seq.)
16	is amended by adding the following new item at the end
17	thereof:
	"Sec. 619. Hydrofluorocarbons (HFCs).".
18	(c) Fire Suppression Agents.—Section 605(a) of
19	the Clean Air Act (42 U.S.C. 7671(a)) is amended—
20	(1) by striking "or" at the end of paragraph
21	(2);
22	(2) by striking the period at the end of para-
23	graph (3) and inserting "; or"; and
24	(3) by adding the following new paragraph after
25	paragraph (3):

1 "(4) is listed as acceptable for use as a fire sup-2 pression agent for nonresidential applications in ac-3 cordance with section 612(c).". 4 (d) Motor Vehicle Air Conditioners.— 5 (1) Section 609(e) of the Clean Air Act (42) 6 U.S.C. 7671h(e)) is amended by inserting ", group 7 I" after each reference to "class II" in the text and 8 heading. 9 (2) Section 609 of the Clean Air Act (42 U.S.C. 10 7671h) is amended by adding the following new sub-11 section after subsection (e): 12 "(f) Class II, Group II Substances.— 13 "(1) Repair.—The Administrator may promul-14 gate regulations establishing requirements for repair 15 of motor vehicle air conditioners prior to adding a 16 class II, group II substance. 17 "(2) SMALL CONTAINERS.—(A) The Adminis-18 trator may promulgate regulations establishing serv-19 icing practices and procedures for recovery of class 20 II, group II substances from containers which con-21 tain less than 20 pounds of such class II, group II 22 substances. 23 "(B) Not later than 18 months after enactment 24 of this subsection, the Administrator shall either 25 promulgate regulations requiring that containers

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which contain less than 20 pounds of a class II, group II substance be equipped with a device or technology that limits refrigerant emissions and leaks from the container and limits refrigerant emissions and leaks during the transfer of refrigerant from the container to the motor vehicle air conditioner or issue a determination that such requirements are not necessary or appropriate.

"(C) Not later than 18 months after enactment of this subsection, the Administrator shall promulgate regulations establishing requirements for consumer education materials on best practices associated with the use of containers which contain less than 20 pounds of a class II, group II substance and prohibiting the sale or distribution, or offer for sale or distribution, of any class II, group II substance in any container which contains less than 20 pounds of such class II, group II substance, unless consumer education materials consistent with such requirements are displayed and available at point-ofsale locations, provided to the consumer, or included in or on the packaging of the container which contain less than 20 pounds of a class II, group II substance.

1 "(D) The Administrator may, through rule-2 making, extend the requirements established under 3 this paragraph to containers which contain 30 4 pounds or less of a class II, group II substance if 5 the Administrator determines that such action would 6 produce significant environmental benefits. 7 "(3) Restriction of Sales.—Effective Janu-8 ary 1, 2014, no person may sell or distribute or offer 9 to sell or distribute or otherwise introduce into inter-10 state commerce any motor vehicle air conditioner re-11 frigerant in any size container unless the substance 12 has been found acceptable for use in a motor vehicle 13 air conditioner under section 612.". 14 (e) SAFE ALTERNATIVES POLICY.—Section 612(e) of 15 the Clean Air Act (42 U.S.C. 7671k(e)) is amended by inserting "or class II" after each reference to "class I". 16 17 SEC. 123. BLACK CARBON. 18 (a) STUDY OF BLACK CARBON EMISSIONS.— 19 (1) Definition of Black Carbon.—In this subsection, the term "black carbon" means any 20 21 light-absorbing graphitic (or elemental) particle pro-22 duced by incomplete combustion. 23 (2) Study.—The Administrator, in consulta-24 tion with the Secretary of Energy, the Secretary of 25 State, and the heads of the National Oceanic and

1	Atmospheric Administration, the National Aero-
2	nautics and Space Administration, the United States
3	Agency for International Development, the National
4	Institutes of Health, the Centers for Disease Control
5	and Prevention, National Institute of Standards and
6	Technology, and other relevant Federal departments
7	and agencies and representatives of appropriate in-
8	dustry and environmental groups, shall conduct a 4-
9	phase study of black carbon emissions, the phases of
10	which shall be the following:
11	(A) Phase I-universal definition.—
12	The Administrator shall conduct phase I of the
13	study under this subsection to carry out meas-
14	ures to establish for the scientific community
15	standard definitions of the terms—
16	(i) black carbon; and
17	(ii) organic carbon.
18	(B) Phase II-sources and tech-
19	NOLOGIES.—The Administrator shall conduct
20	phase II of the study under this subsection to
21	summarize the available scientific and technical
22	information concerning—
23	(i) the identification of the major
24	sources of black carbon emissions in the
25	United States and throughout the world;

1	(ii) an estimate of—
2	(I) the quantity of current and
3	projected future black carbon emis-
4	sions from those sources; and
5	(II) the net climate effects of the
6	emissions;
7	(iii) the most recent scientific data
8	relevant to the public health- and climate-
9	related impacts of black carbon emissions
10	and associated emissions of organic car-
11	bon, nitrogen oxides, and sulfur oxides
12	from the sources identified under clause
13	(i);
14	(iv) the most effective control strate-
15	gies for additional domestic and inter-
16	national reductions in black carbon emis-
17	sions, taking into consideration lifecycle
18	analysis, cost-effectiveness, and the net cli-
19	mate impact of technologies, operations,
20	and strategies, such as—
21	(I) diesel particulate filters on ex-
22	isting diesel on- and off-road engines;
23	and
24	(II) particulate emission reduc-
25	tion measures for marine vessels;

1	(v) carbon dioxide equivalency factors,
2	global/regional modeling, or other metrics
3	to compare the global warming and other
4	climate effects of black carbon emissions
5	with carbon dioxide and other greenhouse
6	gas emissions; and
7	(vi) the health benefits associated with
8	additional black carbon emission reduc-
9	tions.
10	(C) Phase III—international fund-
11	ING.—The Administrator shall conduct phase
12	III of the study under this subsection—
13	(i) to summarize the amount, type,
14	and direction of all actual and potential fi-
15	nancial, technical, and related assistance
16	provided by the United States to foreign
17	countries to reduce, mitigate, or otherwise
18	abate—
19	(I) black carbon emissions; and
20	(II) any health, environmental,
21	and economic impacts associated with
22	those emissions; and
23	(ii) to identify opportunities, including
24	action under existing authority, to achieve
25	significant black carbon emission reduc-

1	tions in foreign countries through the pro-
2	vision of technical assistance or other ap-
3	proaches.
4	(D) Phase IV-research and Develop-
5	MENT OPPORTUNITIES.—The Administrator
6	shall conduct phase IV of the study under this
7	subsection for the purpose of providing to Con-
8	gress recommendations regarding—
9	(i) areas of focus for additional re-
10	search for cost-effective technologies, oper-
11	ations, and strategies with the highest po-
12	tential to reduce black carbon emissions
13	and protect public health in the United
14	States and internationally; and
15	(ii) actions that the Federal Govern-
16	ment could take to encourage or require
17	additional black carbon emission reduc-
18	tions.
19	(3) Reports.—The Administrator shall submit
20	to Congress—
21	(A) by not later than 180 days after the
22	date of enactment of this Act, a report describ-
23	ing the results of phases I and II of the study
24	under subparagraphs (A) and (B) of paragraph
25	(2);

1	(B) by not later than 270 days after the
2	date of enactment of this Act, a report describ-
3	ing the results of phase III of the study under
4	paragraph (2)(C); and
5	(C) by not later than 1 year after the date
6	of enactment of this Act, a report describing
7	the recommendations developed for phase IV of
8	the study under paragraph $(2)(D)$.
9	(4) Authorization of appropriations.—
10	There are authorized to be appropriated such sums
11	as are necessary to carry out this subsection.
12	(b) Black Carbon Mitigation.—[Title VIII of the
13	Clean Air Act (as added by section 121 of this division
14	and amended by section 112 of division A) is further
15	amended by adding after part D the following:
16	"PART E—BLACK CARBON
17	"SEC. 851. BLACK CARBON.
18	"(a) Domestic Black Carbon Mitigation.—
19	"(1) In general.—Taking into consideration
20	the public health and environmental impacts of black
21	carbon emissions, including the effects on global and
22	regional warming, the Arctic, and other snow and
23	ice-covered surfaces, the Administrator shall—
24	"(A) not later than 2 years after the date
25	of enactment of this part, propose—

1	"(i) regulations applicable to emis-
2	sions of black carbon under the existing
3	authorities of this Act; or
4	"(ii) a finding that existing regula-
5	tions promulgated pursuant to this Act
6	adequately regulate black carbon emis-
7	sions, which finding may be based on a
8	finding that existing regulations, in the
9	judgment of the Administrator—
10	"(I) address those sources that
11	both contribute significantly to the
12	total emissions of black carbon and
13	provide the greatest potential for sig-
14	nificant and cost-effective reductions
15	in emissions of black carbon, under
16	the existing authorities; and
17	"(II) reflect the greatest degree
18	of emission reduction achievable
19	through application of technology that
20	will be available for such sources, giv-
21	ing appropriate consideration to cost,
22	energy, and safety factors associated
23	with the application of such tech-
24	nology; and

- 1 "(B) not later than 3 years after the date 2 of enactment of this part, promulgate final reg-3 ulations under the existing authorities of this 4 Act or finalize the proposed finding. 5 "(2) Applicability of regulations.—Regu-6 lations promulgated under paragraph (1) shall not 7 apply to specific types, classes, categories, or other 8 suitable groupings of emission sources that the Ad-9 ministrator finds are subject to adequate regulation. 10 "(b) AUTHORIZATION OF APPROPRIATIONS.—There 11 are authorized to be appropriated such sums as are nec-12 essary to carry out this section.". 13 SEC. 124. STATES. 14 Section 116 of the Clean Air Act (42 U.S.C. 7416) 15 is amended by adding the following at the end thereof: 16 "For the purposes of this section, the phrases standard 17 or limitation respecting emissions of air pollutants' and 18 'requirements respecting control or abatement of air pollution' shall include any provision to: cap greenhouse gas 19 20 emissions, require surrender to the State or a political 21 subdivision thereof of emission allowances or offset credits
- 23 of such allowances or credits as a means of demonstrating24 compliance with requirements established by a State or

established or issued under this Act, and require the use

25 political subdivision thereof.".

