

109TH CONGRESS
2D SESSION

S. _____

To manage the carbon content of United States domestic energy supply.

IN THE SENATE OF THE UNITED STATES

_____ introduced the following bill; which was read twice
and referred to the Committee on _____

A BILL

To manage the carbon content of United States domestic
energy supply.

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.**

4 This Act may be cited as the
5 “_____ Act of _____”.

6 **SEC. 2. ACTIONS TO ADDRESS GLOBAL CLIMATE.**

7 Title XVI of the Energy Policy Act of 1992 (42
8 U.S.C. 13381 et seq.) is amended—

9 (1) by inserting after the title designation and
10 heading the following:

1 **“Subtitle A—General Provisions”;**

2 and

3 (2) by adding at the end the following:

4 **“Subtitle B—Actions to Address**
5 **Global Climate Change**

6 **“SEC. 1611. PURPOSE.**

7 “The purpose of this subtitle is to reduce greenhouse
8 gas emissions intensity in the United States, beginning in
9 calendar year 2012, through an emissions trading system
10 designed to achieve emissions reductions at the lowest
11 practicable cost to the United States.

12 **“SEC. 1612. DEFINITIONS.**

13 “In this subtitle:

14 “(1) CARBON DIOXIDE EQUIVALENT.—The
15 term ‘carbon dioxide equivalent’ means—

16 “(A) for each covered fuel, the quantity of
17 carbon dioxide that would be emitted into the
18 atmosphere as a result of complete combustion
19 of a unit of the covered fuel, to be determined
20 for the type of covered fuel by the Secretary;
21 and

22 “(B) for each greenhouse gas (other than
23 carbon dioxide) the quantity of carbon dioxide
24 that would have an effect on global warming
25 equal to the effect of a unit of the greenhouse

1 gas, as determined by the Secretary, taking into
2 consideration global warming potentials.

3 “(2) COVERED FUEL.—The term ‘covered fuel’
4 means—

5 “(A) coal;

6 “(B) petroleum products;

7 “(C) natural gas;

8 “(D) natural gas liquids; and

9 “(E) any other fuel derived from fossil hy-
10 drocarbons (including bitumen and kerogen).

11 “(3) COVERED GREENHOUSE GAS EMISSIONS.—

12 “(A) IN GENERAL.—The term ‘covered
13 greenhouse gas emissions’ means—

14 “(i) the carbon dioxide emissions from
15 combustion of covered fuel carried out in
16 the United States; and

17 “(ii) nonfuel-related greenhouse gas
18 emissions in the United States, determined
19 in accordance with section 1615(b)(2).

20 “(B) UNITS.—Quantities of covered green-
21 house gas emissions shall be measured and ex-
22 pressed in units of metric tons of carbon diox-
23 ide equivalent.

1 “(4) EMISSIONS INTENSITY.—The term ‘emis-
2 sions intensity’ means, for any calendar year, the
3 quotient obtained by dividing—

4 “(A) covered greenhouse gas emissions; by
5 “(B) the forecasted GDP for that calendar
6 year.

7 “(5) FORECASTED GDP.—The term ‘forecasted
8 GDP’ means the predicted amount of the gross do-
9 mestic product of the United States, based on the
10 most current projection used by the Energy Infor-
11 mation Administration of the Department of Energy
12 on the date on which the prediction is made.

13 “(6) FORECASTED GDP IMPLICIT PRICE
14 DEFLATOR.—The term ‘forecasted GDP implicit
15 price deflator’ means **【TO BE SUPPLIED】**.

16 “(7) GREENHOUSE GAS.—The term ‘greenhouse
17 gas’ means—

18 “(A) carbon dioxide;

19 “(B) methane;

20 “(C) nitrous oxide;

21 “(D) hydrofluorocarbons;

22 “(E) perfluorocarbons; and

23 “(F) sulfur hexafluoride.

1 “(8) INITIAL ALLOCATION PERIOD.—The term
2 ‘initial allocation period’ means the period beginning
3 January 1, 2012, and ending December 31, 2021.

4 【“(9) NATURAL GAS PROCESSING PLANT.—The
5 term ‘natural gas processing plant’ means a facility
6 designed to separate natural gas liquids from nat-
7 ural gas.】

8 “(10) NONFUEL REGULATED ENTITY.—The
9 term ‘nonfuel regulated entity’ means—

10 “(A) the owner or operator of a facility
11 that manufactures hydrofluorocarbons,
12 perfluorocarbons, sulfur hexafluoride, or nitrous
13 oxide;

14 “(B) an importer of hydrofluorocarbons,
15 perfluorocarbons, sulfur hexafluoride, or nitrous
16 oxide;

17 “(C) the owner or operator of a facility
18 that emits nitrous oxide associated with the
19 manufacture of adipic acid or nitric acid;

20 “(D) the owner or operator of an alu-
21 minum smelter;

22 “(E) the owner or operator of an under-
23 ground coal mine that emitted more than
24 35,000,000 cubic feet of methane during 2004
25 or any subsequent calendar year; and

1 “(F) the owner or operator of facility that
2 emits hydrofluorocarbon-23 as a byproduct of
3 hydrochlorofluorocarbon-22 production.

4 “(11) OFFSET PROJECT.—The term ‘offset
5 project’ means any project to—

6 “(A) reduce greenhouse gas emissions; or

7 “(B) sequester a greenhouse gas.

8 “(12) PETROLEUM PRODUCT.—The term ‘pe-
9 troleum product’ means—

10 “(A) a refined petroleum product;

11 “(B) residual fuel oil;

12 “(C) petroleum coke; or

13 “(D) a liquefied petroleum gas.

14 “(13) REGULATED ENTITY.—The term ‘regu-
15 lated entity’ means—

16 “(A) a regulated fuel distributor; or

17 “(B) a nonfuel regulated entity.

18 “(14) REGULATED FUEL DISTRIBUTOR.—The
19 term ‘regulated fuel distributor’ means—

20 “(A) the owner or operator of—

21 “(i) a petroleum refinery;

22 “(ii) a coal mine that produces more
23 than 10,000 short tons during 2004 or any
24 subsequent calendar year; or

1 “(iii) a natural gas processing plant
2 **【size threshold】**;

3 “(B) an importer of—

4 “(i) petroleum products;

5 “(ii) coal;

6 “(iii) coke; or

7 “(iv) natural gas liquids; or

8 “(C) any other entity the Secretary deter-
9 mines under section 1615(b)(3)(A)(ii) to be
10 subject to section 1615.

11 “(15) SAFETY VALVE PRICE.—The term ‘safety
12 valve price’ means—

13 “(A) for 2012, \$7 per metric ton of carbon
14 dioxide equivalent; and

15 “(B) for each subsequent calendar year, an
16 amount equal to the product obtained by multi-
17 plying—

18 “(i) the safety valve price established
19 for the preceding calendar year increased
20 by 5 percent, unless a different rate of in-
21 crease is established for the calendar year
22 under section 1622; and

23 “(ii) the ratio that—

1 “(I) the forecasted GDP implicit
2 price deflator for the calendar year;
3 bears to

4 “(II) the forecasted GDP implicit
5 price deflator for the preceding cal-
6 endar year.

7 “(16) SECRETARY.—The term ‘Secretary’
8 means the Secretary of Energy, unless the President
9 designates another officer of the Executive Branch
10 to carry out a function under this subtitle.

11 “(17) SUBSEQUENT ALLOCATION PERIOD.—The
12 term ‘subsequent allocation period’ means—

13 “(A) the 5-year period beginning January
14 1, 2022, and ending December 31, 2026; and

15 “(B) each subsequent 5-year period.

16 **“SEC. 1613. QUANTITY OF ANNUAL GREENHOUSE GAS AL-**
17 **LOWANCES.**

18 “(a) INITIAL ALLOCATION PERIOD.—

19 “(1) IN GENERAL.—Not later than December
20 31, 2008, the Secretary shall—

21 “(A) make a projection with respect to
22 emissions intensity for 2011, using—

23 “(i) the Energy Information Adminis-
24 tration’s most current projections of cov-

1 ered greenhouse gas emissions for 2011;

2 and

3 “(ii) the forecasted GDP for 2011;

4 “(B) determine the emissions intensity tar-

5 get for 2012 by calculating a 2.6 percent reduc-

6 tion from the projected emissions intensity for

7 2011;

8 “(C) in accordance with paragraph (2), de-

9 termine the emissions intensity target for each

10 calendar year of the initial allocation period

11 after 2012; and

12 “(D) in accordance with paragraph (3), de-

13 termine the total number of allowances to be al-

14 located for each calendar year during the initial

15 allocation period.

16 “(2) EMISSIONS INTENSITY TARGETS AFTER

17 2012.—For each calendar year during the initial allo-

18 cation period after 2012, the emissions intensity tar-

19 get shall be the emissions intensity target estab-

20 lished for the preceding calendar year reduced by

21 2.6 percent.

22 “(3) TOTAL ALLOWANCES.—For each calendar

23 year during the initial allocation period, the quantity

24 of allowances to be issued shall be equal to the prod-

25 uct obtained by multiplying—

1 “(A) the emissions intensity target estab-
2 lished for the calendar year; and

3 “(B) the forecasted GDP for the calendar
4 year.

