

110th CONGRESS

1st Session

**S. 1766**

To reduce greenhouse gas emissions from the production and use of energy, and for other purposes.

**IN THE SENATE OF THE UNITED STATES**

**July 11, 2007**

Mr. BINGAMAN (for himself, Mr. SPECTER, Mr. HARKIN, Mr. STEVENS, Ms. MURKOWSKI, and Mr. AKAKA) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

---

**A BILL**

To reduce greenhouse gas emissions from the production and use of energy, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

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

(a) Short Title- This Act may be cited as the 'Low Carbon Economy Act of 2007'.

(b) Table of Contents- The table of contents is as follows:

Sec. 1. Short title; table of contents.

Sec. 2. Findings.

Sec. 3. Definitions.

**TITLE I--STRATEGIC REDUCTION TARGETS, COMPLIANCE, AND TRADING**

Sec. 101. Quantity of annual allowances.

Sec. 102. Submission of allowances, credits, and payments.

Sec. 103. Trading system for allowances and credits.

## **TITLE II--ALLOCATION AND AUCTION OF ALLOWANCES**

Sec. 201. General allocation and auction rules.

Sec. 202. Allocation to industry sectors other than carbon-intensive manufacturing.

Sec. 203. Allocation to carbon-intensive manufacturing.

Sec. 204. Allocation to States.

Sec. 205. Allocation for agricultural projects.

Sec. 206. Allocation for early reductions.

Sec. 207. Allocation of carbon capture and sequestration bonus allowances.

Sec. 208. Auction of allowances for technology, adaptation, and assistance programs.

## **TITLE III--PROVISION OF CREDITS**

Sec. 301. Credits for activities that take greenhouse gas precursors out of commerce in the United States.

Sec. 302. Credits for carbon dioxide sequestration.

Sec. 303. Credits for projects that offset other greenhouse gas emissions.

## **TITLE IV--TECHNOLOGY, ADAPTATION, AND ASSISTANCE PROGRAMS**

Sec. 401. Early technology deployment programs.

Sec. 402. Adaptation programs.

Sec. 403. Assistance programs.

## **TITLE V--PERIODIC REVIEW AND INTERNATIONAL LEADERSHIP**

Sec. 501. Executive branch and congressional review of program.

Sec. 502. International reserve allowance requirement.

## **TITLE VI--GENERAL PROVISIONS**

Sec. 601. Monitoring and reporting.

Sec. 602. Enforcement.

Sec. 603. Administrative provisions.

Sec. 604. Judicial review.

Sec. 605. Savings provision.

## **SEC. 2. FINDINGS.**

Congress finds that--

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

(2) according to the Fourth Assessment of the Intergovernmental Panel on Climate Change, protecting the climate system could require reductions of global greenhouse gas emissions equivalent to 50 to 85 percent below 2000 levels by 2050;

(3) meeting the commitment to stabilize greenhouse gas emissions at appropriate levels will require a long-term global effort; and

(4) it is possible and desirable to implement, in the United States, an economy-wide annual limit on greenhouse gas emissions for calendar year 2012 and each subsequent calendar year, with the limit declining to 2006 levels by 2020, 1990 levels by 2030, and at least 60 percent below 2006 levels by 2050 (contingent on sufficient international effort), if the system includes--

(A) cost mitigation measures, including a technology accelerator payment mechanism, banking, and offsets;

(B) requirements for periodic Presidential reports and recommendations and expedited congressional procedures to adjust the stringency of the regulatory program on consideration of new scientific information and the efforts of other countries to reduce their emissions;

(C) an aggressive advanced energy technology deployment program to lower costs of compliance and to improve use of fuels;

(D) a program to fund activities to address adaptation to a warming climate; and

(E) a program to provide assistance to low-income persons who may be hardest hit by the costs of climate change and mitigation measures.

## **SEC. 3. DEFINITIONS.**

In this Act:

(1) ALLOCATION PERIOD--

(A) ALLOCATION PERIOD- The term `allocation period' means the initial allocation period or a subsequent allocation period, as appropriate.

(B) INITIAL ALLOCATION PERIOD- The term `initial allocation period' means the period beginning January 1, 2012, and ending December 31, 2021.

(C) SUBSEQUENT ALLOCATION PERIOD- The term `subsequent allocation period' means--

(i) the 5-year period beginning January 1, 2022, and ending December 31, 2026; and

(ii) each subsequent 5-year period.

(2) CARBON DIOXIDE EQUIVALENT- The term `carbon dioxide equivalent' means--

(A) for each covered fuel, the quantity of carbon dioxide that would be emitted into the atmosphere as a result of complete combustion of a unit of the covered fuel, to be determined for the type of covered fuel by the President; and

(B) for each greenhouse gas (other than carbon dioxide), the quantity of carbon dioxide that would have an effect on global warming equal to the effect of a unit of the greenhouse gas, as determined by the President, taking into consideration global warming potentials.

(3) CLIMATE ADAPTATION FUND- The term `Climate Adaptation Fund' means the Climate Adaptation Fund established under section 208(f)(1)(B).

(4) COAL- The term `coal' means any of the recognized classifications and ranks of coal, including anthracite, bituminous, semibituminous, subbituminous, lignite, peat, and fuel derivatives of coal.

(5) COVERED FUEL- The term `covered fuel' means--

(A) coal;

(B) petroleum products;

(C) natural gas, including liquefied natural gas;

(D) natural gas liquids; and

(E) any other fuel derived from fossil hydrocarbons (including bitumen, kerogen, and coalbed methane).

(6) COVERED GREENHOUSE GAS EMISSIONS-

(A) IN GENERAL- The term `covered greenhouse gas emissions' means--

(i) for a regulated coal facility in the United States, the emissions associated with coal consumed or converted to synthetic fuels by the facility;

(ii) for a petroleum refinery located in the United States, the emissions associated with petroleum products, that are refined, produced, or consumed at the refinery;

(iii) for a natural gas processing plant in the United States, a quantity of emissions equal to the sum of--

(I) the emissions associated with natural gas liquids produced or consumed at the plant; and

(II) the emissions associated with natural gas delivered into commerce from, or consumed at, the plant;

(iv) for an importer of petroleum products, coke, or natural gas (including liquefied natural gas) into the United States, the emissions associated with the petroleum products, coke, or natural gas imported;

(v) for a manufacturer or importer of hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, or nitrous oxide or an importer of a product containing hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, or nitrous oxide, the quantity of hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, or nitrous oxide produced in the United States or imported by, or contained in products imported by, the manufacturer or importer;

(vi) for a facility in the United States that manufactures adipic acid or nitric acid, the quantity of nitrous oxide emitted by the facility;

(vii) for an aluminum smelter in the United States, the quantity of perfluorocarbons emitted by the smelter;

(viii) for a facility in the United States that produces hydrochlorofluorocarbon-22, the quantity of hydrofluorocarbon-23 emitted by the facility; and

(ix) such other emissions of greenhouse gases from facilities in the United States that the President, by rule under section 102(g), determines is necessary to ensure that allowances are submitted for each covered fuel.

(B) UNITS- Quantities of covered greenhouse gas emissions shall be measured and expressed in units of metric tons of carbon dioxide equivalent.

(7) ELIGIBLE COAL MINE- The term `eligible coal mine' means a coal mine located in the United States.

(8) ELIGIBLE ELECTRIC GENERATION FACILITY-

(A) IN GENERAL- The term `eligible electric generation facility' means a fossil-fuel-fired facility for the generation of electric energy located in the United States.

(B) EXCLUSION- The term `eligible electric generation facility' does not include any facility described in subparagraph (A) that--

(i) began operations after December 31, 2006; and

(ii) does not satisfy the criteria established in section 202(c).

(9) ELIGIBLE FACILITY- The term `eligible facility' means--

- (A) an eligible coal mine;
- (B) an eligible electric generation facility;
- (C) an eligible natural gas processing plant;
- (D) an eligible nonfuel regulated facility; or
- (E) an eligible refinery.

(10) ELIGIBLE NATURAL GAS PROCESSING PLANT- The term `eligible natural gas processing plant' means a natural gas processing plant located in the United States.

(11) ELIGIBLE NONFUEL REGULATED FACILITY- The term `eligible nonfuel regulated facility' means a nonfuel regulated facility located in the United States.

(12) ELIGIBLE REFINERY- The term `eligible refinery' means a petroleum refinery located in the United States.