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1 SEC. 125. STATE PROGRAMS.

- 2 Title VIII of the Clean Air Act, as added by section
- 3 121 of this division and amended by several sections of
- 4 this Act, is further amended by adding after part E (as
- 5 added by section 123(c) of this division) the following new
- 6 part:

7 "PART F—MISCELLANEOUS

8 "SEC. 861. STATE PROGRAMS.

- 9 "(a) IN GENERAL.—Notwithstanding section 116, if
- 10 a Federal auction is conducted, by the deadline of March
- 11 31, 2011, as established in section 789, no State or polit-
- 12 ical subdivision thereof shall implement or enforce a cap
- 13 and trade program that covers any capped emissions emit-
- 14 ted during the years 2012 through 2017.
- 15 "(b) DEADLINE.—Notwithstanding section 116, in
- 16 the event the March 31, 2011 auction is delayed, no State
- 17 or political subdivision thereof shall enforce a cap and
- 18 trade program that covers any capped emissions emitted
- 19 during the period that is at least 9 months from the first
- 20 auction as set out in section 789, through 2017.
- 21 "(c) Definition of Cap and Trade Program.—
- 22 For purposes of this section, the term 'cap and trade pro-
- 23 gram' means a system of greenhouse gas regulation under
- 24 which a State or political subdivision issues a limited num-
- 25 ber of tradable instruments in the nature of emission al-
- 26 lowances and requires that sources within its jurisdiction

1	surrender such tradeable instruments for each unit of
2	greenhouse gases emitted during a compliance period. For
3	purposes of this section, a 'cap-and-trade program' does
4	not include a target or limit on greenhouse gas emissions
5	adopted by a State or political subdivision that is imple-
6	mented other than through the issuance and surrender of
7	a limited number of tradable instruments in the nature
8	of emission allowances, nor does it include any other
9	standard, limit, regulation, or program to reduce green-
10	house gas emissions that is not implemented through the
11	issuance and surrender of a limited number of tradeable
12	instruments in the nature of emission allowances. For pur-
13	poses of this section, the term 'cap and trade program'
14	does not include, among other things, fleet-wide motor ve-
15	hicle emission requirements that allow greater emissions
16	with increased vehicle production, or requirements that
17	fuels, or other products, meet an average pollution emis-
18	sion rate or lifecycle greenhouse gas standard.
19	"SEC. 862. GRANTS FOR SUPPORT OF AIR POLLUTION CON-
20	TROL PROGRAMS.
21	"The Administrator is authorized to make grants to
22	air pollution control agencies pursuant to section 105 for
23	purposes of assisting in the implementation of programs
24	to address global warming established under the
25	Act "

1 SEC. 126. ENFORCEMENT.

- 2 (a) Remand.—Section 307(b) of the Clean Air Act
- 3 (42 U.S.C. 7607(b)) is amended by adding the following
- 4 new paragraph at the end thereof:
- 5 "(3) If the court determines that any action of
- 6 the Administrator is arbitrary, capricious, or other-
- 7 wise unlawful, the court may remand such action,
- 8 without vacatur, if vacatur would impair or delay
- 9 protection of the environment or public health or
- otherwise undermine the timely achievement of the
- 11 purposes of this Act.".
- 12 (b) Petition for Reconsideration.—Section
- 13 307(d)(7)(B) of the Clean Air Act (42 U.S.C.
- 14 7607(d)(7)(B)) is amended as follows:
- 15 (1) By inserting after the second sentence "If
- a petition for reconsideration is filed, the Adminis-
- trator shall take final action on such petition, in-
- 18 cluding promulgation of final action either revising
- or determining not to revise the action for which re-
- consideration is sought, within 150 days after the
- 21 petition is received by the Administrator or the peti-
- tion shall be deemed denied for the purpose of judi-
- cial review.".
- 24 (2) By amending the third sentence to read as
- follows: "Such person may seek judicial review of
- such denial, or of any other final action, by the Ad-

1	ministrator, in response to a petition for reconsider-
2	ation, in the United States court of appeals for the
3	appropriate circuit (as provided in subsection (b)).".
4	SEC. 127. CONFORMING AMENDMENTS.
5	(a) Federal Enforcement.—Section 113 of the
6	Clean Air Act (42 U.S.C. 7413) is amended as follows:
7	(1) In subsection (a)(3), by striking "or title
8	VI," and inserting "title VI, title VII, or title VIII".
9	(2) In subsection (b), by striking "or a major
10	stationary source" and inserting "a major stationary
11	source, or a covered EGU under title VIII" in the
12	material preceding paragraph (1).
13	(3) In paragraph (2) of subsection (b), by strik-
14	ing "or title VI" and inserting "title VI, title VII,
15	or title VIII".
16	(4) In subsection (c)—
17	(A) in the first sentence of paragraph (1),
18	by striking "or title VI (relating to strato-
19	spheric ozone control)," and inserting "title VI,
20	title VII, or title VIII,"; and
21	(B) in the first sentence of paragraph (3),
22	by striking "or VI" and inserting "VI, VII, or
23	VIII".
24	(5) In subsection $(d)(1)(B)$, by striking "or VI"
25	and inserting "VI, VII, or VIII".

1 (6) In subsection (f), in the first sentence, by 2 striking "or VI" and inserting "VI, VII, or VIII". 3 (b) RETENTION OF STATE AUTHORITY.—Section 4 116 of the Clean Air Act (42 U.S.C. 7416) is amended 5 as follows: 6 (1) By striking "and 233" and inserting "233". (2) By striking "of moving sources" and in-7 8 serting "of moving sources), and 861 (preempting 9 certain State greenhouse gas programs for a limited 10 time)". 11 (c) Inspections, Monitoring, and Entry.—Sec-12 tion 114(a) of the Clean Air Act (42 U.S.C. 7414(a)) is amended by striking "section 112," and all that follows 13 14 through "(ii)" and inserting the following: "section 112, 15 or any regulation of greenhouse gas emissions under title 16 VII or VIII, (ii)". 17 (d) Enforcement.—Subsection (f) of section 304 of the Clean Air Act (42 U.S.C. 7604(f)) is amended as fol-18 19 lows: (1) By striking "; or" at the end of paragraph 20 21 (3) thereof and inserting a comma. 22 (2) By striking the period at the end of para-23 graph (4) thereof and inserting ", or". 24 (3) By adding the following after paragraph (4) 25 thereof:

1	"(5) any requirement of title VII or VIII.".
2	(e) Administrative Proceedings and Judicial
3	REVIEW.—Section 307 of the Clean Air Act (42 U.S.C.
4	7607) is amended as follows:
5	(1) In subsection (a), by striking ", or section
6	306" and inserting "section 306, or title VII or
7	VIII".
8	(2) In subsection (b)(1)—
9	(A) by striking ",," and inserting "," in
10	each place such punctuation appears; and
11	(B) by striking "section 120," in the first
12	sentence and inserting "section 120, any final
13	action under title VII or VIII,".
14	(3) In subsection (d)(1) by amending subpara-
15	graph (S) to read as follows:
16	"(S) the promulgation or revision of any
17	regulation under title VII or VIII,".
18	(f) TECHNICAL AMENDMENT.—Title IV of the Clean
19	Air Act (relating to noise pollution) (42 U.S.C. 7641 et
20	seq.)—
21	(1) is amended by redesignating sections 401
22	through 403 as sections 901 through 903, respec-
23	tively; and
24	(2) is redesignated as title IX and moved to ap-
25	pear at the end of that Act.