5 “(b) SUBSEQUENT ALLOCATION PERIODS.—

6 “(1) IN GENERAL.—Not later than the date
7 that is 4 years before the beginning of each subse-
8 quent allocation period, the Secretary shall—

9 “(A) except as directed under section
10 1622, determine the emissions intensity target
11 for each calendar year during that subsequent
12 allocation period, in accordance with paragraph
13 (2); and

14 “(B) issue the total number of allowances
15 for each calendar year of the subsequent alloca-
16 tion period, in accordance with paragraph (3).

17 “(2) EMISSIONS INTENSITY TARGETS.—For
18 each calendar year during a subsequent allocation
19 period, the emissions intensity target shall be the
20 emissions intensity target established for the pre-
21 ceding calendar year reduced by 3.0 percent.

22 “(3) TOTAL ALLOWANCES.—For each calendar
23 year during a subsequent allocation period, the
24 quantity of allowances to be issued shall be equal to
25 the product obtained by multiplying—

1 “(A) the emissions intensity target estab-
2 lished for the calendar year; and

3 “(B) the forecasted GDP for the calendar
4 year.

5 “(c) ADMINISTRATIVE REQUIREMENTS.—

6 “(1) DENOMINATION.—Allowances issued by
7 the Secretary under this section shall be denomi-
8 nated in units of metric tons of carbon dioxide
9 equivalent.

10 “(2) PERIOD OF USE.—An allowance issued by
11 the Secretary under this section may be used dur-
12 ing—

13 “(A) the calendar year for which the allow-
14 ance is issued; or

15 “(B) any subsequent calendar year.

16 “(3) SERIAL NUMBERS.—The Secretary shall—

17 “(A) assign a unique serial number to each
18 allowance issued under this subtitle; and

19 “(B) retire the serial number of an allow-
20 ance on the date on which the allowance is sub-
21 mitted under section 1615.

22 **“SEC. 1614. ALLOCATION AND AUCTION OF GREENHOUSE**
23 **GAS ALLOWANCES.**

24 “(a) ALLOCATION OF ALLOWANCES.—

1 “(1) DEFINITION OF STATE.—In this sub-
2 section, the term ‘State’ means—

3 “(A) each of the several States of the
4 United States;

5 “(B) the District of Columbia;

6 “(C) the Commonwealth of Puerto Rico;

7 “(D) Guam;

8 “(E) American Samoa;

9 “(F) the Commonwealth of the Northern
10 Mariana Islands;

11 “(G) the Federated States of Micronesia;

12 “(H) the Republic of the Marshall Islands;

13 “(I) the Republic of Palau; and

14 “(J) the United States Virgin Islands.

15 “(2) ALLOCATIONS.—Not later than the date
16 that is 2 years before the beginning of the initial al-
17 location period, and each subsequent allocation pe-
18 riod, the Secretary shall allocate for each calendar
19 year during the allocation period a quantity of allow-
20 ances in accordance with this subsection.

21 “(3) QUANTITY.—The total quantity of allow-
22 ances available to be allocated to industry and
23 States **【OR: to industry and by the President】** for
24 each calendar year of an allocation period shall be
25 the product obtained by multiplying—

1 “(A) the total quantity of allowances
2 issued for the calendar year under subsection
3 (a)(3) or (b)(3) of section 1613; and

4 “(B) the allocation percentage for the cal-
5 endar year under subsection (c).

6 “(4) ALLOWANCE ALLOCATION RULEMAKING.—
7 Not later than 18 months after the date of enact-
8 ment of this subtitle, the Secretary shall establish,
9 by rule, procedures for allocating allowances in ac-
10 cordance with the criteria established under this
11 subsection, including requirements (including forms
12 and schedules for submission) for the reporting of
13 information necessary for the allocation of allow-
14 ances under this section.

15 “(5) DISTRIBUTION OF ALLOWANCES TO IN-
16 DUSTRY.—The allowances available for allocation to
17 industry under paragraph (3) shall be distributed as
18 follows:

19 “(A) COAL MINES.—

20 “(i) DEFINITION OF ELIGIBLE COAL
21 MINE.—In this subparagraph, the term ‘el-
22 igible coal mine’ means a coal mine located
23 in the United States that is a regulated
24 fuel distributor.

1 “(ii) TOTAL ALLOCATION.—For each
2 year, eligible coal mines shall be allocated
3 $\frac{7}{55}$ of the total quantity of allowances
4 available for allocation to industry under
5 paragraph (3).

6 “(iii) INDIVIDUAL ALLOCATIONS.—
7 For any year, the quantity of allowances
8 allocated to an eligible coal mine shall be
9 the quantity equal to the product obtained
10 by multiplying—

11 “(I) the total allocation to eligible
12 coal mines under clause (ii); and

13 “(II) the ratio that—

14 “(aa) the carbon content of
15 coal produced at the eligible coal
16 mine during the 3-year period be-
17 ginning on January 1, 2004;
18 bears to

19 “(bb) the carbon content of
20 coal produced at all eligible coal
21 mines in the United States dur-
22 ing that period.

23 “(B) PETROLEUM REFINERS.—

24 “(i) TOTAL ALLOCATION.—For each
25 year, the petroleum refining sector shall be

1 allocated $\frac{4}{55}$ of the total quantity of allow-
2 ances available for allocation to industry
3 under paragraph (3).

4 “(ii) INDIVIDUAL ALLOCATIONS.—For
5 any year, the quantity of allowances allo-
6 cated to a petroleum refinery located in the
7 United States shall be the quantity equal
8 to the product obtained by multiplying—

9 “(I) the total allocation to the pe-
10 troleum refining sector under clause
11 (i); and

12 “(II) the ratio that—

13 “(aa) the carbon content of
14 petroleum products produced at
15 the refinery during the 3-year pe-
16 riod beginning on January 1,
17 2004; bears to

18 “(bb) the carbon content of
19 petroleum products produced at
20 all refineries in the United States
21 during that period.

22 “(C) NATURAL GAS PROCESSORS.—

23 “(i) DEFINITION OF ELIGIBLE NAT-
24 URAL GAS PROCESSOR.—In this subpara-
25 graph, the term ‘eligible natural gas proc-

1 essor’ means a natural gas processor lo-
2 cated in the United States that is a regu-
3 lated fuel distributor.

4 “(ii) TOTAL ALLOCATION.—For each
5 year, eligible natural gas processors shall
6 be allocated $\frac{2}{55}$ of the total quantity of al-
7 lowances available for allocation to indus-
8 try under paragraph (3).

9 “(iii) INDIVIDUAL ALLOCATIONS.—
10 For any year, the quantity of allowances
11 allocated to an eligible natural gas proc-
12 essor shall be the quantity equal to the
13 product obtained by multiplying—

14 “(I) the total allocation to eligible
15 natural gas processors under clause
16 (ii); and

17 “(II) the ratio that—

18 “(aa) the sum of, for the 3-
19 year period beginning on January
20 1, 2004—

21 “(AA) the carbon con-
22 tent of natural gas liquids
23 produced by the eligible nat-
24 ural gas processor; and

1 “(BB) the carbon con-
2 tent of the natural gas deliv-
3 ered into commerce by the
4 eligible natural gas proc-
5 essor; bears to

6 “(bb) the sum of, for that
7 period—

8 “(AA) the carbon con-
9 tent of natural gas liquids
10 produced by all eligible nat-
11 ural gas processors; and

12 “(BB) the carbon con-
13 tent of the natural gas deliv-
14 ered into commerce by all el-
15 ible natural gas proc-
16 essors.

17 “(D) ELECTRICITY GENERATORS.—

18 “(i) DEFINITION OF ELIGIBLE ELEC-
19 TRICITY GENERATOR.—In this subpara-
20 graph, the term ‘eligible electricity gener-
21 ator’ means an electricity generator located
22 in the United States that is a fossil fuel-
23 fired electricity generator.

24 “(ii) TOTAL ALLOCATION.—For each
25 year, eligible electricity generators shall be

1 allocated ³⁰/₅₅ of the total quantity of al-
2 lowances available for allocation to indus-
3 try under paragraph (3).

4 “(iii) INDIVIDUAL ALLOCATIONS.—
5 For any year, the quantity of allowances
6 allocated to an eligible electricity generator
7 shall be the quantity equal to the product
8 obtained by multiplying—

9 “(I) the total allocation to eligible
10 electricity generators under clause (ii);
11 and

12 “(II) the ratio that—

13 “(aa) the carbon content of
14 the fossil fuel input of the eligible
15 electricity generator during the
16 3-year period beginning on Janu-
17 ary 1, 2004; bears to

18 “(bb) the total carbon con-
19 tent of fossil fuel input of eligible
20 electricity generators in the
21 United States during that period.

22 “(E) CARBON-INTENSIVE MANUFACTURING
23 SECTORS.—

24 “(i) DEFINITION OF ELIGIBLE MANU-
25 FACTURER.—In this subparagraph, the

term ‘eligible manufacturer’ means a carbon-intensive manufacturer located in the United States that [used more than _____ during _____; *need to define/specify; need to exclude fossil fuel-fired electricity generation*].

“(ii) TOTAL ALLOCATION.—For each year, eligible manufacturers shall be allocated ¹⁰/₅₅ of the total quantity of allowances available for allocation to industry under paragraph (3).