(13) ENERGY ASSISTANCE FUND- The term `Energy Assistance Fund' means the Energy Assistance Fund established under section 208(f)(1)(C).

(14) ENERGY TECHNOLOGY DEPLOYMENT FUND- The term `Energy Technology Deployment Fund' means the Energy Technology Deployment Fund established under section 208(f)(1)(A).

(15) GREENHOUSE GAS- The term `greenhouse gas' means--

- (A) carbon dioxide;
- (B) methane;
- (C) nitrous oxide;
- (D) hydrofluorocarbons;
- (E) perfluorocarbons; and
- (F) sulfur hexafluoride.

(16) NATURAL GAS PROCESSING PLANT- The term `natural gas processing plant' means a facility in the United States designed to separate natural gas liquids from natural gas.

(17) NATURAL GAS PROCESSOR- The term `natural gas processor' means the owner or operator of a natural gas processing plant.

(18) NONFUEL REGULATED ENTITY- The term `nonfuel regulated entity' means--

- (A) the owner or operator of a nonfuel regulated facility; and
- (B) an importer of--

- (i) hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, or nitrous oxide; or
  - (ii) a product containing hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, or nitrous oxide.
- (19) NONFUEL REGULATED FACILITY- The term `nonfuel regulated facility' means a facility that--
- (A) manufactures hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, or nitrous oxide;
  - (B) emits nitrous oxide associated with the manufacture of adipic acid or nitric acid;
  - (C) is an aluminum smelter; or
  - (D) emits hydrofluorocarbon-23 as a byproduct of hydrochlorofluorocarbon-22 production.
- (20) OFFSET PROJECT- The term `offset project' means any project to--
- (A) reduce greenhouse gas emissions; or
  - (B) sequester or destroy a greenhouse gas.
- (21) PETROLEUM PRODUCT- The term `petroleum product' means--
- (A) a refined petroleum product;
  - (B) residual fuel oil;
  - (C) petroleum coke; or
  - (D) a liquefied petroleum gas.
- (22) REGULATED COAL FACILITY- The term `regulated coal facility' means a facility that uses more than 5,000 tons of coal in a calendar year.
- (23) REGULATED ENTITY- The term `regulated entity' means--
- (A) a regulated fuel distributor;
  - (B) the owner or operator of a regulated coal facility;
  - (C) a nonfuel regulated entity; or
  - (D) an entity designated by the President under section 102(g)(2).
- (24) REGULATED FUEL DISTRIBUTOR- The term `regulated fuel distributor' means--
- (A) the owner or operator of--
    - (i) a petroleum refinery; or

(ii) a natural gas processing plant; or

(B) an importer of--

(i) petroleum products;

(ii) coke; or

(iii) natural gas (including liquefied natural gas).

(25) SECRETARY- The term `Secretary' means the Secretary of Energy.

(26) STATE- The term `State' means--

(A) each of the several States of the United States;

(B) the District of Columbia;

(C) the Commonwealth of Puerto Rico;

(D) Guam;

(E) American Samoa;

(F) the Commonwealth of the Northern Mariana Islands;

(G) the Federated States of Micronesia;

(H) the Republic of the Marshall Islands;

(I) the Republic of Palau; and

(J) the United States Virgin Islands.

(27) TAP- The term `TAP' means the technology accelerator payment determined under section 102.

(28) UNITED STATES- The term `United States', when used in the geographic sense, means all of the States.

## **TITLE I--STRATEGIC REDUCTION TARGETS, COMPLIANCE, AND TRADING**

### **SEC. 101. QUANTITY OF ANNUAL ALLOWANCES.**

The President shall issue a total quantity of allowances for covered greenhouse gas emissions for each calendar year in accordance with the following table:

---

Calendar Year Millions of Metric Tons of Covered Greenhouse Gas Emission

---

2012 6,652  
2013 6,592  
2014 6,533  
2015 6,474  
2016 6,416  
2017 6,358  
2018 6,301  
2019 6,245  
2020 6,188  
2021 6,097  
2022 6,006  
2023 5,915  
2024 5,823  
2025 5,732  
2026 5,550  
2027 5,367  
2028 5,184  
2029 5,002

2030 and each calendar year thereafter 4,819.

---

## **SEC. 102. SUBMISSION OF ALLOWANCES, CREDITS, AND PAYMENTS.**

(a) Requirement- For calendar year 2012 and each calendar year thereafter, each regulated entity shall submit to the President--

(1) the number of allowances or credits equal to the covered greenhouse gas emissions of the regulated entity; or

(2) a payment equal to the amount of the applicable TAP price in lieu of submission of 1 or more required allowances.

(b) Deadline for Submission- Each regulated entity required to submit an allowance under this section shall submit the allowance, credit, or payment under subsection (a) not later than March 31 of the calendar year following the calendar year for which the allowance is required to be submitted.

(c) Rules- The President shall promulgate such rules as the President determines to be necessary or appropriate to--

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

(2) require the submission of reports and otherwise obtain any information the President determines to be necessary to calculate or verify the compliance of a regulated entity with any requirement under this section.

(d) Determination of Applicable TAP Price- The applicable TAP price per allowance shall be--

(1) for calendar year 2012, \$12 per metric ton of carbon dioxide equivalent; and

(2) for each subsequent calendar year, an amount equal to the product obtained by multiplying--

(A) the TAP price established for the preceding calendar year increased by 5 percent; and

(B) the ratio that--

(i) the implicit price deflator for the gross domestic product, as computed and published by the Department of Commerce for the most recent 4-calendar quarter period for which data is available; bears to

(ii) the implicit price deflator for the gross domestic product, as computed and published by the Department of Commerce for the 4-calendar quarter period immediately preceding the period referred to in clause (i).

(e) Disposition of Receipts- The funds received under subsection (a)(2) shall be deposited into the Energy Technology Deployment Fund.

(f) Exemption- The President may exempt from the requirements of this Act a regulated entity for any period during which the President determines, after providing an opportunity for public comment, that measuring or estimating the quantity of covered greenhouse gas emissions by the entity is not feasible.

(g) Adjustments-

(1) MODIFICATION- The President may modify, by rule, the quantity of covered greenhouse gas emissions attributable to a regulated entity if the President determines that the modification is necessary to ensure that--

(A) allowances are submitted for all quantities of covered greenhouse gas emissions; and

(B) allowances are not submitted for the same quantity of covered greenhouse gas emissions by more than 1 regulated entity.

(2) EXTENSION- The President may extend, by rule, the requirement to submit allowances under this section to an entity that is not otherwise a regulated entity if the President determines that the extension is necessary to ensure that allowances are submitted for all covered greenhouse gas emissions.

(3) APPLICATION TO NATURAL GAS-

(A) IN GENERAL- Rules under paragraphs (1) and (2) shall ensure that--

(i) the requirements of subsection (a) are met for any natural gas that is not imported or processed by a natural gas processor; and

(ii) more than 1 allowance is not required to be submitted for a unit of natural gas that is imported and subsequently processed in the United States.

(B) ALASKA NATURAL GAS- In the case of natural gas produced in Alaska and not reinjected in the field, the producer of the natural gas and any associated natural gas liquids shall be considered to be the natural gas processor and the regulated fuel distributor of the natural gas and natural gas liquids.

(h) Study on Process Emissions- Not later than 2 years after the date of enactment of this Act, the President shall--

(1) carry out studies of the technical and economic feasibility of requiring the submission of allowances for process emissions not otherwise covered by this title; and

(2) submit to Congress a report that describes the results of the study (including recommendations of the President based on those results).

(i) Next Generation Methane Reduction and Use Technologies-

(1) REPORT- Not later than 1 year after the date of enactment of this Act, the President shall submit to Congress a report that--

(A) assesses the potential for next generation technologies that can reduce and use methane emissions from natural sources and the energy, agricultural, and waste sectors; and

(B) includes recommendations for funding research and development and technology deployment programs for the most promising technologies.

(2) DEMONSTRATION PROJECTS- The Secretary shall use a portion of the funds provided under paragraph (3) to support demonstration projects that use methane capture and use technologies.

(3) FUNDING- Of the funds in the Energy Technology Deployment Fund, the Secretary, in consultation with the Administrator of the Environmental Protection Agency and the Secretary of the Interior, shall use to carry out a methane research and development program (including demonstration projects), without further appropriation, \$10,000,000 for each of fiscal years 2010 through 2019.