1 SEC. 128. DAVIS-BACON COMPLIANCE.

- 2 (a) IN GENERAL.—Notwithstanding any other provi-3 sion of law and in a manner consistent with other provisions in this Act, to receive emission allowances or funding 4 5 under this Act, or the amendments made by this Act, the recipient shall provide reasonable assurances that all la-6 7 borers and mechanics employed by contractors and sub-8 contractors on projects funded directly by or assisted in whole or in part by and through the Federal Government pursuant to this Act, or the amendments made by this Act, or by any entity established in accordance with this 11 Act, or the amendments made by this Act, including the 13 Carbon Storage Research Corporation, will be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Sec-15 retary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code (commonly known 17 18 as the "Davis-Bacon Act"). With respect to the labor 19 standards specified in this section, the Secretary of Labor 20 shall have the authority and functions set forth in Reorga-21 nization Plan Numbered 14 of 1950 (64 Stat. 1267; 5 22 U.S.C. App.) and section 3145 of title 40, United States 23 Code.
- 24 (b) Exemption.—Neither subsection (a) nor the re-
- 25 quirements of subchapter IV of chapter 31 of title 40,

1	United States Code, shall apply to retrofitting of the fol-
2	lowing:
3	(1) Single family homes (both attached and de-
4	tached) under [section 202] [Legis. Counsel note:
5	section 202 of the House-passed bill is not included in
6	this draft, so this reference should be modified.].
7	(2) Owner-occupied residential units in larger
8	buildings that have their own dedicated space-condi-
9	tioning systems under section 202 [see above note].
10	(3) Residential buildings (as defined in section
11	202(a)(5)) [see above note] if designed for residen-
12	tial use by less than 4 families.
13	(4) Nonresidential buildings (as defined in sec-
14	tion $202(a)(1)$) [see above note] if the net interior
15	space of such nonresidential building is less than
16	6,500 square feet.

1	Subtitle D—Carbon Market
2	Assurance
3	SEC. 131. TO BE SUPPLIED.
4	TITLE II—PROGRAM
5	ALLOCATIONS
6	SEC. 201. DISTRIBUTION OF ALLOWANCES FOR INVEST-
7	MENT IN CLEAN VEHICLES.
8	(a) Establishment of Fund.—There is estab-
9	lished in the Treasury a separate account, which shall be
10	known as the "Clean Vehicle Technology Fund".
11	(b) Auction Proceeds.—The Administrator shall
12	deposit the proceeds of the auction conducted pursuant
13	to [section 782(a)[()] of the Clean Air Act] in the
14	Clean Vehicle Technology Fund.
15	(c) AVAILABILITY OF AMOUNTS.—Of the amounts
16	deposited in the Clean Vehicle Technology Fund—
17	(1) 80 percent shall be available to the [Sec-
18	retary of to support—
19	(A) the development and demonstration of
20	a national transportation low-emissions energy
21	plan; and
22	(B) the use of plug-in electric drive vehi-
23	cles, including medium- and heavy-duty motor
24	vehicles (including transit vehicles) and other
25	advanced technology vehicles (as defined in sec-

1	tions 131 and 136 of the Energy Independence
2	and Security Act of 2007 (42 U.S.C. 17011
3	17013)) that are developed and produced in the
4	United States; and
5	(2) 20 percent of the amounts shall be available
6	to the Administrator for use in providing grants au-
7	thorized under subtitle G of title VII of the Energy
8	Policy Act of 2005 (42 U.S.C. 16131 et seq.).
9	(d) Pilot Program.—
10	(1) In general.—Of the amounts deposited in
11	accordance with $(c)(1)$, the Secretary [or
12	?] shall [use percent to?] de-
13	velop a national transportation low-emissions energy
14	plan that shall—
15	(A) project the near- and long-term need
16	for and location of electric drive vehicle refuel-
17	ing infrastructure at strategic locations across
18	all major national highways, roads, and cor-
19	ridors;
20	(B) identify infrastructure and standard-
21	ization needs for electricity providers, infra-
22	structure providers, vehicle manufacturers, and
23	electricity purchasers

1	(C) establish an aspirational goal of
2	achieving strategic deployment of electric vehi-
3	cle infrastructure by 2020;
4	(D) be developed by the Secretary with the
5	involvement of all relevant stakeholders; and
6	(E) prioritize the development of—
7	(i) standardized public charge access
8	ports with wireless or smart card billing
9	capability; and
10	(ii) level I and level II charge port
11	systems (that charge an electric vehicle
12	over a period of 8 to 14 hours and 4 to 8
13	hours, respectively) that will meet the en-
14	ergy requirements of the majority of plug-
15	in hybrid and battery electric vehicles;
16	(F) examine the feasibility of level III
17	charge port systems that can charge an electric
18	vehicle over a period of 10 to 20 minutes; and
19	(G) focus on infrastructure that provides
20	consumers with the lowest cost while providing
21	convenient charge system access.
22	(2) Electric drive demonstration
23	PRO IFCTS —

1	(A) IN GENERAL.—The Secretary shall es-
2	tablish pilot projects to demonstrate electric
3	drive vehicles and infrastructure.
4	(B) REQUIREMENTS.—The Secretary
5	shall—
6	(i) establish the pilot projects de-
7	scribed in subparagraph (A) after publica-
8	tion of the plan developed under paragraph
9	(1);
10	(ii) use the plan to determine which
11	regions of the United States are most
12	ready to demonstrate electric vehicle infra-
13	structure;
14	(iii) carry out the pilot projects under
15	this paragraph in different regions of the
16	United States; and
17	(iv) ensure that—
18	(I) at least 1 pilot project is car-
19	ried out in a rural region of the
20	United States; and
21	(II) at least 1 pilot project is fo-
22	cused on freight issues.
23	(3) Financial resources.—In carrying out
24	the pilot projects under paragraph (2), the Secretary
25	shall coordinate the use of appropriate financial in-

1	centives, grant programs, and other Federal finan-
2	cial resources to ensure that electric infrastructure
3	delivery entities are able to participate in the pilot
4	projects.
5	(4) LEEP COORDINATOR.—The Secretary may
6	designate 1 full-time position within the Department
7	of Transportation, to be known as the "LEEP coor-
8	dinator", with responsibility to oversee—
9	(A) the development of the plan under
10	paragraph (1); and
11	(B) the implementation of the pilot
12	projects under paragraph (2).
13	SEC. 202. DISTRIBUTION OF ALLOWANCES TO INDIAN
13 14	SEC. 202. DISTRIBUTION OF ALLOWANCES TO INDIAN TRIBES, STATES, LOCAL GOVERNMENTS,
14	TRIBES, STATES, LOCAL GOVERNMENTS,
14 15	TRIBES, STATES, LOCAL GOVERNMENTS, METROPOLITAN PLANNING ORGANIZATIONS,
14 15 16	TRIBES, STATES, LOCAL GOVERNMENTS, METROPOLITAN PLANNING ORGANIZATIONS, AND RENEWABLE ELECTRICITY GENERA-
14 15 16 17	TRIBES, STATES, LOCAL GOVERNMENTS, METROPOLITAN PLANNING ORGANIZATIONS, AND RENEWABLE ELECTRICITY GENERA- TIONS.
14 15 16 17	TRIBES, STATES, LOCAL GOVERNMENTS, METROPOLITAN PLANNING ORGANIZATIONS, AND RENEWABLE ELECTRICITY GENERA- TIONS. (a) DEFINITIONS.—For purposes of this section:
14 15 16 17 18	TRIBES, STATES, LOCAL GOVERNMENTS, METROPOLITAN PLANNING ORGANIZATIONS, AND RENEWABLE ELECTRICITY GENERA- TIONS. (a) DEFINITIONS.—For purposes of this section: (1) Allowance.—The term "allowance"
14 15 16 17 18 19 20	TRIBES, STATES, LOCAL GOVERNMENTS, METROPOLITAN PLANNING ORGANIZATIONS, AND RENEWABLE ELECTRICITY GENERA- TIONS. (a) DEFINITIONS.—For purposes of this section: (1) Allowance.—The term "allowance" means an emission allowance established under sec-
14 15 16 17 18 19 20	TRIBES, STATES, LOCAL GOVERNMENTS, METROPOLITAN PLANNING ORGANIZATIONS, AND RENEWABLE ELECTRICITY GENERA- TIONS. (a) DEFINITIONS.—For purposes of this section: (1) Allowance.—The term "allowance" means an emission allowance established under section 721 of the Clean Air Act (as added by section

I	Clean Air Act (as added by section 102 of this divi-
2	sion).
3	(b) Distribution Among Indian Tribes, States,
4	LOCAL GOVERNMENTS, METROPOLITAN PLANNING ORGA-
5	NIZATIONS AND RENEWABLE ELECTRICITY GENERA-
6	TIONS.—Not later than September 30 of each of calendar
7	years 2011 through 2049, the Administrator shall, in ac-
8	cordance with this section, distribute allowances allocated
9	pursuant to [section 782(a)()] of the Clean Air Act
10	(as added by section 111 of this division) for the following
11	vintage year. The Administrator, after consultation with
12	the Secretary of the Interior, shall distribute a percentage
13	of such allowances pursuant to [section]. The Ad-
14	ministrator, after consultation with the Secretary of En-
15	ergy and the with the assistance of the Secretary of Trans-
16	portation, shall distribute the remaining allowances among
17	the States, local governments, metropolitan planning orga-
18	nizations, and renewable electricity generations under this
19	section each year in accordance with the following for-
20	mula: [**Percentages add up to 101.]
21	(1) 63.5 percent of the allowances shall be pro-
22	vided to the States, of which—
23	(A) 30 percent shall be divided equally
24	among the States;

1	(B) 30 percent shall be distributed on a
2	pro rata basis among the States based on the
3	population of each State, as contained in the
4	most recent reliable census data available from
5	the Bureau of the Census for all States at the
6	time at which the Administrator calculates the
7	formula for distribution;
8	(C) 30 percent shall be distributed on a
9	pro rata basis among the States on the basis of
10	the energy consumption of each State, as con-
11	tained in the most recent State Energy Data
12	Report available from the Energy Information
13	Administration (or such alternative reliable
14	source as the Administrator may designate);
15	and
16	(D) 10 percentage shall be provided to the
17	States based on an energy-efficiency formula
18	developed by the Administrator, which formula
19	shall be—
20	(i) based on—
21	(I) weather-adjusted criteria;
22	[and/or?]
23	(II) performance-based metrics
24	that measure each State's success at