“(iii) INDIVIDUAL ALLOCATIONS.—For any year, the quantity of allowances allocated to an eligible manufacturer shall be the quantity equal to the product obtained by multiplying—

“(I) the total allocation to eligible manufacturers under clause (ii); and

“(II) the ratio that—

“(aa) the carbon content of fossil fuel combusted at the eligible manufacturer during the 3-year period beginning on January 1, 2004; bears to

1 “(bb) the total carbon con-
2 tent of fossil fuel combusted at
3 all eligible manufacturers in the
4 United States during that period.

5 “(F) NONFUEL REGULATED ENTITIES.—

6 “(i) TOTAL ALLOCATION.—For each
7 year, nonfuel regulated entities shall be al-
8 located $\frac{2}{55}$ of the total quantity of allow-
9 ances available for allocation to industry
10 under paragraph (3).

11 “(ii) INDIVIDUAL ALLOCATIONS.—For
12 any year, the quantity of allowances allo-
13 cated to a nonfuel regulated entity shall be
14 the quantity equal to the product obtained
15 by multiplying—

16 “(I) the total allocation to
17 nonfuel regulated entities under
18 clause (i); and

19 “(II) the ratio that—

20 “(aa) the carbon dioxide
21 equivalent of the nonfuel-related
22 greenhouse gas produced or emit-
23 ted by the nonfuel regulated enti-
24 ty at facilities in the United
25 States during the 3-year period

1 beginning on January 1, 2004;
2 bears to

3 “(bb) the carbon dioxide
4 equivalent of the nonfuel-related
5 greenhouse gases produced or
6 emitted by all nonfuel regulated
7 entities at facilities in the United
8 States during that period.

9 “(6) ALLOWANCES TO STATES.—

10 “(A) DISTRIBUTION.—The allowances
11 available for allocation to States under para-
12 graph (3) shall be distributed as follows:

13 “(i) For each year, $\frac{1}{2}$ of the quantity
14 of allowances available for allocation to
15 States under paragraph (3) shall be allo-
16 cated among the States based on the ratio
17 that—

18 “(I) the greenhouse gas emis-
19 sions of the State during the 3-year
20 period beginning on January 1, 2004;
21 bears to

22 “(II) the greenhouse gas emis-
23 sions of all States for that period.

24 “(ii) For each year, $\frac{1}{2}$ of the quantity
25 of allowances available for allocation to

1 States under paragraph (3) shall be allo-
2 cated among the States based on the ratio
3 that—

4 “(I) the population of the State,
5 as determined by the 2000 decennial
6 census; bears to

7 “(II) the population of all States
8 as determined by that census.

9 “(B) USE.—

10 “(i) IN GENERAL.—During any year,
11 a State shall use not less than 90 percent
12 of the allowances allocated to the State for
13 that year—

14 “(I) to mitigate impacts on low-
15 income energy consumers;

16 “(II) to promote energy effi-
17 ciency;

18 “(III) to promote investment in
19 nonemitting electricity generation
20 technology;

21 “(IV) to encourage advances in
22 energy technology that reduce or se-
23 quester greenhouse gas emissions;

24 “(V) to avoid distortions in com-
25 petitive electricity markets;

1 “(VI) to mitigate obstacles to in-
2 vestment by new entrants in elec-
3 tricity generation markets;

4 “(VII) to address local or re-
5 gional impacts of climate change pol-
6 icy, including providing assistance to
7 displaced workers;

8 “(VIII) to mitigate impacts on
9 energy-intensive industries in inter-
10 nationally-competitive markets; or

11 “(IX) to enhance energy security.

12 “(ii) DEADLINE.—A State shall allo-
13 cate allowances for use in accordance with
14 clause (i) by not later than 1 year before
15 the beginning of each allowance allocation
16 period.

17 **【“(6) *POSSIBLE* SUBSTITUTE FOR (6)】** dis-
18 tribution of allowances by president.—**】】**

19 **【“(A) IN GENERAL.—**The President shall
20 distribute the allowances available for allocation
21 by the President under paragraph (3) in a man-
22 ner designed to mitigate the undue impacts of
23 the program under this subtitle.**】**

24 **【“(B) USE.—**During any year, the Presi-
25 dent shall use not less than 90 percent of the

1 allowances available for allocation by the Presi-
2 dent for that year—】

3 【“(i) to mitigate impacts on low-in-
4 come energy consumers;】

5 【“(ii) to promote energy efficiency;】

6 【“(iii) to promote investment in non-
7 emitting electricity generation technology;】

8 【“(iv) to support advances in energy
9 technology that reduce or sequester green-
10 house gas emissions;】

11 【“(v) to avoid distortions in competi-
12 tive electricity markets;】

13 【“(vi) to mitigate obstacles to invest-
14 ment by new entrants in electricity genera-
15 tion markets;】

16 【“(vii) to address local or regional im-
17 pacts of climate change policy, including
18 providing assistance to displaced workers;】

19 【“(viii) to mitigate impacts on energy-
20 intensive industries in internationally-com-
21 petitive markets; and】

22 【“(ix) to enhance energy security.】

23 【“(C) DEADLINE.—The President shall al-
24 locate allowances for use in accordance with
25 subparagraph (B) by not later than 1 year be-

1 fore the beginning of each allowance allocation
2 period. **【Corresponding changes needed elsewhere**
3 ***if this paragraph is selected.*】**

4 “(7) COST OF ALLOWANCES.—The Secretary
5 shall distribute allowances under this subsection at
6 no cost to the recipient of the allowance.

7 “(b) AUCTION OF ALLOWANCES.—

8 “(1) IN GENERAL.—The Secretary shall estab-
9 lish, by rule, a procedure for the auction of a quan-
10 tity of allowances during each calendar year in ac-
11 cordance with paragraph (2).

12 “(2) BASE QUANTITY.—The base quantity of
13 allowances to be auctioned during a calendar year
14 shall be the product obtained by multiplying—

15 “(A) the total number of allowances for
16 the calendar year under subsection (a)(3) or
17 (b)(3) of section 1613; and

18 “(B) the auction percentage for the cal-
19 endar year under subsection (c).

20 “(3) SCHEDULE.—The auction of allowances
21 shall be held on the following schedule:

22 “(A) In 2009, the Secretary shall auc-
23 tion—

24 “(i) 1/2 of the allowances available for
25 auction for 2012; and

1 “(ii) 1/2 of the allowances available for
2 auction for 2013.

3 “(B) In 2010, the Secretary shall auction
4 1/2 of the allowances available for auction for
5 2014.

6 “(C) In 2011, the Secretary shall auction
7 1/2 of the allowances available for auction for
8 2015.

9 “(D) In 2012 and each subsequent cal-
10 endar year, the Secretary shall auction—

11 “(i) 1/2 of the allowances available for
12 auction for that calendar year; and

13 “(ii) 1/2 of the allowances available for
14 auction for the calendar year that is 4
15 years after that calendar year.

16 “(4) **UNDISTRIBUTED ALLOWANCES.**—In an
17 auction held during any calendar year, the Secretary
18 shall auction any allowance that was—

19 “(A) available for allocation by the Sec-
20 retary under subsection (a) for the calendar
21 year, but not distributed;

22 “(B) available during the preceding cal-
23 endar year for an agricultural sequestration or
24 early reduction activity under section 1620 or

1 1621, but not distributed during that calendar
2 year; or

3 “(C) available for distribution by a State
4 under subsection (a)(6), but not distributed by
5 the date that is 1 year before the beginning of
6 the applicable allocation period.

7 “(c) AVAILABLE PERCENTAGES.—Except as directed
8 under section 1622, the percentage of the total quantity
9 of allowances for each calendar year to be available for
10 allocation, agricultural sequestration and early reduction
11 projects, and auction shall be determined in accordance
12 with the following table:

Year	Percentage Allocated to Industry	Percentage Allocated to States	Percentage Available for Agri- cultural Sequestra- tion	Percentage Available for Early Reduction Allowances	Percentage Auctioned
2012 ...	55	29	5	1	10
2013 ...	55	29	5	1	10
2014 ...	55	29	5	1	10
2015 ...	55	29	5	1	10
2016 ...	55	29	5	1	10
2017 ...	53	29	5	1	12
2018 ...	51	29	5	1	14
2019 ...	49	29	5	1	16
2020 ...	47	29	5	1	18
2021 ...	45	29	5	1	20

Year	Percentage Allocated to Industry	Percentage Allocated to States	Percentage Available for Agri- cultural Sequestra- tion	Percentage Available for Early Reduction Allowances	Percentage Auctioned
2022 and thereaf- ter.	2 less than allocated to indus- try in the prior year, but not less than 0	30	5	0	2 more than available for auc- tion in the prior year, but not more than 65

1 **“SEC. 1615. SUBMISSION OF ALLOWANCES.**

2 “(a) REQUIREMENTS.—

3 “(1) REGULATED FUEL DISTRIBUTORS.—For
4 calendar year 2012 and each calendar year there-
5 after, each regulated fuel distributor shall submit to
6 the Secretary a number of allowances equal to the
7 carbon dioxide equivalent of the quantity of covered
8 fuel, determined in accordance with subsection
9 (b)(1), for the regulated fuel distributor.