(j) Retirement of Allowances-

(1) IN GENERAL- Any person or entity that is not subject to this Act may submit to the President an allowance for retirement at any time.

(2) ACTION BY PRESIDENT- On receipt of an allowance under paragraph (1), the President--

(A) shall accept the allowance; and

(B) shall not allocate, auction, or otherwise reissue the allowance.

## **SEC. 103. TRADING SYSTEM FOR ALLOWANCES AND CREDITS.**

(a) Administrative Requirements-

(1) DENOMINATION- Allowances and credits issued by the President under this Act shall be denominated in units of metric tons of carbon dioxide equivalent.

(2) PERIOD OF USE AND BANKING- An allowance or credit issued by the President under this Act may be used during--

(A) the calendar year for which the allowance or credit is issued; or

(B) any subsequent calendar year.

(3) SERIAL NUMBERS- The President shall--

(A) assign a unique serial number to each allowance or credit issued under this Act; and

(B) retire the serial number of an allowance or credit on the date on which the allowance or credit is submitted.

(b) Trading System-

(1) IN GENERAL- The President shall--

(A) establish, by rule, a trading system under which allowances and credits may be sold, exchanged, purchased, or transferred by any person or entity, including a registry for issuing, recording, and tracking allowances and credits; and

(B) specify all procedures and requirements required for orderly functioning of the trading system.

(2) TRANSPARENCY-

(A) IN GENERAL- The trading system under paragraph (1) shall include such provisions as the President considers to be appropriate to--

(i) facilitate price transparency and participation in the market for allowances and credits; and

(ii) protect buyers and sellers of allowances and credits, and the public, from the adverse effects of collusion and other anticompetitive behaviors.

(B) **AUTHORITY TO OBTAIN INFORMATION-** The President may obtain any information the President considers to be necessary to carry out this subsection from any person or entity that buys, sells, exchanges, or otherwise transfers an allowance or credit.

(c) **Nature of Allowances and Credits-** An allowance or credit that is allocated or distributed under this Act shall not constitute a security or property right.

## **TITLE II--ALLOCATION AND AUCTION OF ALLOWANCES**

### **SEC. 201. GENERAL ALLOCATION AND AUCTION RULES.**

(a) **Percentage of Allowances Available for Allocation and Auction-**

(1) **CALENDAR YEARS 2012 THROUGH 2030-** For each of calendar years 2012 through 2030, the percentage of the total quantity of allowances issued and available for allocation, sequestration and early reduction projects, and auction shall be determined in accordance with the following table:

---

Year	Auction	Allocation to Industry Sectors (Regulated and Nonregulated)		
		Technology	Adaption	Low-Income Assistance
2012	12	8		4
2013	12	8		4
2014	12	8		4
2015	12	8		4
2016	12	8		4
2017	13	9		4
2018	14	10		4
2019	15	11		4
2020	16	12		4
2021	17	13		5
2022	18	14		5
2023	19	15		5
2024	20	16		5
2025	21	17		5

---

2026	22	18	5
2027	23	19	5
2028	24	20	5
2029	25	21	5
2030	26	22	5

(2) CALENDAR YEAR 2031 AND SUBSEQUENT CALENDAR YEARS- For calendar year 2031 and each subsequent calendar year, the percentage of the total quantity of allowances issued shall be equal to the percentages allocated under paragraph (1) for calendar year 2030, as adjusted as follows:

(A) The percentages allocated to technology and adaptation shall each increase by 1 percentage point for each of calendar years 2031 through 2043.

(B) The percentage allocated to industry sectors shall decrease by 2 percentage points for each of calendar years 2031 through 2043.

(C) For calendar year 2043 and each subsequent calendar year, the percentages for technology, adaptation, and industry sectors shall be established at 39, 36, and 0, respectively.

(b) Allocation of Allowances-

(1) ALLOCATIONS- Except as otherwise specifically provided in this Act, not later than the date that is 2 years before the beginning of the initial allocation period, and each subsequent allocation period, the President shall, by rule, allocate for each calendar year during the allocation period a quantity of allowances in accordance with this subsection.

(2) QUANTITY- The total quantity of allowances available to be allocated for each calendar year of an allocation period shall be the product obtained by multiplying--

(A) the total quantity of allowances issued for the calendar year under section 101; and

(B) the allocation percentage for the calendar year under subsection (a).

(3) ALLOWANCE ALLOCATION RULEMAKING- Not later than 18 months after the date of enactment of this Act, the President shall establish, by rule, procedures for allocating allowances in accordance with the criteria established under this subsection, including forms, schedules for submission, and other requirements for the reporting of information necessary for the allocation of allowances under this section.

(4) COST OF ALLOWANCES- The President shall distribute allowances under this title at no cost to the recipient of the allowance.

(c) Allocation Within Industry Sectors- The allowances available for allocation to industry under subsection (b)(2) shall be distributed to industry sectors as follows:

---

Industry Sector	Facilities within Industry Sector	Percentage of Allowances A
Coal	Eligible Coal Mine	
Refining	Eligible Petroleum Refineries	
Natural Gas	Eligible Natural Gas Processing Plants	
Electric Power	Eligible Electric Generation Facilities	
Nonfuel Entities	Eligible Nonfuel Regulated Facilities	
Carbon-intensive Manufacturing	Eligible Manufacturing Facilities	

---

**SEC. 202. ALLOCATION TO INDUSTRY SECTORS OTHER THAN CARBON-INTENSIVE MANUFACTURING.**

(a) Definitions- In this section:

(1) CALCULATED BASELINE EMISSIONS- The term `calculated baseline emissions' means, for an eligible electric generation facility that is a new eligible facility or a new entrant facility, the product obtained by multiplying--

(A) the nameplate capacity of the facility;

(B) the national average capacity factor for the type of generation facility during the most recent 3-year period for which data are available; and

(C) the applicable emission rate established by the President pursuant to subsection (c), as determined as of the date on which the facility is first eligible to receive allowances.

(2) CARBON CONTENT ALLOCATION FACTOR- The term `carbon content allocation factor' means--

(A) in the case of an eligible coal mine, the carbon dioxide equivalent of the coal produced at the coal mine;

(B) in the case of an eligible electric generation facility--

(i) if the eligible electric generation facility is an existing eligible facility, the carbon dioxide emissions of the facility; or

(ii) if the eligible electric generation facility is a new eligible facility or a new entrant facility, the calculated baseline emissions of the facility; and

(C) in the case of an eligible petroleum refinery, an eligible gas processing facility, or an eligible nonfuel regulated facility, the covered greenhouse gas emissions of the facility.

(3) EXISTING ELIGIBLE FACILITY- The term 'existing eligible facility' means an eligible facility that began operation prior to January 1, 2007.

(4) NEW ELIGIBLE FACILITY- The term 'new eligible facility' means an eligible facility that began operation after December 31, 2006, and before the allocation is made for an allocation period.

(5) NEW ENTRANT FACILITY- The term 'new entrant facility', with respect to an allocation period, means an eligible facility that began operation during or after the calendar year in which the allocation rule was promulgated under section 201(b)(1) for that allocation period.

(b) Allocation-

(1) TOTAL ALLOCATION- For each calendar year, eligible facilities (other than new entrant facilities) within an industry sector shall be allocated 92 percent of the total quantity of allowances available for allocation to that industry sector under section 201(c).

(2) GENERAL RULE FOR ALLOCATION TO INDIVIDUAL FACILITIES- For each calendar year, the quantity of allowances allocated to each eligible facility (other than a new entrant facility) within an industry sector shall be the quantity equal to the product obtained by multiplying--

(A) the total allocation to eligible facilities (other than new entrant facilities) in that sector under paragraph (1); and

(B) the ratio that--

(i) the carbon content allocation factor for that facility during the 3-year period beginning on January 1, 2004 (or, in the case of a new eligible facility, during the first 3 years of operation); bears to

(ii) the sum of the carbon content allocation factors for all eligible facilities (other than new entrant facilities) in that sector, as determined pursuant to clause (i).

(3) ALLOCATION FOR NEW ENTRANTS-

(A) IN GENERAL- For each calendar year, 8 percent of the total quantity of allowances available for allocation to an industry sector under section 201(c) shall be available for allocation to new entrant facilities in that sector, as determined under subparagraphs (B) and (C).