1	decreasing energy consumption or in-
2	creasing energy efficiency—
3	(aa) on a per capita basis in
4	the residential sector; and
5	(bb) on an energy consump-
6	tion per square-foot basis in the
7	commercial sector; and
8	(ii) updated every 3 years.
9	(2) 25 percent of the allowances shall be pro-
10	vided to local governments for energy conservation
11	and efficiency grants.
12	(3) 10 percent of the allowances shall be re-
13	served by the Secretary of Transportation for grants
14	to States and metropolitan planning organizations
15	for greenhouse gas reduction programs in the trans-
16	portation sector.
17	(4) 2.5 percent of the allowances shall be pro-
18	vided to renewable energy generating companies with
19	a capacity of 20 megawatts or greater exclusively for
20	the generation of renewable energy. The Adminis-
21	trator, in consultation with the Secretary of Energy,
22	shall award allocations to renewable energy genera-
23	tion companies based on the number of megawatt-
24	hours the company generates and the technology
25	used. The Administrator shall promulgate such regu-

1	lations as are appropriate to carry out this para-
2	graph.
3	(c) Uses.—The allowances distributed to each State,
4	local government, and metropolitan planning organization
5	pursuant to this section shall be used exclusively in accord-
6	ance with the following requirements:
7	(1) Allocation to states.—Allowances allo-
8	cated to the States under subsection $(b)(1)$ shall be
9	for the following purposes and be used in accordance
10	with the following conditions:
11	(A) Purposes.—
12	(i) Energy efficiency pro-
13	GRAMS.—Not less than 35 percent shall be
14	used exclusively for—
15	(I) implementation and enforce-
16	ment of building codes;
17	(II) implementation of the en-
18	ergy-efficient manufactured homes
19	program;
20	(III) implementation of building
21	energy performance labeling; and
22	(IV) low-income community en-
23	ergy efficiency programs.
24	(ii) Renewable energy pro-
25	GRAMS.—[Not less than percent

1	shall be used for?] renewable energy pro-
2	grams for capital grants, tax credits, pro-
3	duction incentives, loans, loan guarantees,
4	forgivable loans, direct provision of allow-
5	ances, and interest rate buy-downs for—
6	(I) re-equipping, expanding, or
7	establishing a manufacturing facility
8	that receives certification from the
9	Secretary of Energy pursuant to sec-
10	tion 48C of the Internal Revenue
11	Code of 1986 for the production of—
12	(aa) property designed to be
13	used to produce energy from re-
14	newable energy sources; and
15	(bb) electricity storage sys-
16	tems;
17	(II) deployment of technologies to
18	generate electricity from renewable
19	energy sources; and
20	(III) deployment of facilities or
21	equipment, such as solar panels, to
22	generate electricity or thermal energy
23	from renewable energy resources in
24	and on buildings in an urban environ-
25	ment.

1	(iii) Improvement in electricity
2	TRANSMISSION.—[Not less than per-
3	cent shall be used for? I improvement in
4	electricity transmission for 1 or more of
5	the following purposes:
6	(I) State implementation of elec-
7	tricity transmission planning and
8	siting activities that facilitate renew-
9	able energy development, including fa-
10	cilitation of landowner negotiations
11	for transmission of right-of-way leas-
12	ing or other contractual arrange-
13	ments.
14	(II) Grants to nonprofit organi-
15	zations that facilitate negotiations for
16	transmission right-of-way leasing or
17	other contractual agreements between
18	landowners and developers.
19	(III) State or regional studies of
20	renewable energy zones and resources
21	with insufficient transmission capac-
22	ity, including geographical identifica-
23	tion of potential renewable energy
24	sites, environmental reviews, and land
25	use or coastal zone constraints.

1	(IV) Grants to support land-
2	owner associations' and other non-
3	profit organizations' participation in
4	State and Federal siting processes, in-
5	cluding such associations' studies of
6	renewable energy feasibility and bene-
7	fits and associated data collection.
8	(V) Grants to landowners or
9	landowner associations or nonprofit
10	organizations for mitigation of im-
11	pacts on property or ecosystems due
12	to transmission projects that are part
13	of an interconnection-wide plan fo-
14	cused on facilitating renewable energy
15	development.
16	(VI) Training for State regu-
17	latory authority staff and local
18	workforces relating to renewable en-
19	ergy generation resources and storage,
20	smart grid, or new transmission tech-
21	nologies.
22	(VII) Grants to transmission pro-
23	viders for transmission improvements
24	(including smart grid investments)
25	that benefit consumers.

1	(VIII) Grants to transmission
2	providers for security upgrades to the
3	transmission system and authorized
4	uses under title XIII of the Energy
5	Independence and Security Act of
6	2007 (42 U.S.C. 17381 et seq.).
7	(IX) Grants to develop energy
8	storage, reliability, or distributed re-
9	newable generation projects.
10	(iv) Energy efficiency.—[Not less
11	than percent shall be used for?] en-
12	ergy efficiency purposes.
13	(v) Renewable energy.—[Not less
14	than percent shall be used for?] re-
15	newable energy purposes.
16	(vi) End-use consumers.—[Not
17	less than percent shall be used for?]
18	cost-effective energy efficiency programs
19	for end-use consumers of electricity, nat-
20	ural gas, home heating oil, or propane, in-
21	cluding, where appropriate, programs or
22	mechanisms administered by local govern-
23	ments and entities other than the State.
24	(vii) Retrofits and housing in-
25	VESTMENTS.—[Not less than percent

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shall be used for? energy retrofits and green investments in subsidized housing based on standards to ensure that investments are cost-effective, taking into account reductions in future use of energy and other utilities, and the extent to which such retrofits and investments address repair and replacement needs that may otherwise need to be addressed with other forms of assistance. As a condition of such funding, the recipient shall commit to an additional period of affordability of not fewer than 15 years, covering all units for which such grants and loans are used.

(viii) THERMAL **ENERGY** EFFI-CIENCY.—Not less than 2 percent shall be used for thermal energy efficiency projects provide district thermal that energy through a network of pipes from 1 or more central plants to at least 2 or more buildings, combined heat and power that produces electricity and thermal energy with a minimum 60 percent overall efficiency on a lower-heating value basis, or recoverable waste energy (including mechanical, ther-

1	mal, or electrical energy) that, if not for
2	recovery, would be wasted and may be re-
3	covered or generated through modification
4	of an existing facility or addition of a new
5	facility. Allocations may be used for plan-
6	ning, engineering, and feasibility studies as
7	well as project construction and develop-
8	ment. Such projects shall—
9	(I) reduce or avoid greenhouse
10	gas emissions; and
11	(II)(aa) produce thermal energy
12	from renewable energy resources or
13	natural cooling sources;
14	(bb) capture and productively use
15	thermal energy from an electric gen-
16	eration facility;
17	(cc) integrate new electricity gen-
18	eration into an existing district energy
19	system;
20	(dd) capture and productively
21	uses surplus thermal energy from an
22	industrial or municipal process (such
23	as wastewater treatment); or
24	(ee) distribute and transfer to
25	buildings the thermal energy from the

1	energy sources described in items (aa)
2	through (dd).
3	(ix) Smart grid development.—
4	[Not less than percent shall be used
5	for?] enabling the development of a Smart
6	Grid (as described in section 1301 of the
7	Energy Independence and Security Act of
8	2007 (42 U.S.C. 17381)) for State, local
9	government, and other public buildings and
10	facilities, including integration of renew-
11	able energy resources and distributed gen-
12	eration, demand response, demand-side
13	management, and systems analysis.
14	(x) Retirement.—[Not less than
15	percent shall be used for? retire-
16	ment of allowances that account for green-
17	house gas emission reductions resulting
18	from State-required or State-allowed, util-
19	ity-run, green-power purchasing programs
20	that are voluntary for ratepayers.
21	(B) Conditions.—
22	(i) In general.—The States shall
23	prioritize expansion of existing energy effi-
24	ciency programs approved and overseen by

1	the State or the appropriate State regu-
2	latory authority.
3	(ii) Supplementation.—The States
4	shall demonstrate that such allowances
5	have been used to supplement, and not to
6	supplant, existing and otherwise available
7	State, local, and ratepayer funding for
8	such purpose.
9	(2) Energy conservation and effi-
10	CIENCY.—Allowances allocated to local governments
11	under subsection (b)(2) shall be used exclusively for
12	energy conservation and efficiency purposes specified
13	under section 543 of the Energy Independence and
14	Security Act of 2007 (42 U.S.C. 17153).
15	(3) State and MPO Grants.—Allocation to
16	the Secretary of Transportation for grants to States
17	and metropolitan planning organizations under sub-
18	section (b)(3) shall be used exclusively for the
19	Transportation Greenhouse Gas Reduction program
20	in accordance with section 112 and section 113 of
21	the Act [this Act?].
22	(d) REPORTING.—Each Indian tribe, State, local gov-
23	ernment, metropolitan planning organization, and renew-
24	able electricity generating company directly receiving al-
25	lowances or allowance value under this section shall sub-

- 1 mit to the Administrator a report that contains a list of
- 2 entities receiving allowances or allowance value under this
- 3 section.
- 4 (e) Enforcement.—If the Administrator deter-
- 5 mines that an Indian tribe, State, local government, met-
- 6 ropolitan planning organization, or renewable electricity
- 7 generation company is not in compliance with this section,
- 8 the Administrator may withhold up to twice the number
- 9 of allowances or allowance value that the Indian tribe,
- 10 State, local government, metropolitan planning organiza-
- 11 tion, or renewable electricity generation company failed to
- 12 use in accordance with the requirements of this section,
- 13 that such Indian tribe, State, local government, metropoli-
- 14 tan planning organization, or renewable electricity genera-
- 15 tion companies would otherwise be eligible to receive under
- 16 this section in later years. Allowances withheld pursuant
- 17 to this subsection shall be distributed among the remain-
- 18 ing Indian tribes, States, local governments, metropolitan
- 19 planning organizations, and renewable electricity genera-
- 20 tion companies in accordance with subsection (b).