10 “(2) NONFUEL REGULATED ENTITIES.—For
11 2012 and each calendar year thereafter, each
12 nonfuel regulated entity shall submit to the Sec-
13 retary a number of allowances equal to the carbon
14 dioxide equivalent of the quantity of nonfuel-related
15 greenhouse gas, determined in accordance with sub-
16 section (b)(2), for the nonfuel regulated entity.

17 “(b) REGULATED QUANTITIES.—

1 “(1) COVERED FUELS.—For purposes of sub-
2 section (a)(1), the quantity of covered fuel shall be
3 equal to—

4 “(A) for a petroleum refinery located in
5 the United States, the quantity of petroleum
6 products refined, produced, or consumed at the
7 refinery;

8 “(B) for a natural gas processing plant lo-
9 cated in the United States, a quantity equal to
10 the sum of—

11 “(i) the quantity of natural gas liq-
12 uids produced or consumed at the plant;
13 and

14 “(ii) the quantity of natural gas deliv-
15 ered into commerce from, or consumed at,
16 the plant;

17 “(C) for a coal mine located in the United
18 States, the quantity of coal produced or con-
19 sumed at the mine; and

20 “(D) for an importer of coal, petroleum
21 products, or natural gas liquids into the United
22 States, the quantity of coal, petroleum prod-
23 ucts, or natural gas liquids imported into the
24 United States.

1 “(2) NONFUEL-RELATED GREENHOUSE
2 GASES.—For purposes of subsection (a)(2), the
3 quantity of nonfuel-related greenhouse gas shall be
4 equal to—

5 “(A) for a manufacturer or importer of
6 hydrofluorocarbons, perfluorocarbons, sulfur
7 hexafluoride, or nitrous oxide, the quantity of
8 hydrofluorocarbons, perfluorocarbons, sulfur
9 hexafluoride, or nitrous oxide produced or im-
10 ported by the manufacturer or importer;

11 “(B) for an underground coal mine, the
12 quantity of methane emitted by the coal mine;

13 “(C) for a facility that manufactures adipic
14 acid or nitric acid, the quantity of nitrous oxide
15 emitted by the facility;

16 “(D) for an aluminum smelter, the quan-
17 tity of perfluorocarbons emitted by the smelter;
18 and

19 “(E) for a facility that produces
20 hydrochlorofluorocarbon-22, the quantity of
21 hydrofluorocarbon-23 emitted by the facility.

22 “(3) ADJUSTMENTS.—

23 “(A) REGULATED FUEL DISTRIBUTORS.—

24 “(i) Modification.—The Secretary
25 may modify, by rule, a quantity of covered

1 fuels under paragraph (1) if the Secretary
2 determines that the modification is nec-
3 essary to ensure that—

4 “(I) allowances are submitted for
5 all units of covered fuel; and

6 “(II) allowances are not sub-
7 mitted for the same quantity of cov-
8 ered fuel by more than 1 regulated
9 fuel distributor.

10 “(ii) EXTENSION.—The Secretary
11 may extend, by rule, the requirement to
12 submit allowances under subsection (a)(1)
13 to an entity that is not a regulated fuel
14 distributor if the Secretary determines that
15 the extension is necessary to ensure that
16 allowances are submitted for all covered
17 fuels.

18 “(B) NONFUEL REGULATED ENTITIES.—
19 The Secretary may modify, by rule, a quantity
20 of nonfuel-related greenhouse gases under para-
21 graph (2) if the Secretary determines the modi-
22 fication is necessary to ensure that allowances
23 are not submitted for the same volume of
24 nonfuel-related greenhouse gas by more than 1
25 regulated entity.

1 “(c) DEADLINE FOR SUBMISSION.—Any entity re-
2 quired to submit an allowance to the Secretary under this
3 section shall submit the allowance not later than March
4 31 of the calendar year following the calendar year for
5 which the allowance is required to be submitted.

6 “(d) REGULATIONS.—The Secretary shall promul-
7 gate such regulations as the Secretary determines to be
8 necessary or appropriate to—

9 “(1) identify and register each regulated entity
10 that is required to submit an allowance under this
11 section; and

12 “(2) require the submission of reports and oth-
13 erwise obtain any information the Secretary deter-
14 mines to be necessary to calculate or verify the com-
15 pliance of a regulated entity with any requirement
16 under this section.

17 “(e) EXEMPTION AUTHORITY FOR NON-FUEL REGU-
18 LATED ENTITIES.—

19 “(1) IN GENERAL.—Except as provided in para-
20 graph (2), the Secretary may exempt from the re-
21 quirements of this subtitle an entity that emits,
22 manufactures, or imports nonfuel-related greenhouse
23 gases for any period during which the Secretary de-
24 termines, after providing an opportunity for public
25 comment, that measuring or estimating the quantity

1 of greenhouse gases emitted, manufactured, or im-
2 ported by the entity is not feasible.

3 “(2) EXCLUSION.—The Secretary may not ex-
4 empt a regulated fuel distributor from the require-
5 ments of this subtitle under paragraph (1).

6 “(f) RETIREMENT OF ALLOWANCES.—

7 “(1) IN GENERAL.—Any person or entity that
8 is not subject to this subtitle may submit to the Sec-
9 retary an allowance for retirement at any time.

10 “(2) ACTION BY SECRETARY.—On receipt of an
11 allowance under paragraph (1), the Secretary—

12 “(A) shall accept the allowance; and

13 “(B) shall not allocate, auction, or other-
14 wise reissue the allowance.

15 “(g) SUBMISSION OF CREDITS.—A regulated entity
16 may submit a credit distributed by the Secretary pursuant
17 to section 1618, 1619, or 1622(e) in lieu of an allowance.

18 “(h) CLEAN DEVELOPMENT MECHANISM CERTIFIED
19 EMISSION REDUCTIONS.—

20 “(1) IN GENERAL.—The Secretary shall estab-
21 lish, by regulation, procedures under which a regu-
22 lated entity may submit a clean development mecha-
23 nism certified emission reduction in lieu of an allow-
24 ance under this section.

1 “(2) CLEAR TITLE AND PREVENTION OF DOU-
2 BLE-COUNTING.—Procedures established by the Sec-
3 retary under this subsection shall include such provi-
4 sions as the Secretary considers to be appropriate to
5 ensure that—

6 “(A) a regulated entity that submits a
7 clean development mechanism certified emission
8 reduction in lieu of an allowance has clear title
9 to that certified emission reduction; and

10 “(B) a clean development mechanism cer-
11 tified emission reduction submitted in lieu of an
12 allowance has not been and cannot be used in
13 the future for compliance purposes under any
14 foreign greenhouse gas regulatory program.

15 “(i) STUDY ON PROCESS EMISSIONS.—

16 “(1) IN GENERAL.—Not later than
17 [_____], the Secretary shall—

18 “(A) carry out a study of the feasibility of
19 requiring the submission of allowances for proc-
20 ess emissions not otherwise covered by this sub-
21 title; and

22 “(B) submit to Congress a report that de-
23 scribes the results of the study (including rec-
24 ommendations of the Secretary based on those
25 results).

1 **“SEC. 1616. SAFETY VALVE.**

2 “The Secretary shall accept from a regulated entity
3 a payment of the applicable safety valve price for a cal-
4 endar year in lieu of submission of an allowance under
5 section 1615 for that calendar year.

6 **“SEC. 1617. ALLOWANCE TRADING SYSTEM.**

7 “(a) IN GENERAL.—The Secretary shall—

8 “(1) establish, by rule, a trading system under
9 which allowances and credits may be sold, ex-
10 changed, purchased, or transferred by any person or
11 entity, including a registry for issuing, recording,
12 and tracking allowances and credits; and

13 “(2) specify all procedures and requirements re-
14 quired for orderly functioning of the trading system.

15 “(b) TRANSPARENCY.—

16 “(1) IN GENERAL.—The trading system under
17 subsection (a) shall include such provisions as the
18 Secretary considers to be appropriate to—

19 “(A) facilitate price transparency and par-
20 ticipation in the market for allowances and
21 credits; and

22 “(B) protect buyers and sellers of allow-
23 ances and credits, and the public, from the ad-
24 verse effects of collusion and other anticompeti-
25 tive behaviors.

1 “(2) AUTHORITY TO OBTAIN INFORMATION.—

2 The Secretary may obtain any information the Sec-
3 retary considers to be necessary to carry out this
4 section from any person or entity that buys, sells,
5 exchanges, or otherwise transfers an allowance or
6 credit.

7 “(c) BANKING.—Any allowance or credit may be sub-
8 mitted for compliance during any year following the year
9 for which the allowance or credit was issued.

10 **“SEC. 1618. CREDITS FOR FEEDSTOCKS AND EXPORTS.**

11 “(a) IN GENERAL.—The Secretary shall establish, by
12 rule, a program under which the Secretary distributes
13 credits to entities in accordance with this section.

14 “(b) USE OF FUELS AS FEEDSTOCKS.—If the Sec-
15 retary determines that an entity has used a covered fuel
16 as a feedstock so that the carbon dioxide associated with
17 the covered fuel will not be emitted, the Secretary shall
18 distribute to that entity, for 2012 and each subsequent
19 calendar year, a quantity of credits equal to the quantity
20 of covered fuel used as feedstock by the entity during that
21 year, measured in carbon dioxide equivalents.