(B) INDIVIDUAL ALLOCATIONS- Each calendar year, the President shall allocate allowances to any new entrant facility for that calendar year equal to the product obtained by multiplying--

(i) the carbon content allocation factor for that facility for the prior calendar year; and

(ii) the ratio that (for that calendar year)--

(I) the allowances allocated under paragraph (1) to the applicable industry sector; bears to

(II) the sum of the carbon content allocation factors for all eligible facilities (other than new entrant facilities) in that sector.

(C) RELATIONSHIP TO AUCTION-

(i) INSUFFICIENT ALLOCATIONS- If the allowances available for allocation to new entrant facilities under subparagraph (A) are insufficient to enable the allocations required under subparagraph (B) to be made, the additional required allowances shall be deducted from the allowances available for auction under section 208.

(ii) SURPLUS ALLOCATIONS- If the President does not allocate under subparagraph (B) all the allowances available for new entrants under subparagraph (A), any unallocated allowances shall be added to the allowances available for auction.

(c) Eligibility Criteria for Post-2006 Electric Generation Facilities-

(1) CRITERIA- The President shall establish, by rule, emissions rate criteria for--

(A) natural gas-fired generation facilities for electric energy, based on the carbon dioxide per kilowatt hour emission rate of new natural gas combined cycle facilities; and

(B) coal-fired generation facilities for electric energy that commence operation after December 31, 2006, based on the lowest economically achievable carbon dioxide per kilowatt hour emission rate for a facility of that type.

(2) REVIEW AND REVISION- The President--

(A) shall review the criteria in advance of the allocation for each subsequent allocation period; and

(B) may revise the criteria by rule.

(3) EFFECTIVE DATE OF REVISIONS- Any revision of the criteria shall apply only with respect to eligible electricity generation facilities beginning operation after the effective date of the revised criterion.

## **SEC. 203. ALLOCATION TO CARBON-INTENSIVE MANUFACTURING.**

(a) Definitions- In this section:

(1) CURRENTLY OPERATING FACILITY- The term 'currently operating facility' means an eligible manufacturing facility that had significant operations during the calendar year preceding the calendar year for which the allocation rule is promulgated under section 201(b) for an allocation period.

(2) ELIGIBLE MANUFACTURING FACILITY-

(A) IN GENERAL- The term 'eligible manufacturing facility' means a manufacturing facility located in the United States that principally manufactures iron, steel, aluminum, pulp, paper, cement,

chemicals, or such other products as the President may determine, by rule, are likely to be significantly disadvantaged in competitive international markets as a result of indirect costs of the program established under this Act.

(B) EXCLUSION- The term `eligible manufacturing facility' does not include a facility eligible to receive allowances under section 202 or any electric generator.

(3) INDIRECT CARBON DIOXIDE EMISSIONS- The term `indirect carbon dioxide emissions' means the product obtained by multiplying (as determined by the President)--

(A) the quantity of electricity consumption at an eligible manufacturing facility; and

(B) the rate of carbon dioxide emission per kilowatt-hour output for the region in which the manufacturer is located.

(4) NEW ENTRANT MANUFACTURING FACILITY- The term `new entrant manufacturing facility', with respect to an allocation period, means an eligible manufacturing facility that began operation during or after the calendar year for which the allocation rule was promulgated under subsection 201(b) for that allocation period.

(b) Total Allocation for Currently-Operating Facilities- For each calendar year, currently-operating facilities shall be allocated 96 percent of the total quantity of allowances available for allocation to carbon-intensive manufacturing under section 201(c).

(c) Total Allocation for Currently-Operating Facilities in Each Category of Manufacturing Facilities- The quantity of allowances available for allocation to facilities in each category of currently-operating facilities shall be equal to the product obtained by multiplying--

(1) the total quantity of allowances available for allocation under subsection (b); and

(2) the ratio that (during the year preceding the calendar year for which the allocation rule is promulgated for the allocation period)--

(A) the sum of the direct and indirect carbon dioxide emissions by currently-operating facilities in the category; bears to

(B) the sum of the direct and indirect carbon dioxide emissions by all currently-operating facilities.

(d) Individual Allocations to Currently-Operating Facilities- For each calendar year of the allocation period, the quantity of allowances allocated to a currently-operating facility shall be the quantity equal to the product obtained by multiplying--

(1) the total quantity of allowances available for allocation to currently-operating facilities in the appropriate category, as determined under subsection (c); and

(2) the ratio that (during the 3 calendar years preceding the year for which the allocation rule is promulgated for the allocation period)--

(A) the average number of production employees employed at the facility; bears to

(B) the average number of production employees employed at all existing eligible manufacturing facilities in the appropriate category.

(e) Revocation of Allowances on Facility Shut Down- If an eligible manufacturing facility received an allocation of allowances under this section for an allocation period and is subsequently permanently shut down during the allocation period, the facility shall promptly return to the President allowances equal to the allowances received for calendar years after the calendar year of the shut down.

(f) New Entrant Manufacturing Facilities-

(1) IN GENERAL- For each calendar year, 4 percent of the total quantity of allowances available for allocation to carbon intensive manufacturing under section 201(c) shall be allocated to new entrant manufacturing facilities.

(2) INDIVIDUAL ALLOCATIONS- Each calendar year, the President shall allocate allowances to any new entrant manufacturing facility for that calendar year in a quantity equal to the product obtained by multiplying--

(A) the average number of production employees employed at the new entrant manufacturing facility during the prior calendar year; and

(B) the rate (in allowances per production employee) at which allowances were allocated to currently-operating facilities in the appropriate category for the calendar year, as determined under subsection (d).

(3) RELATIONSHIP TO AUCTION- Section 202(b)(3)(C) shall be applicable to allowances for new entrant manufacturing facilities to the same extent that section 202(b)(3)(C) applies to allowances for other new entrant facilities.

## **SEC. 204. ALLOCATION TO STATES.**

(a) Distribution- Not later than the date that is 2 years before the 5-year period beginning January 1, 2012 and ending December 31, 2017, and each subsequent 5-year period, the President shall, by rule, allocate for each calendar year during the relevant 5-year period a quantity of allowances in accordance with this section.

(b) Distribution- The allowances available for allocation to States under section 201(b) for an allocation period shall be distributed as follows:

(1) For each calendar year of the period, 1/2 of the quantity of allowances available for allocation to States under section 201(b) shall be allocated to individual States based on the ratio that--

(A) the greenhouse gas emissions of the State during the 3 calendar years preceding the calendar year for which the allocation rule is promulgated for the period; bears to

(B) the greenhouse gas emissions of all States for that period.

(2) For each calendar year of the period, 1/2 of the quantity of allowances available for allocation to States under section 201(b) shall be allocated among the States based on the ratio that--

(A) the population of the State, as determined by the most recent decennial census preceding the calendar year for which the allocation rule is promulgated for the allocation period; bears to

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

(c) Use-

(1) IN GENERAL- During any calendar year, a State shall use not less than 90 percent of the allowances allocated to the State (or proceeds of sale of those allowances) for that calendar year--

(A) to mitigate impacts on low-income energy consumers;

(B) to promote energy efficiency (including support of electricity demand reduction, waste minimization, and recycling programs);

(C) to promote investment in nonemitting electricity generation technology;

(D) to encourage advances in energy technology that reduce or sequester greenhouse gas emissions;

(E) to avoid distortions in competitive electricity markets;

(F) to mitigate obstacles to investment by new entrants in electricity generation markets and energy-intensive manufacturing sectors;

(G) to address local or regional impacts of climate change policy, including providing assistance to displaced workers;

(H) to mitigate impacts on energy-intensive industries in internationally competitive markets; or

(I) to enhance energy security.

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

(3) RETURN OF ALLOWANCES- Not later than 330 days before the beginning of each period, a State shall return to the President any allowances not distributed by the deadline in paragraph (2).

## **SEC. 205. ALLOCATION FOR AGRICULTURAL PROJECTS.**

(a) Agricultural Greenhouse Gas Management Research-

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

(A) research on soil carbon sequestration and other agricultural greenhouse gas management that has been carried out;

(B) any additional research that is necessary;

(C) the proposed priority for additional research;

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

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

**(2) STANDARDIZED SYSTEM OF SOIL CARBON MEASUREMENT AND CERTIFICATION FOR THE AGRICULTURAL SECTOR-**

(A) **IN GENERAL-** As soon as practicable after the date of enactment of this Act, the Secretary of Agriculture shall establish a standardized system of soil carbon measurement and certification for the agricultural sector.