21 SEC. 203. ENERGY EFFICIENCY IN BUILDING CODES.

- Not later than September 30, 2011, and each cal-
- 23 endar year thereafter through calendar year 2049, the Ad-
- 24 ministrator shall distribute emission allowances allocated
- 25 for the following vintage year pursuant to [section 782]

- 1 (a)(__) of the Clean Air Act among the States in accord-
- 2 ance with the formula described in [section 1___(b)(1)
- 3 of this division exclusively for the purpose of section
- 4 163 of title I of division A.

5 SEC. 204. BUILDING RETROFIT PROGRAM.

- 6 Not later than September 30, 2011, and each cal-
- 7 endar year thereafter through calendar year 2049, the Ad-
- 8 ministrator shall distribute emission allowances allocated
- 9 for the following vintage year pursuant to [section 782]
- 10 (a)(__) of the Clean Air Act] among the States in accord-
- 11 ance with the formula described in [section 1 (b)(1)
- 12 of this division exclusively for the purpose of exclusively for the purpose of
- 13 164 of title I of division A.

14 SEC. 205. ENERGY INNOVATION HUBS.

- 15 (a) Purpose.—The Secretary shall carry out a pro-
- 16 gram in accordance with this section to establish Energy
- 17 Innovation Hubs to enhance the economic, environmental,
- 18 and energy security of the United States by promoting
- 19 commercial application of clean, indigenous energy alter-
- 20 natives to oil and other fossil fuels, reducing greenhouse
- 21 gas emissions, and ensuring that the United States main-
- 22 tains a technological lead in the development and commer-
- 23 cial application of state-of-the-art energy technologies.
- 24 (b) Definitions.—In this section:

1	(1) Allowance.—The term "allowance"
2	means an emission allowance established under sec-
3	tion 721 of the Clean Air Act (as added by section
4	111 of this division).
5	(2) CLEAN ENERGY TECHNOLOGY.—The term
6	"clean energy technology" means a technology that
7	produces clean energy, including technology that
8	produces clean energy, including technology that—
9	(A) produces energy from solar, wind, geo-
10	thermal, biomass, tidal, wave, ocean, and other
11	renewable energy resources;
12	(B) more efficiently transmits, distributes,
13	or stores energy;
14	(C) enhances energy efficiency for build-
15	ings and industry, including combined heat and
16	power;
17	(D) enables the development of a Smart
18	Grid (as described in section 1301 of the En-
19	ergy Independence and Security Act of 2007
20	(42 U.S.C. 17381)), including integration of re-
21	newable energy resources and distributed gen-
22	eration, demand response, demand side man-
23	agement, and systems analysis;

1	(E) produces an advanced or sustainable
2	material with energy or energy efficiency appli-
3	cations;
4	(F) enhances water security through im-
5	proved water management, conservation, dis-
6	tribution, and end use applications; or
7	(G) improves energy efficiency for trans-
8	portation, including electric vehicles.
9	(3) Hub.—The term "Hub" means an Energy
10	Innovation Hub established in accordance with this
11	section.
12	(4) Project.—The term "project" means an
13	activity with respect to which a Hub provides sup-
14	port under subsection (e).
15	(5) Qualifying entity.—The term "quali-
16	fying entity' means an entity that is eligible, as de-
17	termined by the Secretary, to receive assistance
18	under this section.
19	(6) Secretary.—The term "Secretary" means
20	the Secretary of Energy.
21	(7) VINTAGE YEAR.—The term "vintage year"
22	has the meaning given that term in section 700 of
23	the Clean Air Act (as added by section 112 of this
24	division).

1	(c) Role of the Secretary.—The Secretary, in
2	accordance with this section and section 201, shall—
3	(1) have ultimate responsibility for, and over-
4	sight of, all aspects of the program under this sec-
5	tion;
6	(2) not later than September 30, 2011, and
7	each calendar year thereafter through calendar year
8	2049, provide for the distribution of allowances allo-
9	cated for the following vintage year under section
10	782(a) of the Clean Air Act (as added by section
11	121 of this division) to support the establishment of
12	8 Hubs, each with a unique designated technology
13	development focus, pursuant to this section; and
14	(3) coordinate the innovation activities of Hubs
15	with those occurring through other Department of
16	Energy entities, including the National Laboratories,
17	the Advanced Research Projects Agency—Energy,
18	and Energy Frontier Research Collaborations, and
19	within industry.
20	(d) Entities Eligible for Support.—The Sec-
21	retary shall promulgate regulations listing entities eligible
22	for support under this section.
23	(e) Energy Innovation Hubs.—
24	(1) Role.—Hubs receiving allowances under
25	this section shall support translational research ac-

- 1 tivities leading to commercial application of clean en-2 ergy technologies, in accordance with the purposes of 3 this section, through issuance of awards to projects 4 and other entities meeting the purposes of this sec-5 tion. 6 (2) ADVISORY BOARDS.—Each Hub shall estab-7 lish an Advisory Board, the members of which shall 8 have extensive and relevant scientific, technical, in-9 dustry, financial, or research management expertise. 10 The Advisory Board shall review the Hub's proposed 11 plans, programs, project selection criteria, and 12 projects and shall ensure that projects selected for 13 awards meet the conflict of interest policies of the 14 Hub. All Advisory Board members shall comply with the Hub's conflict of interest policies and proce-15 16 dures. 17 (3) Conflict of interest.—Hubs shall es-18 tablish procedures to prevent conflicts of interest for 19 any employee or consortia designee for Hub activi-20 ties who serves in a decisionmaking capacity.
- 21 (f) Distribution of Allowances to Energy In-22 Novation Hubs.—
- 23 (1) DISTRIBUTION OF ALLOWANCES.—Not later 24 than September 30, 2011, and each calendar year 25 thereafter through calendar year 2049, the Secretary

- shall, in accordance with the requirements of this section, distribute to eligible consortia allowances allocated for the following vintage year under section 782(h)(1) of the Clean Air Act (as added by section 121 of this division).
 - (2) Selection and schedule.—Allowances to support the establishment of a Hub shall be distributed to eligible consortia (as determined by the Secretary) selected through a competitive process.
 - (3) Amount and term of awards.—For each Hub selected to receive an award under this subsection, the Secretary shall define a quantity of allowances that shall be distributed to such Hub each year for an initial period as determined by the Secretary.
 - (4) Use of allowances.—Allowances distributed under this section shall be used exclusively to support project awards pursuant to subsection (e)(1), provided that a Hub may use not more than 10 percent of the value of such allowances for its administrative expenses related to making such awards. Allowances distributed under this section shall not be used for construction of new buildings or facilities for Hubs, and construction of new buildings or facilities shall not be considered as part of

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the non-Federal share of a cost sharing agreement under this section.

> (5) Audit.—Each Hub shall conduct, in accordance with such requirements as the Secretary may prescribe, an annual audit to determine the extent to which allowances distributed to the Hub under this subsection, and awards under subsection (e), have been utilized in a manner consistent with this section. The auditor shall transmit a report of the results of the audit to the Secretary and to the Government Accountability Office. The Secretary shall include such report in an annual report to Congress, along with a plan to remedy any deficiencies cited in the report. The Government Accountability Office may review such audits as appropriate and shall have full access to the books, records, and personnel of the Hub to ensure that allowances distributed to the Hub under this subsection, and awards made under subsection (e), have been utilized in a manner consistent with this section.