22 “(c) EXPORTERS OF COVERED FUEL.—If the Sec-
23 retary determines that an entity has exported covered fuel,
24 the Secretary shall distribute to that entity, for 2012 and
25 each subsequent calendar year, a quantity of credits equal

1 to the quantity of covered fuel exported by the entity dur-
2 ing that year, measured in carbon dioxide equivalents.

3 “(d) OTHER EXPORTERS.—If the Secretary deter-
4 mines that an entity has exported hydrofluorocarbons,
5 perfluorocarbons, sulfur hexafluoride, or nitrous oxide, the
6 Secretary shall distribute to that entity, for 2012 and each
7 subsequent calendar year, a quantity of credits equal to
8 the volume of hydrofluorocarbons, perfluorocarbons, sulfur
9 hexafluoride, or nitrous oxide exported by the entity dur-
10 ing that year, measured in carbon dioxide equivalents.

11 **“SEC. 1619. CREDITS FOR OFFSET PROJECTS.**

12 “(a) ESTABLISHMENT.—The Secretary shall estab-
13 lish, by regulation, a program under which the Secretary
14 shall distribute credits to entities that carry out offset
15 projects in the United States that—

16 “(1)(A) reduce any greenhouse gas emissions
17 that are not covered greenhouse gas emissions; or

18 “(B) sequester a greenhouse gas;

19 “(2) meet the requirements of section 1623(c);
20 and

21 “(3) are consistent with maintaining the envi-
22 ronmental integrity of the program under this sub-
23 title.

24 “(b) CATEGORIES OF OFFSET PROJECTS ELIGIBLE
25 FOR STREAMLINED PROCEDURES.—

1 “(1) IN GENERAL.—The program established
2 under this section shall include the use of stream-
3 lined procedures for distributing credits to categories
4 of projects for which the Secretary determines there
5 are broadly-accepted standards or methodologies for
6 quantifying and verifying the greenhouse gas emis-
7 sion mitigation benefits of the projects.

8 “(2) CATEGORIES OF PROJECTS.—The stream-
9 lined procedures described in paragraph (1) shall
10 apply to—

11 “(A) geologic sequestration projects not in-
12 volving enhanced oil recovery;

13 “(B) landfill methane use projects;

14 “(C) animal waste or municipal wastewater
15 methane use projects;

16 “(D) projects to reduce sulfur hexafluoride
17 emissions from transformers;

18 “(E) projects to destroy
19 hydrofluorocarbons; and

20 “(F) such other categories of projects as
21 the Secretary may specify by regulation.

22 “(c) OTHER PROJECTS.—With respect to an offset
23 project that is eligible to be carried out under this section
24 but that is not classified within any project category de-

1 scribed in subsection (b), the Secretary may distribute
2 credits on a basis of less than 1-credit-for-1-ton.

3 “(d) INELIGIBLE OFFSET PROJECTS.—An offset
4 project shall not be eligible to receive a credit under this
5 section if the offset project is eligible to receive credits
6 or allowances under section 1618, 1620, 1621, or 1622(e).

7 **“SEC. 1620. EARLY REDUCTION ALLOWANCES.**

8 “(a) ESTABLISHMENT.—The Secretary shall estab-
9 lish, by rule, a program under which the Secretary distrib-
10 utes to any entity that carries out a project to reduce or
11 sequester greenhouse gas emissions before the initial allo-
12 cation period a quantity of allowances that reflects the ac-
13 tual emissions reductions or net sequestration of the
14 project, as determined by the Secretary.

15 “(b) AVAILABLE ALLOWANCES.—The total quantity
16 of allowances distributed under subsection (a) may not ex-
17 ceed the product obtained by multiplying—

18 “(1) the total number of allowances issued for
19 the calendar year under subsection (a)(3) of section
20 1613; and

21 “(2) the percentage available for early reduction
22 allowances for the calendar year under section
23 1614(c).

24 “(c) ELIGIBILITY.—The Secretary may distribute al-
25 lowances for early reduction projects only to an entity that

1 has reported the reduced or sequestered greenhouse gas
2 emissions under—

3 “(1) the Voluntary Reporting of Greenhouse
4 Gases Program of the Energy Information Adminis-
5 tration under section 1605(b) of the Energy Policy
6 Act of 1992 (42 U.S.C. 13385(b));

7 “(2) the Climate Leaders Program of the Envi-
8 ronmental Protection Agency; or

9 “(3) a State-administered or privately-adminis-
10 tered registry that includes early reduction actions
11 not covered under the programs described in para-
12 graphs (1) and (2).

13 **“SEC. 1621. AGRICULTURAL SEQUESTRATION PROJECTS.**

14 “(a) ESTABLISHMENT.—The Secretary of Agri-
15 culture shall establish, by rule, a program under which
16 agricultural sequestration allowances are distributed to
17 entities that carry out soil carbon sequestration projects
18 **【and other projects?】** that—

19 “(1) meet the requirements of section 1623(c);
20 and

21 “(2) achieve sequestration results that are—

22 “(A) greater than sequestration results
23 achieved pursuant to standard agricultural
24 practices; and

25 **【“(B) long-term.】**

1 “(b) QUANTITY.—During a calendar year, the Sec-
2 retary of Agriculture shall distribute agricultural seques-
3 tration allowances in a quantity not greater than the prod-
4 uct obtained by multiplying—

5 “(1) the total number of allowances issued for
6 the calendar year under section 1613; and

7 “(2) the percentage of allowances available for
8 agricultural sequestration under section 1614(c).

9 “(c) OVERSUBSCRIPTION.—If, during a calendar
10 year, the qualifying agricultural sequestration exceeds the
11 quantity of agricultural sequestration allowances available
12 for distribution under subsection (b), the Secretary of Ag-
13 riculture may distribute allowances on a basis of less than
14 1-allowance-for-1-ton.

15 **“SEC. 1622. CONGRESSIONAL REVIEW.**

16 “(a) INTERAGENCY REVIEW.—

17 “(1) IN GENERAL.—Not later than January 15,
18 2016, and every 5 years thereafter, the President
19 shall establish an interagency group to review and
20 make recommendations relating to—

21 “(A) each program under this subtitle; and

22 “(B) any similar program of a foreign
23 country described in paragraph (2).

24 “(2) COUNTRIES TO BE REVIEWED.—An inter-
25 agency group established under paragraph (1) shall

1 review actions and programs relating to greenhouse
2 gas emissions of—

3 “(A) each member country (other than the
4 United States) of the Organisation for Eco-
5 nomic Co-operation and Development;

6 “(B) China;

7 “(C) India;

8 “(D) Brazil;

9 “(E) Mexico;

10 “(F) Russia; and

11 “(G) Ukraine.

12 “(3) INCLUSIONS.—A review under paragraph
13 (1) shall—

14 “(A) for the countries described in para-
15 graph (2), analyze whether the countries that
16 are the highest emitting countries and, collec-
17 tively, contribute at least 75 percent of the total
18 greenhouse gas emissions of those countries
19 have taken action that—

20 “(i) in the case of member countries
21 of the Organisation for Economic Co-Oper-
22 ation and Development, is comparable to
23 that of the United States; and

24 “(ii) in the case of China, India,
25 Brazil, Mexico, Russia, and Ukraine, is

1 significant, contemporaneous, and equi-
2 table compared to action taken by the
3 United States;

4 “(B) analyze whether each of the 5 largest
5 trading partners of the United States, as of the
6 date on which the review is conducted, has
7 taken action with respect to greenhouse gas
8 emissions that is comparable to action taken by
9 the United States;

10 “(C) analyze whether the programs estab-
11 lished under this subtitle have contributed to an
12 increase in electricity imports from Canada or
13 Mexico; and

14 “(D) make recommendations with respect
15 to whether—

16 “(i) the rate of reduction of emissions
17 intensity under subsection (a)(2) or (b)(2)
18 of section 1613 should be modified; and

19 “(ii) the rate of increase of the safety
20 valve price should be modified.

21 “(4) SUPPLEMENTARY REVIEW ELEMENTS.—A
22 review under paragraph (1) may include an analysis
23 of—

24 “(A) the feasibility of regulating owners or
25 operators of entities that—

1 “(i) emit nonfuel-related greenhouse
2 gases; and

3 “(ii) that are not subject to this sub-
4 title;

5 “(B) whether the percentage of allowances
6 for any calendar year that are auctioned under
7 section 1614(c) should be modified;

8 “(C) whether regulated entities should be
9 allowed to submit credits issued under foreign
10 greenhouse gas regulatory programs in lieu of
11 allowances under section 1615;

12 “(D) whether the Secretary should dis-
13 tribute credits for offset projects carried out
14 outside the United States that do not receive
15 credit under a foreign greenhouse gas program;
16 and

17 “(E) whether and how the value of allow-
18 ances or credits banked for use during a future
19 year should be discounted if an acceleration in
20 the rate of increase of the safety valve price is
21 recommended under paragraph (3)(D)(ii).

22 “(5) NATIONAL RESEARCH COUNCIL RE-
23 PORTS.—The President may request such reports
24 from the National Research Council as the President
25 determines to be necessary and appropriate to sup-

1 port the interagency review process under this sub-
2 section.