(B) **ADMINISTRATION-** In establishing the system, the Secretary shall--

(i) create a standardized system of measurements for agricultural greenhouse gases that takes into account crop type, fertilizer and water inputs, soil type, region or weather, tilling practices, and other relevant factors; and

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

(3) **RESEARCH-** After the date of submission of the report described in paragraph (1), the President and the Secretary of Agriculture (in collaboration with the member institutions of higher education of the Consortium for Agricultural Soil Mitigation of Greenhouse Gases, institutions of higher education, and research entities) shall initiate a program to conduct any additional research that is necessary relating to soil carbon sequestration and other agricultural sector greenhouse gas emissions for all agricultural sectors, including trees and grassland.

(b) **Agricultural Sequestration Allowances-** Taking into account the report prepared under subsection (a)(1), the Secretary of Agriculture shall establish, by rule, a program under which agricultural sequestration allowances may be distributed to entities that carry out sequestration projects on agricultural land that achieve long-term greenhouse gas emission mitigation benefits.

(c) **Quantity-** During a calendar year, the Secretary of Agriculture shall distribute agricultural sequestration allowances in a quantity not greater than the product obtained by multiplying--

(1) the total number of allowances issued for the calendar year under section 101(a); and

(2) the percentage of allowances available for agricultural sequestration under section 201(a).

(d) **Relationship to Auction-**

(1) **INSUFFICIENT ALLOWANCES-** If the allowances available for agricultural sequestration under subsection (c) are insufficient to enable the allocations required under the program established under subsection (b) to be made, the additional required allowances shall be deducted from allowances available for auction under section 208.

(2) SURPLUS ALLOWANCES- If the Secretary of Agriculture does not allocate under this subsection all of the allowances available for agricultural sequestration, any unallocated allowances shall be added to the allowances available for auction under section 208.

(e) Education and Outreach Services- The Secretary of Agriculture, acting through the Cooperative State Research, Education, and Extension Service, shall carry out a program to provide--

(1) education and outreach services to agricultural producers relating to--

(A) the carbon sequestering ability of soil by region, plant type, soil type, cropping practice, and water availability;

(B) the soil and environmental benefits of carbon sequestration;

(C) the transition to carbon sequestering soil techniques;

(D) other agricultural sector greenhouse gas emission reduction activities; and

(E) the rules and earning potential of participating in private and public carbon trading systems; and

(2) education and outreach services to aggregators relating to--

(A) the management of carbon credits for agricultural producers; and

(B) the assistance provided to agricultural producers for the management required for carbon trading systems.

(f) Competitive Grants-

(1) IN GENERAL- The Secretary of Agriculture shall carry out a program to provide competitive grants to conduct research, education, and outreach service projects under this section within and outside of the Department of Agriculture.

(2) PRIORITY- In making grants under paragraph (1), the Secretary of Agriculture shall give priority to community organizations and producer groups.

(3) LIMITATIONS-

(A) RESEARCH PROJECTS- The maximum amount of a grant awarded for a research project under this subsection shall be \$500,000.

(B) EDUCATIONAL AND OUTREACH PROJECTS- The maximum amount of a grant awarded for an education or outreach project under this subsection shall be \$50,000.

(4) FUNDING- Of the funds of the Energy Technology Deployment Fund, the Secretary of Agriculture shall use to carry out this subsection, without further appropriation, \$10,000,000 for each of fiscal years 2008 through 2013, to remain available until expended.

## **SEC. 206. ALLOCATION FOR EARLY REDUCTIONS.**

### **(a) Establishment-**

(1) **IN GENERAL-** The President shall establish, by rule, a program under which the President may distribute to any entity that carries out a project to reduce or sequester greenhouse gas emissions before the initial allocation period a quantity of allowances that reflects the actual emissions reductions or net sequestration of the project, as determined by the President.

(2) **INSUFFICIENT ALLOWANCES-** The President shall establish procedures for distribution of allowances if the total quantity of eligible early reductions exceeds the quantity of allowances available under subsection (b).

(b) **Available Allowances-** The total quantity of allowances distributed under subsection (a) may not exceed the product obtained by multiplying--

(1) the total number of allowances issued for the calendar year under section 101(a); and

(2) the percentage available for early reduction allowances for the calendar year under section 201(a).

(c) **Eligibility-** The President may distribute allowances only for early reduction projects that--

(1) are consistent with maintaining the environmental integrity of the program under this Act; and

(2) were reported under--

(A) the Voluntary Reporting of Greenhouse Gases Program of the Energy Information Administration under section 1605(b) of the Energy Policy Act of 1992 (42 U.S.C. 13385(b));

(B) the Climate Leaders Program of the Environmental Protection Agency; or

(C) a State-administered or privately administered registry that includes early reduction actions not covered under the programs described in subparagraph (A) or (B).

## **SEC. 207. ALLOCATION OF CARBON CAPTURE AND SEQUESTRATION BONUS ALLOWANCES.**

### **(a) Bonus Allowances for Near-Term Geological Sequestration Projects-**

#### **(1) ESTABLISHMENT-**

(A) **IN GENERAL-** The President shall establish, by rule, a demonstration program under which the President shall encourage near-term development of certain geological sequestration projects by distributing bonus allowances to entities that implement the projects.

(B) **ADDITIONAL ALLOWANCES-** The distribution of bonus allowances shall be in addition to any credits distributed for the projects under section 302.

(2) **QUALIFYING PROJECTS-** To be eligible for bonus allowances under this subsection, a project shall--

(A) comply with such procedures as the President may establish for crediting geological sequestration projects under sections 302 and 303;

(B) sequester carbon dioxide emissions resulting from electric power generation; and

(C) have begun operation during the period beginning January 1, 2008, and ending December 31, 2030.

(3) **ALLOCATION OF BONUS ALLOWANCES-** Each calendar year, the President shall distribute bonus allowances to each qualifying project under this subsection in a quantity equal to the product obtained by multiplying the number of tons sequestered by the project and the bonus allowance rate for that calendar year as provided in the following table:

-----

Calendar Year Bonus Allowance Rate

-----

2012	3.5
2013	3.5
2014	3.5
2015	3.5
2016	3.5
2017	3.5
2018	3.3
2019	3.1
2020	2.9
2021	2.7
2022	2.5
2023	2.3
2024	2.1
2025	1.9
2026	1.7
2027	1.5

2028	1.3
2029	1.1
2030	0.9
2031	0.7
2032	0.5
2033	0.5
2034	0.5
2035	0.5
2036	0.5
2037	0.5
2038	0.5
2039	0.5
2040	0.0

-----

(4) 10-year LIMIT- A qualifying project may receive annual bonus allowances under this subsection only for the first 10 years of operation.

(5) RELATIONSHIP TO AUCTION-

(A) INSUFFICIENT BONUS ALLOWANCES- If the bonus allowances available for geological sequestration (as determined by multiplying the total number of allowances issued for a calendar year under section 101(a) and the percentage for geological sequestration under section 201(a)) are insufficient to enable the allocations required under paragraph (3) to be made, the additional required allowances shall be deducted from allowances available for auction under section 208.

(B) SURPLUS BONUS ALLOWANCES- If the President does not allocate under this subsection all of the allowances available for geological sequestration, any unallocated allowances shall be added to the allowances available for auction under section 208.

(b) Report on Geological Sequestration Projects- Not later than 1 year after the date of enactment of this Act, the President shall submit to Congress a report on the environmental, health, and safety issues surrounding the long-term storage of large quantities of carbon dioxide emissions in geological formations, including any legislative recommendations to address liability for releases of carbon dioxide emissions from the formations.

## **SEC. 208. AUCTION OF ALLOWANCES FOR TECHNOLOGY, ADAPTATION, AND ASSISTANCE PROGRAMS.**

(a) Procedure- The President shall establish, by rule, a procedure for the auction of allowances for each calendar year in accordance with this section.

(b) Base Quantity- Subject to subsection (c), the base quantity of allowances to be auctioned for a calendar year shall be the product obtained by multiplying--

(1) the total number of allowances issued for the calendar year under section 101(a); and

(2) the percentage for technology, adaptation, and low-income household assistance for the calendar year under section 201(a).