> (6) REVOCATION OF ALLOWANCES.—The Secretary shall have authority to review awards made under this subsection and to revoke such awards if the Secretary determines that a Hub has used the

- 1 award in a manner not consistent with the require-2 ments of this section.
- 3 SEC. 206. ADVANCED ENERGY RESEARCH.
- 4 (a) Definitions.—For purposes of this section:
- 5 (1) Allowance.—The term "allowance"
- 6 means an emission allowance established under sec-
- 7 tion 721 of the Clean Air Act (as added by section
- 8 111 of this Act).
- 9 (2) DIRECTOR.—The term "Director" means
- 10 Director of the Advanced Research Projects Agency–
- Energy.
- 12 (b) DISTRIBUTION OF ALLOWANCES.—Not later than
- 13 September 30, 2011, and each calendar year thereafter
- 14 through calendar year 2049, the Director, in accordance
- 15 with this section, shall distribute allowances allocated for
- 16 the following vintage year under [section 782(a)(11)] of
- 17 the Clean Air Act (as added by section 121 of this divi-
- 18 sion). Such allowances shall be distributed on a competi-
- 19 tive basis to institutions of higher education, companies,
- 20 research foundations, trade and industry research collabo-
- 21 rations, or consortia of such entities, or other appropriate
- 22 research and development entities to achieve the goals of
- 23 the Advanced Research Projects Agency-Energy (as de-
- 24 scribed in section 5012(c) of the America COMPETES
- 25 Act) through targeted acceleration of—

(1) novel early-stage energy research with pos-1 2 sible technology applications; 3 (2) development of techniques, processes, and 4 technologies, and related testing and evaluation; 5 (3) development of manufacturing processes for 6 technologies; and 7 (4) demonstration and coordination with non-8 governmental entities for commercial applications of 9 technologies and research applications. 10 (c) Supplement Not Supplant.—Assistance pro-11 vided under this section shall be used to supplement, and 12 not to supplant, any other Federal resources available to 13 carry out activities described in this section. 14 SEC. 207. INTERNATIONAL CLEAN TECHNOLOGY DEPLOY-15 MENT. 16 Not later than September 30, 2011, and each cal-17 endar year thereafter through 2049, the Secretary of 18 State shall distribute emission allowances allocated for the 19 following vintage year pursuant to section \[782 \) (a)() of the Clean Air Act] exclusively for the purpose of section 20 21 [3 of division A. 22 SEC. 208. INTERNATIONAL ADAPTATION. 23 Not later than September 30, 2011, and each calendar year thereafter through calendar year 2049, the 25 Secretary of State shall distribute emission allowances al-

- 1 located for the following vintage year pursuant to section
- 2 [782 (a)(__) of the Clean Air Act] exclusively for the pur-
- 3 pose of section [3____ of division A].
- 4 SEC. 209. INTERNATIONAL CLEAN TECHNOLOGY DEPLOY-
- 5 MENT.
- 6 Not later than September 30, 2011, and each cal-
- 7 endar year thereafter through calendar year 2049, the
- 8 Secretary of State shall distribute emission allowances al-
- 9 located for the following vintage year pursuant to section
- 10 [782 (a)(__) of the Clean Air Act] exclusively for the pur-
- 11 pose of section [3 of division A].
- 12 SEC. 210. GREEN JOBS AND WORKER TRANSITION.
- 13 (a) Establishment of Fund.—There is estab-
- 14 lished in the Treasury a separate account, to be known
- 15 as the "Energy Efficiency and Renewable Energy Worker
- 16 Training Fund".
- 17 (b) Auction Proceeds.—The Administrator shall
- 18 deposit the proceeds of the auction conducted pursuant
- 19 to [section 782 (b)() of the Clean Air Act] in the En-
- 20 ergy Efficiency and Renewable Energy Worker Training
- 21 Fund.
- (c) AVAILABILITY OF AMOUNTS.—Of the amounts
- 23 deposited in the Energy Efficiency and Renewable Energy
- 24 Worker Training Fund under subsection (b)—

1	(1) 90 percent shall be available to the Sec-
2	retary of Energy to carry out section 171(e)(8) of
3	the Workforce Investment Act of 1998 (29 U.S.C.
4	2916(e)(8)) without further appropriation or fiscal
5	year limitation; and
6	(2) 10 percent shall be available to the Sec-
7	retary of Education to provide clean energy cur-
8	riculum development grants pursuant to [section
9	321 of division A?] without further appropriation or
10	fiscal year limitation.
11	SEC. 211. STATE PROGRAMS ADDRESSING CLIMATE
12	CHANGE AND RELATED IMPACTS.
12 13	CHANGE AND RELATED IMPACTS. (a) DEFINITIONS.—In this section:
13	(a) Definitions.—In this section:
13 14	(a) DEFINITIONS.—In this section: (1) ALASKA NATIVE VILLAGE.—The term
131415	(a) Definitions.—In this section:(1) Alaska Native village. The term"Alaska Native village" means a federally recognized
13 14 15 16	 (a) Definitions.—In this section: (1) Alaska native village. The term "Alaska Native village" means a federally recognized Indian tribe located in the State of Alaska and listed
13 14 15 16 17	 (a) Definitions.—In this section: (1) Alaska Native village. The term "Alaska Native village" means a federally recognized Indian tribe located in the State of Alaska and listed in the Bureau of Indian Affairs publication entitled
13 14 15 16 17 18	 (a) Definitions.—In this section: (1) Alaska native village. The term "Alaska Native village" means a federally recognized Indian tribe located in the State of Alaska and listed in the Bureau of Indian Affairs publication entitled "Indian Entities Recognized and Eligible to Receive
13 14 15 16 17 18 19	(a) Definitions.—In this section: (1) Alaska Native village" means a federally recognized indian tribe located in the State of Alaska and listed in the Bureau of Indian Affairs publication entitled "Indian Entities Recognized and Eligible to Receive Services from the United States Bureau of Indian
13 14 15 16 17 18 19 20	(a) Definitions.—In this section: (1) Alaska Native village" means a federally recognized "Alaska Native village" means a federally recognized Indian tribe located in the State of Alaska and listed in the Bureau of Indian Affairs publication entitled "Indian Entities Recognized and Eligible to Receive Services from the United States Bureau of Indian Affairs" (74 Fed. Reg. 40218 (Aug. 11, 2009)).
13 14 15 16 17 18 19 20 21	 (a) Definitions.—In this section: (1) Alaska Native village" means a federally recognized indian tribe located in the State of Alaska and listed in the Bureau of Indian Affairs publication entitled "Indian Entities Recognized and Eligible to Receive Services from the United States Bureau of Indian Affairs" (74 Fed. Reg. 40218 (Aug. 11, 2009)). (2) Allowance.—The term "allowance"

tion.

1	(3) Indian tribe.—The term "Indian tribe"
2	has the meaning given the term in section 4 of the
3	Indian Self-Determination and Education Assistance
4	Act (25 U.S.C. 450b).
5	(4) SCCR ACCOUNT.—The term "SCCR Ac
6	count" means a State Climate Change Response Ac
7	count established under subsection (d)(4).
8	(5) VINTAGE YEAR.—The term "vintage year"
9	has the meaning given that term in section 700 or
10	the Clean Air Act (as added by section 112 of this
11	division).
12	(b) Regulations; Coordination.—
13	(1) REGULATIONS.—Not later than 2 years
14	after the date of enactment of this Act, the Adminis
15	trator, or the heads of such Federal agencies as the
16	President may designate, shall promulgate regula
17	tions to implement this section.
18	(2) Coordination.—If the President des
19	ignates more than 1 Federal agency to implement
20	this section, the President shall require such agen
21	cies to establish a memorandum of understanding
22	providing for coordination of rulemaking and other
23	implementing activities in accordance with this sec

1 (c) STATE CLIMATE CHANGE RESPONSE AND TRANS-2 PORTATION FUND.— 3 (1) Establishment of fund.—There is established in the Treasury a separate account, to be 4 5 known as the "State Climate Change Response and 6 Transportation Fund". 7 (2)AUCTION PROCEEDS DEPOSITED TO 8 FUND.—The Administrator shall deposit the pro-9 ceeds of the auction conducted pursuant to section 10 [782(b)() of the Clean Air Act (as added by sec-11 tion 121 of this division) in the State Climate 12 Change Response and Transportation Fund. 13 (3) AVAILABILITY OF AMOUNTS.—All amounts 14 deposited in the State Climate Change Response and 15 Transportation Fund shall be available, without fur-16 ther appropriation or fiscal year limitation, to carry 17 out this section. 18 (d) Distribution of Allowance Proceeds.— 19 (1) IN GENERAL.—Not later than September 20 30 of each of calendar years 2011 through 2049, the 21 Administrator shall distribute, in accordance with 22 this section, proceeds of the auction of allowances al-23 located for the following vintage year conducted pur-24 suant to subsection (c)(2) that have been deposited

1	in the State Climate Change Response and Trans-
2	portation Fund.
3	(2) Reservation.—The Administrator shall—
4	(A) reserve 10 percent of the proceeds of
5	such allowances described in paragraph (1) for
6	distribution among coastal States in accordance
7	with subsection (f);
8	(B) after consultation with the Secretary
9	of the Interior, reserve at least 1 percent of the
10	proceeds of those allowances for distribution to
11	Indian tribes in accordance with subsection (e)
12	and
13	(C) distribute the remaining proceeds of
14	those allowances to fund State and local govern-
15	ment programs to address climate change and
16	related impacts, with such remaining proceeds
17	divided equally between—
18	(i) funding of transportation grant
19	programs under subsection (g); and
20	(ii) funding of other programs admin-
21	istered by the States, with the proceeds to
22	be deposited in and administered through
23	the State Climate Change Response Ac-
24	counts established pursuant to paragraph
25	(4).