3 “(b) REPORT.—

4 “(1) IN GENERAL.—Not later than January 15,
5 2017, and every 5 years thereafter, the President
6 shall submit to the House of Representatives and
7 the Senate a report describing any recommendation
8 of the President with respect to changes in the pro-
9 grams under this subtitle.

10 “(2) RECOMMENDATIONS.—A recommendation
11 under paragraph (1) shall take into consideration
12 the results of the most recent interagency review
13 under subsection (a).

14 “(c) CONGRESSIONAL ACTION.—

15 “(1) CONSIDERATION.—Not later than Sep-
16 tember 30 of any calendar year during which a re-
17 port is to be submitted under subsection (b), the
18 House of Representatives and the Senate may con-
19 sider a joint resolution, in accordance with para-
20 graph (2), that—

21 “(A) amends subsection (a)(2) or (b)(2) of
22 section 1613;

23 “(B) modifies the safety valve price; or

24 “(C) modifies the percentage of allowances
25 to be allocated under section 1614(c).

1 calendar year 2022 and thereafter and in-
 2 serting the following:

Year	Percent- age Allo- cated to Industry	Percent- age Allo- cated to States	Percent- age Avail- able for Agricul- tural Se- questra- tion	Percent- age Avail- able for Early Re- duction Allow- ances	Percent- age Auc- tioned
2022 and thereafter ...	_____	_____	_____	_____	_____

3 “(3) APPLICABLE LAW.—Subsections (b)
 4 through (g) of section 802 of title 5, United States
 5 Code, shall apply to any joint resolution under this
 6 subsection.

7 “(d) FOREIGN CREDITS.—

8 “(1) REGULATIONS.—After taking into consid-
 9 eration the initial interagency review under section
 10 (a), the Secretary may promulgate regulations that
 11 authorize regulated entities to submit credits issued
 12 under foreign greenhouse gas regulatory programs
 13 in lieu of allowances under section 1615.

14 “(2) COMPARABLE PROGRAMS AND PREVEN-
 15 TION OF DOUBLE-COUNTING.—Regulations promul-
 16 gated by the Secretary under paragraph (1) shall en-
 17 sure that foreign credits submitted in lieu of allow-
 18 ances are—

19 “(A) from foreign greenhouse gas regu-
 20 latory programs that the Secretary determines

1 to have a level of environmental integrity that
2 is not less than the level of environmental integ-
3 rity of the programs under this subtitle; and

4 “(B) not also submitted for use in achiev-
5 ing compliance under any foreign greenhouse
6 gas regulatory program.

7 “(e) INTERNATIONAL OFFSETS PROJECTS.—

8 “(1) ACTION BY THE SECRETARY.—After tak-
9 ing into consideration the results of the initial inter-
10 agency review under section (a), the Secretary may
11 promulgate regulations establishing a program under
12 which the Secretary distributes credits to entities
13 that—

14 “(A) carry out offset projects outside the
15 United States that meet the requirements of
16 section 1623(c);

17 “(B) maintain the environment integrity of
18 the program under this subtitle; and

19 “(C) do not receive credits issued under a
20 foreign greenhouse gas regulatory program.

21 “(2) STREAMLINED PROCEDURES AND PREVEN-
22 TION OF DOUBLE-COUNTING.—Regulations promul-
23 gated by the Secretary under the paragraph (1)
24 shall—

1 “(A) have streamlined procedures for dis-
2 tributing credits to projects for which the Sec-
3 retary determines there are broadly-accepted
4 standards or methodologies for quantifying and
5 verifying the greenhouse gas emission mitiga-
6 tion benefits of the projects; and

7 “(B) ensure that offset project reductions
8 credited under the program are not also cred-
9 ited under foreign programs.

10 **“SEC. 1623. MONITORING AND REPORTING.**

11 “(a) IN GENERAL.—The Secretary shall require, by
12 rule, that a regulated entity shall perform such monitoring
13 and submit such reports as the Secretary determines to
14 be necessary to carry out this subtitle.

15 “(b) SUBMISSION OF INFORMATION.—The Secretary
16 shall establish, by rule, any procedure the Secretary deter-
17 mines to be necessary to ensure the completeness, consist-
18 ency, transparency, and accuracy of reports under sub-
19 section (a), including—

20 “(1) accounting and reporting standards for
21 covered greenhouse gas emissions;

22 “(2) standardized methods of calculating cov-
23 ered greenhouse gas emissions in specific industries
24 from other information the Secretary determines to
25 be available and reliable, such as energy consump-

1 tion data, materials consumption data, production
2 data, or other relevant activity data;

3 “(3) if the Secretary determines that a method
4 described in paragraph (2) is not feasible for a regu-
5 lated entity, a standardized method of estimating
6 covered greenhouse gas emissions of the regulated
7 entity;

8 “(4) a method of avoiding double counting of
9 covered greenhouse gas emissions;

10 “(5) a procedure to prevent a regulated entity
11 from avoiding the requirements of this subtitle by—

12 “(A) reorganization into multiple entities;

13 or

14 “(B) outsourcing the operations or activi-
15 ties of the regulated entity with respect to cov-
16 ered greenhouse gas emissions; and

17 “(6) a procedure for the verification of data re-
18 lating to covered greenhouse gas emissions by—

19 “(A) regulated entities; and

20 “(B) independent verification organiza-
21 tions.

22 “(c) DETERMINING ELIGIBILITY FOR CREDITS, AG-
23 RICULTURAL SEQUESTRATION ALLOWANCES, AND EARLY
24 REDUCTION ALLOWANCES.—

1 “(1) IN GENERAL.—An entity shall provide the
2 Secretary with the information described in para-
3 graph (2) in connection with any application to re-
4 ceive—

5 “(A) a credit under section 1618, 1619, or
6 1622(e);

7 “(B) an early reduction allowance under
8 section 1620 (unless, and to the extent that, the
9 Secretary determines that providing the infor-
10 mation would not be feasible for the entity); or

11 “(C) an agricultural sequestration allow-
12 ance under section 1621.

13 “(2) REQUIRED INFORMATION.—

14 “(A) GREENHOUSE GAS EMISSIONS RE-
15 DUCTION.—In the case of a greenhouse gas
16 emissions reduction, the entity shall provide the
17 Secretary with information verifying that, as
18 determined by the Secretary—

19 “(i) the entity has achieved an actual
20 reduction in greenhouse gas emissions—

21 “(I) relative to historic emissions
22 levels of the entity; and

23 “(II) taking into consideration
24 any increase in other greenhouse gas
25 emissions of the entity; and

1 “(ii) if the reduction exceeds the net
2 reduction of direct greenhouse gas emis-
3 sions of the entity, the entity reported a
4 reduction that was adjusted so as not to
5 exceed the net reduction.

6 “(B) GREENHOUSE GAS SEQUESTRA-
7 TION.—In the case of a greenhouse gas seques-
8 tration, the entity shall provide the Secretary
9 with information verifying that, as determined
10 by the Secretary, the entity has achieved actual
11 increases in net sequestration, taking into ac-
12 count the total use of materials and energy by
13 the entity in carrying out the sequestration.

14 **“SEC. 1624. ENFORCEMENT.**

15 “(a) FAILURE TO SUBMIT ALLOWANCES.—

16 “(1) PAYMENT TO SECRETARY.—A regulated
17 entity that fails to submit an allowance (or the safe-
18 ty valve price in lieu of an allowance) for a calendar
19 year not later than March 31 of the following cal-
20 endar year shall pay to the Secretary, for each al-
21 lowance the regulated entity failed to submit, an
22 amount equal to the product obtained by multi-
23 plying—

24 “(A) the safety valve price for that cal-
25 endar year; and

1 “(B) 3.

2 “(2) FAILURE TO PAY.—A regulated entity that
3 fails to make a payment to the Secretary under
4 paragraph (1) by December 31 of the calendar year
5 following the calendar year for which the payment is
6 due shall be subject to subsection (b) or (c), or both.

7 “(b) CIVIL ENFORCEMENT.—

8 “(1) PENALTY.—A person that the Secretary
9 determines to be in violation of this subtitle shall be
10 subject to a civil penalty of not more than \$25,000
11 for each day during which the entity is in violation,
12 in addition to any amount required under subsection
13 (a)(1).

14 “(2) INJUNCTION.—The Secretary may bring a
15 civil action for a temporary or permanent injunction
16 against any person described in paragraph (1).

17 “(c) CRIMINAL PENALTIES.—A person that willfully
18 fails to comply with this subtitle shall be subject to a fine
19 under title 18, United States Code, or imprisonment for
20 not to exceed 5 years, or both.

21 **“SEC. 1625. JUDICIAL REVIEW.**

22 “(a) IN GENERAL.—Except as provided in subsection
23 (b), section 336(b) of the Energy Policy and Conservation
24 Act (42 U.S.C. 6306(b)) shall apply to a review of any
25 rule issued under this subtitle in the same manner, and

1 to the same extent, that section applies to a rule issued
2 under sections 323, 324, and 325 of that Act (42 U.S.C.
3 6293, 6294, 6295).

4 “(b) EXCEPTION.—A petition for review of a rule
5 under this subtitle shall be filed in the United States
6 Court of Appeals for the District of Columbia.

7 **“SEC. 1626. ADMINISTRATIVE PROVISIONS.**

8 “(a) RULES AND ORDERS.—The Secretary may issue
9 such rules and orders as the Secretary determines to be
10 necessary or appropriate to carry out this subtitle.