(c) Adjustments to Number of Allowances Auctioned- For any calendar year, the quantity of allowances shall be equal to the base quantity of allowances determined pursuant to subsection (b)--

(1) minus any excess allowances needed to--

(A) allocate allowances to a new entrant facility under section 202(b)(3);

(B) allocate allowances to a new entrant manufacturing facility under section 203(f);

(C) allocate allowances for an agricultural sequestration project under section 205; or

(D) allocate carbon capture and sequestration bonus allowances under section 207(a); and

(2) plus any allowances that were--

(A) available for allocation by the President under section 201(b) for the calendar year but not distributed;

(B) available for allocation for the preceding calendar year for new entrant facilities under section 202(b)(3) but not distributed during that calendar year;

(C) returned to the President by the owner or operator of a shut down eligible manufacturing facility under section 203(e);

(D) available for allocation for the preceding calendar year for new entrant manufacturing facilities under section 203(f) but not distributed during that calendar year;

(E) returned to the President by a State under section 204(b)(3);

(F) available during the preceding calendar year for allocation to an agricultural project under section 205 but not distributed during that calendar year; or

(G) available during the preceding calendar year for allocation as a carbon capture and sequestration bonus allowance under section 207(a) but not distributed during that calendar year.

(d) Allocation of Reduction or Increase- Any reduction or increase in auction allowances under subsection (c) shall be allocated among technology, adaptation, and low-income household assistance in the same ratio as the base quantity of allowances is allocated between technology, adaptation, and low-income household assistance under section 201(a).

(e) Schedule- The auction of allowances shall be held on the following schedule:

(1) In 2009, the President shall auction--

(A) 1/2 of the allowances available for auction for 2012; and

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

(2) In 2010, the President shall auction 1/2 of the allowances available for auction for 2014.

(3) In 2011, the President shall auction 1/2 of the allowances available for auction for 2015.

(4) In 2012 and each subsequent calendar year, the President shall auction--

(A) 1/2 of the allowances available for auction for that calendar year; and

(B) 1/2 of the allowances available for auction for the calendar year that is 4 calendar years after that calendar year.

(f) Auction Proceeds-

(1) ESTABLISHMENT OF FUNDS- There are established in the Treasury the following funds:

(A) The Energy Technology Deployment Fund.

(B) The Climate Adaptation Fund.

(C) The Energy Assistance Fund.

(2) DEPOSIT OF FUNDS- Subject to paragraph (3), the President shall deposit into the funds under paragraph (1) the proceeds of auctions of allowances under this section, in the same ratio as the base quantity of allowances for the applicable year for technology, adaptation, and low-income household assistance, respectively, under section 201(a).

(3) LIMITATION- Any auction proceeds that would otherwise be deposited into the funds established under subparagraphs (A) and (B) of paragraph (1) shall be treated as miscellaneous receipts of the United States and deposited into the general fund of the Treasury to the extent that the funds exceed--

(A) for calendar year 2009, \$25,000,000,000; and

(B) for each subsequent year, the product obtained by multiplying--

(i) the amount of the limitation established for the preceding year; by

(ii) the ratio described in section 102(d)(2)(B).

## **TITLE III--PROVISION OF CREDITS**

### **SEC. 301. CREDITS FOR ACTIVITIES THAT TAKE GREENHOUSE GAS PRECURSORS OUT OF COMMERCE IN THE UNITED STATES.**

(a) In General- The President shall establish, by rule, a program under which the President distributes credits to United States entities for certain downstream activities in accordance with this section.

(b) Use of Fuels as Feedstocks- If the President determines that an entity has used a covered fuel (other than coal) as a feedstock in calendar year 2012 or any calendar year thereafter, so that the carbon dioxide associated with the covered fuel will not be emitted, the President shall distribute to that entity a quantity of credits equal to the quantity of covered fuel used as feedstock by the entity during that calendar year, measured in carbon dioxide equivalents.

(c) Exporters of Covered Fuel- If the President determines that an entity has exported covered fuel (other than coal) (including exports of natural gas from Alaska to Canada for reimportation into the United States) in calendar year 2012 or any calendar year thereafter, the President shall distribute to that entity a quantity of credits equal to the quantity of covered fuel exported by the entity during that calendar year, measured in carbon dioxide equivalents.

(d) Other Exporters- If the President determines that an entity has exported hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, or nitrous oxide in calendar year 2012 or any calendar year thereafter, the President shall distribute to that entity a quantity of credits equal to the volume of hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, or nitrous oxide exported by the entity during that calendar year, measured in carbon dioxide equivalents.

(e) Hydrofluorocarbon Destruction- If the President determines that an entity has destroyed hydrofluorocarbons in calendar year 2012 or any calendar year thereafter, the President shall distribute to that entity a quantity of credits equal to the volume of hydrofluorocarbons destroyed by the entity during that calendar year, measured in carbon dioxide equivalents.

### **SEC. 302. CREDITS FOR CARBON DIOXIDE SEQUESTRATION.**

If the President determines that an entity has sequestered in calendar year 2012 or any calendar year thereafter carbon dioxide emissions in a geological formation in a manner the President determines will achieve long-term greenhouse gas mitigation benefits, the President shall distribute to that entity a quantity of credits equal to the quantity of carbon dioxide sequestered by the entity during that calendar year.

### **SEC. 303. CREDITS FOR PROJECTS THAT OFFSET OTHER GREENHOUSE GAS EMISSIONS.**

(a) Establishment- The President shall establish, by rule, a program under which the President shall distribute credits to entities that carry out offset projects in the United States that--

(1)(A) reduce any greenhouse gas emissions that are not covered greenhouse gas emissions in calendar year 2012 or any calendar year thereafter; or

- (B) sequester a greenhouse gas in calendar year 2012 or any calendar year thereafter;
- (2) meet the requirements of section 601(c); and
- (3) are consistent with maintaining the environmental integrity of the program under this Act.

(b) Categories of Offset Projects Eligible for Streamlined Procedures-

(1) IN GENERAL- The program established under this section shall include the use of streamlined procedures for distributing credits to categories of projects for which the President determines there are broadly accepted standards or methodologies for quantifying and verifying the long-term greenhouse gas emission mitigation benefits of the projects.

(2) CATEGORIES OF PROJECTS- The streamlined procedures described in paragraph (1) shall apply to--

- (A) landfill methane use projects;
- (B) animal waste or municipal wastewater methane use projects;
- (C) projects to reduce sulfur hexafluoride emissions from transformers;
- (D) coal mine methane use projects; and
- (E) such other categories of projects as the President may specify by rule.

(c) Distribution of Credits-

(1) IN GENERAL- If the President determines that an entity has carried out an offset project in calendar year 2012 or any calendar year thereafter that is eligible under this section, the President shall distribute to that entity a quantity of credits equal to the volume of greenhouse gas emissions reduced or sequestered during that calendar year, measured in carbon dioxide equivalents.

(2) UNCLASSIFIED PROJECTS- With respect to an offset project that is not classified within any project category described in subsection (b), the President may distribute less than 1 credit for each ton of greenhouse gas emissions reduced or sequestered, measured in carbon dioxide equivalents.

(d) Ineligible Offset Projects- An offset project shall not be eligible to receive a credit under this section if the offset project is eligible to receive credits or allowances under section 205, 206, 207, 301, or 302.

## **TITLE IV--TECHNOLOGY, ADAPTATION, AND ASSISTANCE PROGRAMS**

### **SEC. 401. EARLY TECHNOLOGY DEPLOYMENT PROGRAMS.**

(a) In General-

(1) ALLOCATION- Beginning in fiscal year 2010, the Secretary shall use 80 percent of the funds deposited in the Energy Technology Deployment Fund (other than funds used under sections

102(i)(3) and 205(f)(4)), without further appropriation or fiscal year limitation, as follows:

(A) 45 percent of the funds shall be used to carry out the zero- or low-carbon energy technologies program under subsection (b).

(B) 35 percent of the funds shall be used as follows:

(i) 28 percent shall be used to carry out the advanced coal and sequestration technologies program under subsection (c).

(ii) 7 percent shall be used to carry out the cellulosic biomass ethanol and municipal solid waste technology deployment programs.

(C) 20 percent shall be used to carry out the advanced technology vehicles manufacturing incentive program under subsection (e).