1	(3) Formula for distribution.—The Ad-
2	ministrator shall distribute the proceeds to be allo-
3	cated pursuant to paragraph (4) ratably among the
4	States based on the product obtained by multi-
5	plying—
6	(A) the population of a State; and
7	(B) the allocation factor for the State de-
8	termined under paragraph (3).
9	(4) STATE ALLOCATION FACTORS.—
10	(A) In general.—Except as provided in
11	subparagraph (B), the allocation factor for a
12	State shall be the quotient obtained by divid-
13	ing—
14	(i) the per capita income of all indi-
15	viduals in the United States; by
16	(ii) the per capita income of all indi-
17	viduals in the State.
18	(B) Limitation.—
19	(i) Maximum.—If the allocation fac-
20	tor for a State as calculated under sub-
21	paragraph (A) would exceed 1.2, the allo-
22	cation factor for such State shall be 1.2.
23	(ii) MINIMUM.—If the allocation fac-
24	tor for a State as calculated under sub-
25	paragraph (A) would be less than 0.8, the

1	allocation factor for such State shall be
2	0.8.
3	(C) PER CAPITA INCOME.—For purposes
4	of this paragraph, per capita income shall be—
5	(i) determined at 2-year intervals; and
6	(ii) subject to subparagraph (D),
7	equal to the average of the annual per cap-
8	ita incomes for the most recent period of
9	3 consecutive years for which satisfactory
10	data are available from the Department of
11	Commerce at the time such determination
12	is made.
13	(D) REVENUE DIRECTLY RESULTING FROM
14	A PRESIDENTIALLY DECLARED MAJOR DIS-
15	ASTER.—
16	(i) In general.—For purposes of
17	this paragraph, per capita income from 1
18	or more of the sources described in clause
19	(ii) shall be reduced or excluded if the Sec-
20	retary of Commerce—
21	(I) (in consultation with the Ad-
22	ministrator and the heads of the de-
23	partments or agencies involved) deter-
24	mines that the income accrues to per-
25	sons as the result of a major disaster

1	designated by the President under the
2	Robert T. Stafford Disaster Relief
3	and Emergency Assistance Act (42
4	U.S.C. 5121 et seq.); and
5	(II) finds that the inclusion of 1
6	or more of the income sources, in
7	whole or in part, results in a transi-
8	tory, rather than a sustainable, in-
9	crease in a State's per capita income
10	level relative to the national average.
11	(ii) Sources of Income.—The
12	sources of income referred to in clause (i)
13	are the following:
14	(I) Property and casualty insur-
15	ance (including homeowners and rent-
16	ers insurance).
17	(II) The National Flood Insur-
18	ance Program of the Federal Emer-
19	gency Management Agency.
20	(III) The Individual and Family
21	Grants Program of the Federal Emer-
22	gency Management Agency.
23	(IV) The Disaster Housing Pro-
24	gram of the Federal Emergency Man-
25	agement Agency.

1	(V) The Community Develop-
2	ment Block Grant Program of the De-
3	partment of Housing and Urban De-
4	velopment.
5	(VI) The Disaster Unemployment
6	Assistance Program of the Depart-
7	ment of Labor.
8	(VII) Any other source deter-
9	mined appropriate by the Adminis-
10	trator.
11	(5) STATE CLIMATE CHANGE RESPONSE AC-
12	COUNTS.—Each State shall establish a State Cli-
13	mate Change Response Account, to be administered
14	pursuant to State law, to receive and distribute all
15	amounts provided under this section. State regula-
16	tions and implementing procedures relating to such
17	accounts shall require compliance with the provisions
18	of this section and all other applicable provisions of
19	Federal law.
20	(e) Distribution to Indian Tribes.—
21	(1) In general.—The Administrator, or the
22	heads of such Federal agencies as the President may
23	designate, shall promulgate regulations establishing
24	a program to distribute allowance proceeds to Indian
25	tribes, in accordance with the requirements of this

1 section, of which not less than 18 percent shall be 2 allocated to Alaska Native Villages for each year. 3 (2) Use of proceeds.—Allowance proceeds 4 distributed to Indian tribes shall be used exclu-5 sively— 6 (A) in accordance with subsection (h); and 7 (B) in compliance with any approved tribal 8 climate change response plan. 9 (f) Distribution to Coastal States.—The Ad-10 ministrator, or the heads of such other Federal agencies 11 as the President may designate, shall distribute proceeds 12 of emission allowances for coastal State economic protec-13 tion each fiscal year, in accordance with section. 14 (g) Distribution of Transportation Grants.— 15 Funding provided pursuant to subsection (d)(1) shall be used exclusively for the Transportation Greenhouse Gas 16 Reduction Program in accordance with sections 112 and 18 113 of this Act. 19 (h) Uses of Allowance Proceeds Deposited to 20 SCCR ACCOUNTS.— 21 (1) IN GENERAL.—States and Indian tribes 22 shall use allowance proceeds deposited to SCCR Ac-23 counts under subsection (c)(2) exclusively for the de-24 velopment and implementation of projects, pro-25 grams, or measures as described in this section to

1	address climate change by reducing emissions of
2	greenhouse gases or by building resilience to the im-
3	pacts of climate change, including impacts such as—
4	(A) extreme weather events, such as flood-
5	ing and tropical cyclones;
6	(B) more frequent heavy precipitation
7	events;
8	(C) water scarcity and adverse impacts on
9	water quality;
10	(D) stronger and longer heat waves;
11	(E) more frequent and severe droughts;
12	(F) rises in sea level;
13	(G) ecosystem disruption;
14	(H) increased air pollution;
15	(I) effects on public health;
16	(J) impaired transportation systems and
17	infrastructure; and
18	(K) reduced productivity of agricultural or
19	ranching operations.
20	(2) Requirements for expenditure of al-
21	LOWANCE PROCEEDS DEPOSITED TO SCCR AC-
22	COUNTS.—The allowance proceeds received by each
23	SCCR Account pursuant to this section for each fis-
24	cal year shall be used by the State exclusively to
25	fund the following categories of activities, in compli-

1	ance with the provisions of approved State climate
2	change response plans:
3	(A) Grants to fund water system mitiga-
4	tion and adaptation partnerships in accordance
5	with section [].
6	(B) Flood control, protection, prevention
7	and response programs and projects in accord-
8	ance with section [].
9	(C) Programs or projects implemented by
10	State agencies as owners or operators of water
11	systems to address any ongoing or forecasted
12	climate-related impact on water quality, water
13	supply or reliability, for 1 or more of the pur-
14	poses listed in section [].
15	(D) Programs or projects to reduce green-
16	house gas emissions through recycling or for in-
17	creasing recycling rates in accordance with sec-
18	tion [].
19	(E) Programs and projects addressing ad-
20	verse impacts of climate change affecting agri-
21	culture or ranching activities.
22	(F) Programs or projects addressing air
23	pollution or air quality impacts caused or exac-
24	erbated by climate change.

1	(3) Distribution for local govern-
2	MENTS.—Not less than 12.5 percent of the proceeds
3	deposited to SCCR Accounts shall be distributed by
4	each State to units of local government within such
5	State, to be used exclusively to support the cat-
6	egories of climate change response efforts listed in
7	paragraph (2).
8	(4) Vulnerable populations.—In deploying
9	allowance proceeds under this section, States and
10	units of local government shall ensure that programs
11	and projects are funded responding to impacts af-
12	fecting socially and economically vulnerable popu-
13	lations, including—
14	(A) persons of low-income (as defined in
15	title I of the Housing and Community Develop-
16	ment Act of 1974, (42 U.S.C. 5301 et seq.));
17	(B) members of socially disadvantaged
18	groups (as defined in section 2501(e)(2) of the
19	Food, Agriculture, Conservation, and Trade Act
20	of 1990 (7 U.S.C. 2279(e)(2)));
21	(C) individuals over 65 years of age and
22	under 5 years of age; and
23	(D) individuals with disabilities.
24	(5) Intent of congress.—It is the intent of
25	the Congress that allowances distributed to carry

1	out this section should be used to supplement, and
2	not replace, existing sources of funding used to ad-
3	dress and build resilience to the impacts of climate
4	change.
5	(i) STATE AND TRIBAL CLIMATE CHANGE RESPONSE
6	Plans.—
7	(1) In general.—The regulations promulgated
8	pursuant to subsection (b) shall include require-
9	ments for submission and approval of State or tribal
10	climate change response plans under this section.
11	Beginning with vintage year 2012, distribution of al-
12	lowance proceeds to a State pursuant to this section
13	shall be contingent on approval of a State climate
14	change response plan for such State that meets the
15	requirements of such regulations.
16	(2) Requirements.—Regulations promulgated
17	under this section shall require, at minimum, that
18	State climate change response plans—
19	(A) assess and prioritize the vulnerability
20	of a State or Indian tribe to a broad range of
21	impacts of climate change, based on the best
22	available science;
23	(B) identify and prioritize specific cost-ef-
24	fective projects, programs, and measures to
25	mitigate and build resilience to current and pre-

1	dicted impacts of climate change, including
2	projects, programs, and measures within each
3	of the categories listed in subsection $(h)(2)$;
4	(C) include an assessment of potential for
5	carbon reduction through changes to land man-
6	agement policies (including enhancement or
7	protection of forest carbon sinks);
8	(D) ensure that the State or Indian tribe
9	fully considers and undertakes, to the maximum
10	extent practicable, initiatives that—
11	(i) protect or enhance natural eco-
12	system functions, including protection,
13	maintenance, or restoration of natural in-
14	frastructure such as wetlands, reefs, and
15	barrier islands to buffer communities from
16	floodwaters or storms, watershed protec-
17	tion to maintain water quality and ground-
18	water recharge, or floodplain restoration to
19	improve natural flood control capacity;
20	(ii) where appropriate, use non-
21	structural approaches, including practices
22	that use, enhance, or mimic the natural
23	hydrologic cycle processes of infiltration,
24	evapotranspiration, and use; or