11 “(b) DATA.—

12 “(1) IN GENERAL.—In carrying out this sub-
13 title, the Secretary may use any authority provided
14 under section 11 of the Energy Supply and Environ-
15 mental Coordination Act of 1974 (15 U.S.C. 796).

16 “(2) DEFINITION OF ENERGY INFORMATION.—
17 For the purposes of carrying out this subtitle, the
18 definition of the term ‘energy information’ under
19 section 11 of the Energy Supply and Environmental
20 Coordination Act of 1974 (15 U.S.C. 796) shall be
21 considered to include any information the Secretary
22 determines to be necessary or appropriate to carry
23 out this subtitle.

24 **“SEC. 1627. EARLY TECHNOLOGY DEPLOYMENT.**

25 “(a) TRUST FUND.—

1 “(1) ESTABLISHMENT.—There is established in
2 the Treasury a trust fund, to be known as the ‘Cli-
3 mate Change Trust Fund’ (referred to in this sec-
4 tion as the ‘Trust Fund’).

5 “(2) DEPOSITS.—The Secretary shall deposit
6 into the Trust Fund any funds received by the Sec-
7 retary under section 1614(b) or 1616.

8 “(3) MAXIMUM CUMULATIVE AMOUNT.—Not
9 more than \$50,000,000,000 may be deposited into
10 the Trust Fund.

11 “(b) DISTRIBUTION.—Beginning in fiscal year 2010,
12 the Secretary shall transfer any funds deposited into the
13 Trust Fund during the previous fiscal year as follows:

14 “(1) ZERO- OR LOW-CARBON ENERGY TECH-
15 NOLOGIES.—50 percent of the funds shall be trans-
16 ferred to the Secretary to carry out the zero- or low-
17 carbon energy technologies program under sub-
18 section (c).

19 “(2) ADVANCED ENERGY TECHNOLOGIES IN-
20 CENTIVE PROGRAM.—35 percent of the funds shall
21 be transferred as follows:

22 “(A) ADVANCED COAL TECHNOLOGIES.—
23 28 percent shall be transferred to the Secretary
24 to carry out the advanced coal and sequestra-
25 tion technologies program under subsection (d).

1 “(B) CELLULOSIC BIOMASS.—7 percent
2 shall be transferred to the Secretary to carry
3 out—

4 “(i) the cellulosic biomass ethanol and
5 municipal solid waste loan guarantee pro-
6 gram under section 212(b) of the Clean
7 Air Act (42 U.S.C. 7546(b));

8 “(ii) the cellulosic biomass ethanol
9 conversion assistance program under sec-
10 tion 212(e) of that Act (42 U.S.C.
11 7546(e)); and

12 “(iii) the fuel from cellulosic biomass
13 program under subsection (e).

14 “(3) ADVANCED TECHNOLOGY VEHICLES.—15
15 percent shall be transferred to the Secretary to carry
16 out the advanced technology vehicles manufacturing
17 incentive program under subsection (f).

18 “(c) ZERO- OR LOW-CARBON ENERGY TECH-
19 NOLOGIES DEPLOYMENT.—

20 “(1) DEFINITIONS.—In this subsection:

21 “(A) ENERGY SAVINGS.—The term ‘energy
22 savings’ means megawatt-hours of electricity or
23 million British thermal units of natural gas
24 saved by a product, in comparison to projected

1 energy consumption under the energy efficiency
2 standard applicable to the product.

3 “(B) HIGH-EFFICIENCY CONSUMER PROD-
4 UCT.—The term ‘high-efficiency consumer prod-
5 uct’ means a covered product to which an en-
6 ergy conservation standard applies under sec-
7 tion 325 of the Energy Policy and Conservation
8 Act (42 U.S.C. 6295), if the energy efficiency
9 of the product exceeds the energy efficiency re-
10 quired under the standard.

11 “(C) ZERO- OR LOW-CARBON GENERA-
12 TION.—The term ‘zero- or low-carbon genera-
13 tion’ means generation of electricity by an elec-
14 tric generation unit that—

15 “(i) emits no carbon dioxide into the
16 atmosphere, or is fossil-fuel fired and emits
17 into the atmosphere not more than 250
18 pounds of carbon dioxide per megawatt-
19 hour (after adjustment for any carbon di-
20 oxide from the unit that is geologically se-
21 questered); and

22 “(ii) was placed into commercial serv-
23 ice after the date of enactment of this Act.

24 “(2) FINANCIAL INCENTIVES PROGRAM.—Dur-
25 ing each fiscal year beginning on or after October 1,

1 2008, the Secretary shall competitively award finan-
2 cial incentives under this subsection in the following
3 technology categories:

4 “(A) Production of electricity from new
5 zero- or low-carbon generation.

6 “(B) Manufacture of high-efficiency con-
7 sumer products.

8 “(3) REQUIREMENTS.—

9 “(A) IN GENERAL.—The Secretary shall
10 make awards under this subsection to producers
11 of new zero- or low-carbon generation and to
12 manufacturers of high-efficiency consumer
13 products—

14 “(i) in the case of producers of new
15 zero- or low-carbon generation, based on
16 the bid of each producer in terms of dol-
17 lars per megawatt-hour of electricity gen-
18 erated; and

19 “(ii) in the case of manufacturers of
20 high-efficiency consumer products, based
21 on the bid of each manufacturer in terms
22 of dollars per megawatt-hour or million
23 British thermal units saved.

24 “(B) ACCEPTANCE OF BIDS.—

1 “(i) IN GENERAL.—In making awards
2 under this subsection, the Secretary
3 shall—

4 “(I) solicit bids for reverse auc-
5 tion from appropriate producers and
6 manufacturers, as determined by the
7 Secretary; and

8 “(II) award financial incentives
9 to the producers and manufacturers
10 that submit the lowest bids that meet
11 the requirements established by the
12 Secretary.

13 “(ii) FACTORS FOR CONVERSION.—

14 “(I) IN GENERAL.—For the pur-
15 pose of assessing bids under clause
16 (i), the Secretary shall specify a factor
17 for converting megawatt-hours of elec-
18 tricity and million British thermal
19 units of natural gas to common units.

20 “(II) REQUIREMENT.—The con-
21 version factor shall be based on the
22 relative greenhouse gas emission bene-
23 fits of electricity and natural gas con-
24 servation.

1 “(C) INELIGIBLE UNITS.—A new unit for
2 the generation of electricity that uses renewable
3 energy resources shall not be eligible to receive
4 an award under this subsection if the unit re-
5 ceives renewable energy credits under a Federal
6 renewable portfolio standard.

7 “(4) FORMS OF AWARDS.—

8 “(A) ZERO- AND LOW-CARBON GENERA-
9 TORS.—An award for zero- or low-carbon gen-
10 eration under this subsection shall be in the
11 form of a contract to provide a production pay-
12 ment for each year during the first 10 years of
13 commercial service of the generation unit in an
14 amount equal to the product obtained by multi-
15 plying—

16 “(i) the amount bid by the producer
17 of the zero- or low-carbon generation; and

18 “(ii) the megawatt-hours estimated to
19 be generated by the zero- or low-carbon
20 generation unit each year.

21 “(B) HIGH-EFFICIENCY CONSUMER PROD-
22 UCTS.—An award for a high-efficiency con-
23 sumer product under this subsection shall be in
24 the form of a lump sum payment in an amount
25 equal to the product obtained by multiplying—

1 “(i) the amount bid by the manufac-
2 turer of the high-efficiency consumer prod-
3 uct; and

4 “(ii) the energy savings during the
5 projected useful life of the high-efficiency
6 consumer product, not to exceed 10 years,
7 as determined under rules issued by the
8 Secretary.

9 “(d) ADVANCED COAL AND SEQUESTRATION TECH-
10 NOLOGIES PROGRAM.—

11 “(1) ADVANCED COAL TECHNOLOGIES.—

12 “(A) DEFINITION OF ADVANCED COAL
13 GENERATION TECHNOLOGY.—In this para-
14 graph, the term ‘advanced coal generation tech-
15 nology’ means integrated gasification combined
16 cycle or other advanced coal-fueled power plant
17 technologies that—

18 “(i) have a minimum of 50 percent
19 coal heat input on an annual basis;

20 “(ii) provide a technical pathway for
21 carbon capture and storage; and

22 “(iii) provide a technical pathway for
23 co-production of a hydrogen slip-stream.

24 “(B) DEPLOYMENT INCENTIVES.—

1 “(i) IN GENERAL.—The Secretary
2 shall use 1/2 of the funds provided to carry
3 out this subsection during each fiscal year
4 to provide Federal financial incentives to
5 facilitate the deployment of not more than
6 20 gigawatts of advanced coal generation
7 technologies.

8 “(ii) ADMINISTRATION.—In providing
9 incentives under clause (i), the Secretary
10 shall—

11 “(I) provide appropriate incen-
12 tives for regulated investor-owned util-
13 ities, municipal utilities, electric co-
14 operatives, and independent power
15 producers, as determined by the Sec-
16 retary; and

17 “(II) ensure that a range of the
18 domestic coal types is employed in the
19 facilities that receive incentives under
20 this subparagraph.