## (2) ADJUSTMENT OF PROGRAM FUNDING PROPORTIONS-

(A) REVIEW- Not later than September 30, 2013, the Secretary shall enter into appropriate arrangements with the National Academy of Sciences to review, every 10 years, the funding categories and percentages under this subsection to determine if the categories and percentages are responsive to the greatest needs and opportunities for deployment of advanced energy technology to mitigate climate change.

(B) ADJUSTMENT- On receipt of the report by the National Academy of Sciences, the Secretary may, by rule, adjust the funding categories and percentages under this subsection to implement the recommendations by the National Academy of Sciences.

### (b) Zero- or Low-Carbon Energy Technologies Deployment-

(1) DEFINITIONS- In this subsection:

(A) ENERGY SAVINGS- The term `energy savings' means megawatt-hours of electricity or million British thermal units of natural gas saved by a product, in comparison to projected energy consumption under the energy efficiency standard applicable to the product.

(B) HIGH-EFFICIENCY CONSUMER PRODUCT- The term `high-efficiency consumer product' means a covered product to which an energy conservation standard applies under section 325 of the Energy Policy and Conservation Act (42 U.S.C. 6295), if the energy efficiency of the product exceeds the energy efficiency required under the standard.

(C) ZERO- OR LOW-CARBON GENERATION- The term `zero- or low-carbon generation' means generation of electricity by an electric generation unit that--

(i) emits no carbon dioxide into the atmosphere, or is fossil-fuel fired and emits into the atmosphere not more than 250 pounds of carbon dioxide per megawatt-hour (after adjustment for any carbon dioxide from the unit that is geologically sequestered); and

(ii) was placed into commercial service after the date of enactment of this Act.

(2) FINANCIAL INCENTIVES PROGRAM- During each fiscal year beginning on or after October 1, 2008, the Secretary shall competitively award financial incentives under this subsection in the following technology categories:

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

(B) Manufacture of high-efficiency consumer products.

(3) REQUIREMENTS-

(A) IN GENERAL- The Secretary shall make awards under this subsection to producers of new zero- or low-carbon generation and to manufacturers of high-efficiency consumer products--

(i) in the case of producers of new zero- or low-carbon generation, based on the bid of each producer in terms of dollars per megawatt-hour of electricity generated; and

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

(B) ACCEPTANCE OF BIDS-

(i) IN GENERAL- In making awards under this subsection, the Secretary shall--

(I) solicit bids for reverse auction from appropriate producers and manufacturers, as determined by the Secretary; and

(II) award financial incentives to the producers and manufacturers that submit the lowest bids that meet the requirements established by the Secretary.

(ii) FACTORS FOR CONVERSION-

(I) IN GENERAL- For the purpose of assessing bids under clause (i), the Secretary shall specify a factor for converting megawatt-hours of electricity and million British thermal units of natural gas to common units.

(II) REQUIREMENT- The conversion factor shall be based on the relative greenhouse gas emission benefits of electricity and natural gas conservation.

(C) INELIGIBLE UNITS- A new unit for the generation of electricity that uses renewable energy resources shall not be eligible to receive an award under this subsection if the unit receives renewable energy credits under a Federal renewable portfolio standard.

(4) FORMS OF AWARDS-

(A) ZERO- AND LOW-CARBON GENERATORS- An award for zero- or low-carbon generation under this subsection shall be in the form of a contract to provide a production payment for each year during the first 10 years of commercial service of the generation unit in an amount equal to the product obtained by multiplying--

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

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

(B) HIGH-EFFICIENCY CONSUMER PRODUCTS- An award for a high-efficiency consumer product under this subsection shall be in the form of a lump sum payment in an amount equal to the product obtained by multiplying--

(i) the amount bid by the manufacturer of the high-efficiency consumer product; and

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

(c) Advanced Coal and Sequestration Technologies Program-

(1) ADVANCED COAL TECHNOLOGIES-

(A) DEFINITION OF ADVANCED COAL GENERATION TECHNOLOGY- In this paragraph, the term 'advanced coal generation technology' means advanced coal-fueled power plant technologies that--

(i) achieve a minimum efficiency of 30 percent with respect to higher heating value of the feedstock after all parasitic requirements for carbon dioxide capture and compression to 2,000 psia have been subtracted; and

(ii) provide for capture of a significant quantity of carbon dioxide emissions, as determined by the Secretary.

(B) DEMONSTRATION PROJECTS- The Secretary shall use 1/4 of the funds provided to carry out this subsection during each year to support demonstration projects using advanced coal generation technology, including retrofit technology that could be deployed on existing coal generation facilities.

(C) DEPLOYMENT INCENTIVES-

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

(ii) ADMINISTRATION- In providing incentives under this subparagraph, the Secretary shall--

(I) provide appropriate incentives for regulated investor-owned utilities, municipal utilities, electric cooperatives, and independent power producers, as determined by the Secretary; and

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

(iii) FUNDING REQUIREMENTS-

(I) SEQUESTRATION ACTIVITIES- The Secretary shall provide incentives only to projects that will capture and sequester emissions of carbon dioxide.

(II) STORAGE AGREEMENT REQUIRED- The Secretary shall require a binding storage agreement for the carbon dioxide captured in a project under this subsection, in a geologic storage project approved by the Secretary.

(III) PROJECTS USING CERTAIN COALS- In providing incentives under this subparagraph, the Secretary shall set aside not less than 25 percent of any funds made available to carry out this paragraph for projects using lower rank coals, such as subbituminous coal and lignite.

(iv) DISTRIBUTION OF FUNDS- A project that receives an award under this subparagraph may elect 1 of the following Federal financial incentives:

(I) A loan guarantee.

(II) A cost-sharing grant for not more than 50 percent of the cost of the project.

(III) Production payments of not more than 1.5 cents per kilowatt-hour of electric output during the first 10 years of commercial service of the project.

(v) LIMITATION- A project may not receive an award under this subsection if the project receives an award under subsection (d).

(2) SEQUESTRATION-

(A) IN GENERAL- The Secretary shall use 1/2 of the funds provided to carry out this subsection during each fiscal year for large-scale geologic carbon storage demonstration projects that use carbon dioxide captured from facilities for the generation of electricity using coal gasification or other advanced coal combustion processes, including facilities that receive assistance under paragraph (1).

(B) PROJECT CAPITAL AND OPERATING COSTS- The Secretary shall provide assistance under this paragraph to reimburse the project owner for a percentage of the incremental project capital and operating costs of the project that are attributable to carbon capture and sequestration, as the Secretary determines to be appropriate.

(d) Fuel From Cellulosic Biomass-

(1) IN GENERAL- The Secretary shall provide deployment incentives under this subsection to encourage a variety of projects to produce transportation fuels from cellulosic biomass, relying on different feedstocks in different regions of the United States.

(2) PROJECT ELIGIBILITY- Incentives under this subsection shall be provided on a competitive basis to projects that produce fuels that--

(A) meet United States fuel and emissions specifications;

(B) help diversify domestic transportation energy supplies; and

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

(3) INCENTIVES- Incentives under this subsection may consist of--

(A) loan guarantees for the construction of production facilities and supporting infrastructure; or

(B) production payments through a reverse auction in accordance with paragraph (4).

(4) REVERSE AUCTION-

(A) IN GENERAL- In providing incentives under this subsection, the Secretary shall--

(i) prescribe rules under which producers of fuel from cellulosic biomass may bid for production payments under paragraph (3)(B); and

(ii) solicit bids from producers of different classes of transportation fuel, as the Secretary determines to be appropriate.

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

(e) Advanced Technology Vehicles Manufacturing Incentive Program-

(1) DEFINITIONS- In this subsection:

(A) ADVANCED TECHNOLOGY VEHICLE- The term `advanced technology vehicle' means a light duty motor vehicle that meets--

(i) the Tier II Bin 5 emission standard established in rules prescribed by the Administrator of the Environmental Protection Agency under section 202(i) of the Clean Air Act (42 U.S.C. 7521(i)), or a lower numbered Bin emission standard;

(ii) any new emission standard for fine particulate matter prescribed by the Administrator under that Act; and

(iii) at least 125 percent of the average base year combined fuel economy, calculated on an energy-equivalent basis, for vehicles of a substantially similar footprint.