1	(iii) where appropriate, protect for-
2	ested land via scientifically based ecological
3	restoration practices, including by reducing
4	fuel loads, restoring forest diversity, and
5	conducting research on pest mitigation;
6	(E) give consideration to impacts affecting
7	socially and economically vulnerable popu-
8	lations, including—
9	(i) persons of low-income (as defined
10	in title I of the Housing and Community
11	Development Act of 1974 (42 U.S.C. sec.
12	5301 et seq.));
13	(ii) members of socially disadvantaged
14	groups (as defined in section 2501(e)(2) of
15	the Food, Agriculture, Conservation, and
16	Trade Act of 1990 (7 U.S.C. 2279(e)(2)));
17	(iii) persons over 65 years of age and
18	under 5 years of age; and
19	(iv) persons with disabilities;
20	(F) use pre-disaster mitigation, emergency
21	response, and public insurance programs to
22	mitigate the impacts of climate change;
23	(G) be consistent with Federal conserva-
24	tion and environmental laws and, to the max-

1	imum extent practicable, avoid environmental
2	degradation; and
3	(H) be revised and resubmitted for ap-
4	proval not less frequently than every 5 years.
5	(3) Tribal climate change response
6	PLANS.—Requirements for tribal climate change re-
7	sponse plans should include the requirements listed
8	in subparagraphs (A) through (H) of paragraph (2),
9	as appropriate, but may vary from those of State ad-
10	aptation plans to the extent necessary to account for
11	the special circumstances of Indian tribes.
12	(4) Coordination with Prior Planning Ef-
13	FORTS.—In implementing this subsection, the Ad-
14	ministrator, or the heads of such Federal agencies
15	as the President may designate, shall—
16	(A) draw upon lessons learned and best
17	practices from preexisting State and tribal cli-
18	mate change response planning efforts;
19	(B) seek to avoid duplication of such ef-
20	forts; and
21	(C) ensure that the plans developed under
22	this section are developed in coordination with
23	State natural resources adaptation plans devel-
24	oped under [section] of this Act.

1 (j) Reporting.—Not later than 1 year after each 2 date of receipt of allowances under this section, and bien-3 nially thereafter until the value of any allowance proceeds 4 received under this section has been fully expended, each 5 State or Indian tribe receiving allowance proceeds under this section shall submit to the Administrator, or the 6 heads of such Federal agencies as the President may des-8 ignate, a report that— 9 (1) provides a full accounting for the use by the 10 State or Indian tribe of allowance proceeds distrib-11 uted under this section, including a description of 12 the projects, programs, or measures supported using 13 such proceeds; 14 (2) includes a report prepared by an inde-15 pendent third party, in accordance with such regula-16 tions as are promulgated by the Administrator or 17 the heads of such other Federal agencies as the 18 President may designate, evaluating the performance 19 of the projects, programs, or measures supported 20 under this section; and 21 (3) identifies any use by the State or Indian 22 tribe of allowance proceeds distributed under this 23 section for the reduction of flood and storm damage 24 and the effects of climate change on water and flood 25 protection infrastructure.

- 1 (k) AUDITING.—The Administrator, or the heads of 2 such Federal agencies as the President may designate, 3 shall have authority to conduct such audits or other review 4 of States implementation of and compliance with this sec-5 tion as such Federal officials may in their discretion deter-6 mine to be necessary or appropriate. 7 (1) Enforcement.—If the Administrator, or the 8 heads of such Federal agencies as the President may designate, determine that a State or Indian tribe is not in 10 compliance with this section, the Administrator or such other agency head may withhold a quantity of the allow-11 12 ance proceeds equal to up to twice the quantity of allowance proceeds that the State or Indian tribe failed to use in accordance with the requirements of this section, that 14 15 such State or Indian tribe would otherwise be eligible to receive under this section in 1 or more later years. Allow-16 17 ance proceeds withheld pursuant to this subsection shall be distributed among the remaining States or Indian 18 tribes ratably in accordance with— 19 20 (1) the formula under subsection (d), in the 21 case of allowances withheld from a State; or
- 22 (2) in accordance with subsection (e), in the 23 case of allowance proceeds withheld from an Indian 24 tribe.

1	SEC. 212. CLIMATE CHANGE HEALTH PROTECTION AND
2	PROMOTION FUND.
3	(a) Establishment of Fund.—There is estab-
4	lished in the Treasury a separate account, to be known
5	as the "Climate Change Health Protection and Promotion
6	Fund".
7	(b) Auction Proceeds.—The Administrator shall
8	deposit the proceeds of the auction pursuant to section
9	[782(b)() of the Clean Air Act] in the Climate
10	Change Health Protection and Promotion Fund.
11	(c) AVAILABILITY OF AMOUNTS.—All amounts depos-
12	ited in the Climate Change Health Protection and Pro-
13	motion Fund shall be available to the Secretary of Health
14	and Human Services to carry out [subpart B of subtitle
15	E of title III of the Act], without
16	further appropriation or fiscal year limitation.
17	
1 /	(d) Distribution of Funds by HHS.—In carrying
	(d) DISTRIBUTION OF FUNDS BY HHS.—In carrying out [this] [that? meaning the subpart referenced under
18	
18 19	out [this] [that? meaning the subpart referenced under
18 19 20	out [this] [that? meaning the subpart referenced under subsection (c)?] subpart, the Secretary of Health and
18 19 20 21	out [this] [that? meaning the subpart referenced under subsection (c)?] subpart, the Secretary of Health and Human Services may make funds deposited in the Climate
18 19 20 21 22	out [this] [that? meaning the subpart referenced under subsection (c)?] subpart, the Secretary of Health and Human Services may make funds deposited in the Climate Change Health Protection and Promotion Fund available
	out [this] [that? meaning the subpart referenced under subsection (c)?] subpart, the Secretary of Health and Human Services may make funds deposited in the Climate Change Health Protection and Promotion Fund available to—
118 119 220 221 222 223	out [this] [that? meaning the subpart referenced under subsection (c)?] subpart, the Secretary of Health and Human Services may make funds deposited in the Climate Change Health Protection and Promotion Fund available to— (1) other departments, agencies, and offices of

- 1 (3) such other entities as the Secretary deter-2 mines to be appropriate. 3 (e) Supplement, Not Replace.—It is the intent of Congress that funds made available to carry out this 5 subpart section? should be used to supplement, and not replace, existing sources of funding for public health. SEC. 213. CLIMATE CHANGE SAFEGUARDS FOR NATURAL 8 RESOURCES CONSERVATION. 9 (a) Establishment of Fund.—There is estab-10 lished in the Treasury a separate account, to be known as the "Natural Resources Climate Change Adaptation 11 12 Account". 13 (b) Auction Proceeds.—The Administrator shall 14 deposit the proceeds of the auction conducted pursuant to section [782(b)() of the Clean Air Act] in the Nat-15 ural Resources Climate Change Adaptation Account. 16 17 (c) AVAILABILITY OF AMOUNTS.—All amounts deposited in the Natural Resources Climate Change Adaptation 18 19 Account shall be available without further appropriation 20 or fiscal year limitation solely for the purposes of Lection 21 380 of division A? 1. 22 SEC. 214. NUCLEAR WORKER TRAINING. 23 (a) Establishment of Fund.—There is estab-
- 24 lished in the Treasury a separate account, to be known 25 as the "Nuclear Worker Training Fund".

- 1 (b) AUCTION PROCEEDS.—The Administrator shall
- 2 deposit the proceeds of the auction conducted pursuant
- 3 to section [782(b)(____) of the Clean Air Act] in the Nu-
- 4 clear Worker Training Fund.
- 5 (c) AVAILABILITY OF AMOUNTS.—All amounts depos-
- 6 ited in the Nuclear Worker Training Fund shall be avail-
- 7 able without further appropriation or fiscal year limitation
- 8 solely for the purpose of carrying out [section 141 of this
- 9 division?].
- 10 SEC. 215. SUPPLEMENTAL AGRICULTURE, RENEWABLE EN-
- 11 ERGY, AND FORESTRY.
- 12 (a) Establishment of Fund.—There is estab-
- 13 lished in the Treasury a separate account, to be known
- 14 as the "Supplemental Agriculture, Renewable Energy, and
- 15 Forestry Fund".
- 16 (b) AUCTION PROCEEDS.—The Administrator shall
- 17 deposit the proceeds of the auction conducted pursuant
- 18 to [section 782(b)(____) of the Clean Air Act] in the
- 19 Supplemental Agriculture, Renewable Energy, and For-
- 20 estry Fund.
- 21 (c) AVAILABILITY OF AMOUNTS.—All amounts depos-
- 22 ited in the Supplemental Agriculture, Renewable Energy,
- 23 and Forestry Fund shall be available without further ap-
- 24 propriation or fiscal year limitation solely for the purpose
- 25 of carrying out [section 167 of this division? Division A?].

- 1 SEC. 216. INVESTMENT IN ENERGY EFFICIENCY AND RE-
- 2 **NEWABLE ENERGY.**
- 3 [PLACEHOLDER FOR TEXT PROVIDING AL-
- 4 LOCATION FOR PROGRAMS UNDER SUB-
- 5 SECTIONS (a)(8), (b)(6), and (b)(7) of SECTION 782,
- 6 and SECTION 788, of the Clean Air Act (as added by
- 7 SECTION 111 of this division).