21 “(C) FUNDING PRIORITIES.—

22 “(i) PROJECTS USING CERTAIN
23 COALS.—In providing incentives under this
24 paragraph, the Secretary shall set aside
25 not less than 25 percent of any funds

1 made available to carry out this paragraph
2 for projects using lower rank coals, such as
3 subbituminous coal and lignite.

4 “(ii) SEQUESTRATION ACTIVITIES.—
5 After the Secretary has made awards for
6 2000 megawatts of capacity under this
7 paragraph, the Secretary shall give priority
8 to projects that will capture and sequester
9 emissions of carbon dioxide, as determined
10 by the Secretary.

11 “(D) DISTRIBUTION OF FUNDS.—A project
12 that receives an award under this paragraph
13 may elect 1 of the following Federal financial
14 incentives:

15 “(i) A loan guarantee under section
16 1403(b).

17 “(ii) A cost-sharing grant for not
18 more than 50 percent of the cost of the
19 project.

20 “(iii) Production payments of not
21 more than 1.5 cents per kilowatt-hour of
22 electric output during the first 10 years of
23 commercial service of the project.

1 “(E) LIMITATION.—A project may not re-
2 ceive an award under this subsection if the
3 project receives an award under subsection (c).

4 “(2) SEQUESTRATION.—

5 “(A) IN GENERAL.—The Secretary shall
6 use ½ of the funds provided to carry out this
7 subsection during each fiscal year for large-
8 scale geologic carbon storage demonstration
9 projects that use carbon dioxide captured from
10 facilities for the generation of electricity using
11 coal gasification or other advanced coal combus-
12 tion processes, including facilities that receive
13 assistance under paragraph (1).

14 “(B) PROJECT CAPITAL AND OPERATING
15 COSTS.—The Secretary shall provide assistance
16 under this paragraph to reimburse the project
17 owner for a percentage of the incremental
18 project capital and operating costs of the
19 project that are attributable to carbon capture
20 and sequestration, as the Secretary determines
21 to be appropriate.

22 “(e) FUEL FROM CELLULOSIC BIOMASS.—

23 “(1) IN GENERAL.—The Secretary shall provide
24 deployment incentives under this subsection to en-
25 courage a variety of projects to produce transpor-

1 tation fuels from cellulosic biomass, relying on dif-
2 ferent feedstocks in different regions of the United
3 States.

4 “(2) PROJECT ELIGIBILITY.—Incentives under
5 this paragraph shall be provided on a competitive
6 basis to projects that produce fuels that—

7 “(A) meet United States fuel and emis-
8 sions specifications;

9 “(B) help diversify domestic transportation
10 energy supplies; and

11 “(C) improve or maintain air, water, soil,
12 and habitat quality.

13 “(3) INCENTIVES.—Incentives under this sub-
14 section may consist of—

15 “(A) additional loan guarantees under sec-
16 tion 1403(b) for the construction of production
17 facilities and supporting infrastructure; or

18 “(B) production payments through a re-
19 verse auction in accordance with paragraph (4).

20 “(4) REVERSE AUCTION.—

21 “(A) IN GENERAL.—In providing incen-
22 tives under this subsection, the Secretary
23 shall—

24 “(i) prescribe rules under which pro-
25 ducers of fuel from cellulosic biomass may

1 bid for production payments under para-
2 graph (3)(B); and

3 “(ii) solicit bids from producers of dif-
4 ferent classes of transportation fuel, as the
5 Secretary determines to be appropriate.

6 “(B) REQUIREMENT.—The rules under
7 subparagraph (A) shall require that incentives
8 shall be provided to the producers that submit
9 the lowest bid (in terms of cents per gallon) for
10 each class of transportation fuel from which the
11 Secretary solicits a bid.

12 “(f) ADVANCED TECHNOLOGY VEHICLES MANUFAC-
13 TURING INCENTIVE PROGRAM.—

14 “(1) DEFINITIONS.—In this subsection:

15 “(A) ADVANCED LEAN BURN TECHNOLOGY
16 MOTOR VEHICLE.—The term ‘advanced lean
17 burn technology motor vehicle’ means a pas-
18 senger automobile or a light truck with an in-
19 ternal combustion engine that—

20 “(i) is designed to operate primarily
21 using more air than is necessary for com-
22 plete combustion of the fuel;

23 “(ii) incorporates direct injection; and

24 “(iii) achieves at least 125 percent of
25 the 2002 model year city fuel economy of

1 vehicles in the same size class as the vehi-
2 cle.

3 “(B) ADVANCED TECHNOLOGY VEHICLE.—

4 The term ‘advanced technology vehicle’ means a
5 light duty motor vehicle that—

6 “(i) is a hybrid motor vehicle or an
7 advanced lean burn technology motor vehi-
8 cle; and

9 “(ii) meets the following performance
10 criteria:

11 “(I) Except as provided in para-
12 graph (3)(A)(ii), the Tier II Bin 5
13 emission standard established in regu-
14 lations prescribed by the Adminis-
15 trator of the Environmental Protec-
16 tion Agency under section 202(i) of
17 the Clean Air Act (42 U.S.C.
18 7521(i)), or a lower numbered bin.

19 “(II) At least 125 percent of the
20 base year city fuel economy for the
21 weight class of the vehicle.

22 “(C) ENGINEERING INTEGRATION
23 COSTS.—The term ‘engineering integration
24 costs’ includes the cost of engineering tasks re-
25 lating to—

1 “(i) incorporating qualifying compo-
2 nents into the design of advanced tech-
3 nology vehicles; and

4 “(ii) designing new tooling and equip-
5 ment for production facilities that produce
6 qualifying components or advanced tech-
7 nology vehicles.

8 “(D) HYBRID MOTOR VEHICLE.—The term
9 ‘hybrid motor vehicle’ means a motor vehicle
10 that draws propulsion energy from onboard
11 sources of stored energy that are—

12 “(i) an internal combustion or heat
13 engine using combustible fuel; and

14 “(ii) a rechargeable energy storage
15 system.

16 “(E) QUALIFYING COMPONENTS.—The
17 term ‘qualifying components’ means compo-
18 nents that the Secretary determines to be—

19 “(i) specially designed for advanced
20 technology vehicles; and

21 “(ii) installed for the purpose of meet-
22 ing the performance requirements of ad-
23 vanced technology vehicles.

24 “(2) MANUFACTURER FACILITY CONVERSION
25 AWARDS.—The Secretary shall provide facility con-

1 version funding awards under this subsection to
2 automobile manufacturers and component suppliers
3 to pay 30 percent of the cost of—

4 “(A) re-equipping or expanding an existing
5 manufacturing facility to produce—

6 “(i) qualifying advanced technology
7 vehicles; or

8 “(ii) qualifying components; and

9 “(B) engineering integration of qualifying
10 vehicles and qualifying components.

11 “(3) PERIOD OF AVAILABILITY.—

12 “(A) PHASE I.—

13 “(i) IN GENERAL.—An award under
14 paragraph (2) shall apply to—

15 “(I) facilities and equipment
16 placed in service before January 1,
17 2016; and

18 “(II) engineering integration
19 costs incurred during the period be-
20 ginning on the date of enactment of
21 this Act and ending on December 31,
22 2015.

23 “(ii) TRANSITION STANDARD FOR
24 LIGHT DUTY DIESEL-POWERED VEHI-
25 CLES.—For purposes of making an award

1 under clause (i), the term ‘advanced tech-
2 nology vehicle’ includes a diesel-powered or
3 diesel-hybrid light duty vehicle that—

4 “(I) has a weight greater than
5 6,000 pounds; and

6 “(II) meets the Tier II Bin 8
7 emission standard established in regu-
8 lations prescribed by the Adminis-
9 trator of the Environmental Protec-
10 tion Agency under section 202(i) of
11 the Clean Air Act (42 U.S.C.
12 7521(i)), or a lower numbered bin.

13 “(B) PHASE II.—If the Secretary deter-
14 mines under paragraph (4) that the program
15 under this subsection has resulted in a substan-
16 tial improvement in the ability of automobile
17 manufacturers to produce light duty vehicles
18 with improved fuel economy, the Secretary shall
19 continue to make awards under paragraph (2)
20 that shall apply to—

21 “(i) facilities and equipment placed in
22 service before January 1, 2021; and

23 “(ii) engineering integration costs in-
24 curred during the period beginning on Jan-

1 uary 1, 2016, and ending on December 31,
2 2020.

3 “(4) DETERMINATION OF IMPROVEMENT.—

4 “(A) IN GENERAL.—Not later than Janu-
5 ary 1, 2015, the Secretary shall determine,
6 after providing notice and an opportunity for
7 public comment, whether the program under
8 this subsection has resulted in a substantial im-
9 provement in the ability of automobile manufac-
10 turers to produce light duty vehicles with im-
11 proved fuel economy.

12 “(B) EFFECT ON MANUFACTURERS.—In
13 preparing the determination under subpara-
14 graph (A), the Secretary shall enter into an
15 agreement with the National Academy of
16 Sciences to analyze the effect of the program
17 under this subsection on automobile manufac-
18 turers.

19 **“SEC. 1628. EFFECT OF SUBTITLE.**

20 “Nothing in this subtitle affects the authority of Con-
21 gress to limit, terminate, or change the value of an allow-
22 ance or credit issued under this subtitle.”.