(B) COMBINED FUEL ECONOMY- The term `combined fuel economy' means--

(i) the combined city-highway miles per gallon values, as reported in accordance with section 32908 of title 49, United States Code; and

(ii) in the case of an electric drive vehicle with the ability to recharge from an off-board source, the reported mileage, as determined in a manner consistent with the Society of Automotive Engineers recommended practice for that configuration, or a similar practice recommended by the Secretary, using a petroleum equivalence factor for the off-board electricity (as defined by the Secretary).

(C) ENGINEERING INTEGRATION COSTS- The term `engineering integration costs' includes the cost of engineering tasks relating to--

(i) incorporating qualifying components into the design of advanced technology vehicles; and

(ii) designing new tooling and equipment for production facilities that produce qualifying components or advanced technology vehicles.

(D) QUALIFYING COMPONENT- The term `qualifying component' means a component that the Secretary determines to be--

(i) specially designed for advanced technology vehicles; and

(ii) installed for the purpose of meeting the performance requirements of advanced technology vehicles.

(2) MANUFACTURER FACILITY CONVERSION AWARDS- The Secretary shall provide facility conversion funding awards under this subsection to automobile manufacturers and component suppliers to pay 30 percent of the cost of--

(A) re-equipping or expanding an existing manufacturing facility to produce--

(i) qualifying advanced technology vehicles; or

(ii) qualifying components; and

(B) engineering integration of qualifying vehicles and qualifying components.

(3) PERIOD OF AVAILABILITY-

(A) IN GENERAL- An award under paragraph (2) shall apply to--

(i) facilities and equipment placed in service after the date of enactment of this Act and before January 1, 2016; and

(ii) engineering integration costs incurred after the date of enactment of this Act.

(f) International Technology Development-

(1) FUNDING- Beginning in fiscal year 2010, the Secretary of State shall, without further appropriation or fiscal year limitation, use 20 percent of the funds deposited in the Energy Technology Deployment Fund and any funds in the International Technology Deployment Fund from the sale of international reserve allowances under section 502(f)(4)(A), for purposes of carrying out an international technology development program under this subsection.

(2) REPORT-

(A) IN GENERAL- Not later than 1 year after the date of enactment of this Act, the President shall submit to Congress--

(i) a report on a strategy for leveraging funds available under this subsection to encourage the deployment of energy technology with low or no greenhouse gas emissions in key developing countries; and

(ii) legislative recommendations for carrying out the strategy.

(B) TARGETING-

(i) IN GENERAL- The report shall recommend targeted countries, priority technologies, and sectors.

(ii) PRIORITY- Priority shall be given to countries that the President determines are making substantial efforts to reduce the greenhouse gas emissions of the countries.

(C) GOALS- The recommendations in the report shall be based on the dual goals of export promotion and greenhouse gas reduction.

(D) COMPONENTS- Components of the strategy described in the report may include--

(i) loan guarantees and other funding mechanisms;

(ii) cost sharing for demonstration projects;

(iii) information sharing and capacity building;

(iv) cooperative benchmarking efforts;

(v) joint research and development initiatives;

(vi) elimination of financing and market barriers; and

(vii) pursuing carbon reduction strategies that align with general development plans (such as using nuclear power, employing efficiency or fuel switching to reduce conventional pollution, or avoiding deforestation).

(3) IMPLEMENTATION- The program under this subsection, if the program is approved by Congress by law, shall be administered by the Secretary of State, in consultation with--

(A) the Secretary of Energy;

(B) the Secretary of Commerce;

(C) the Administrator of the United States Agency for International Development;

(D) the United States Trade Representative; and

(E) the Administrator of the Environmental Protection Agency.

## **SEC. 402. ADAPTATION PROGRAMS.**

(a) In General-

(1) AUCTION PROCEEDS- All proceeds from auctions deposited into the Climate Adaptation Fund shall be made available, without further appropriation or fiscal year limitation, for the adaptation programs under this section.

(2) USES OF FUNDS- Funds for adaptation shall be used as follows:

(A) 25 percent shall be used by the President to address climate change impacts on coastal regions of the United States (other than regions for which funding is received under subparagraph (B)).

(B) 25 percent shall be to address climate change impacts on regions in the United States above 50 degrees North latitude, in accordance with a plan submitted by such a region to the President, with up to 5 percent of the funds for those regions made available for research on impacts of climate change on those regions.

(C) 20 percent shall be used by the President to address climate change impacts on natural resources in the contiguous United States (other than in areas described in subparagraphs (A) and (B)), with a priority given to--

(i) studies or research within the Climate Change Science Program, including basic data acquisition and enhanced modeling systems, intended to better understand and predict the impacts to water supply of global climate change;

(ii) research and development of new technologies to reclaim impaired and nontraditional water supplies, including desalination technologies; and

(iii) providing an appropriate Federal cost-share through existing Federal programs to facilitate the planning, design, and construction of projects to conserve water or otherwise enhance water use efficiency, including facilities to reclaim and reuse wastewater.

(D) 30 percent shall be used for fish and wildlife conservation programs, with the total funding under this subparagraph divided as follows:

(i) 18 percent shall be transferred to the subaccount of the Treasury known as the Wildlife Conservation and Restoration Account established by section 3(a)(2) of the Pittman-Robertson Wildlife Restoration Act (16 U.S.C. 669b(a)(2)) in accordance with subsection (b).

(ii) 18 percent shall be made available to States through the Federal aid to wildlife restoration fund established under section 3(a)(1) of the Pittman-Robertson Wildlife Restoration Act (16 U.S.C. 669b(a)(1)) and the Dingell-Johnson Sport Fish Restoration Act (commonly known as the 'Wallop-Breaux Act') (16 U.S.C. 777 et seq.) in accordance with subsection (c).

(iii) 28 percent shall be available for obligation or expenditure in accordance with section 5 of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 460l-7) in accordance with subsection (d).

(iv) 36 percent shall be transferred to the Treasury subaccount described in subsection (e)(2) for the purposes specified in subsection (e)(3).

(3) DISTRIBUTION RULES- The President shall establish, by rule, a procedure to distribute the adaptation assistance available for each calendar year under subparagraphs (A) and (C) of paragraph (2).

(4) USE OF FUNDS- Adaptation assistance available for each calendar year under subparagraphs (A) and (B) of paragraph (2) shall be used only for--

- (A) coastal and estuarine land protection;
- (B) mitigation, restoration, protection, and relocation of threatened coastal communities;
- (C) coastal damage prevention and restoration, including infrastructure replacement and construction;
- (D) research and deployment of technologies designed to address climate impacts; or
- (E) construction of energy or transportation infrastructure capable of reducing carbon emissions.

(5) REPORT-

(A) IN GENERAL- Not later than September 30, 2008, and annually thereafter, a State receiving adaptation assistance under this subsection shall submit to the appropriate congressional committees, the Department of Commerce, Department of the Interior, Environmental Protection Agency, and the Council on Environmental Quality a report that describes actions taken to carry out this subsection.

(B) CONTENT- The report shall include--

- (i) the amount of obligations and expenditures to carry out this subsection;
- (ii) a list of research questions and the results of research undertaken; and
- (iii) a description of any project undertaken with the use of funds under this subsection.

(b) State Wildlife Plans-

(1) IN GENERAL- Funds made available under subsection (a)(2)(D)(i) shall be used by States to improve the ability of fish and wildlife to survive the effects of climate change by--

- (A) developing assessment information, conducting research, and undertaking monitoring of fish and wildlife and the habitat of fish and wildlife;
- (B) developing and undertaking projects to manage, conserve, and restore individual species of fish and wildlife and populations; and
- (C) implementing actions to manage, conserve, and restore fish and wildlife habitat.

(2) INTEGRATING CLIMATE CHANGE CONSIDERATIONS INTO STATE COMPREHENSIVE WILDLIFE CONSERVATION STRATEGIES- Effective beginning on the date of enactment of this Act, each State shall account for anticipated changes in climate and anticipated changes in the natural environment in any revisions and updates to the comprehensive wildlife conservation strategy required by section 4(d)(1)(D) of the Pittman-Robertson Wildlife Restoration Act (16 U.S.C. 669c(d)(1)(D)) undertaken after the date of enactment of this Act.

(3) STATE MATCHING REQUIREMENT- Notwithstanding any other provision of law, the State matching requirement for use of funds made available under subsection (a)(2)(D)(i) shall be 10 percent of the cost of the projects carried out under this subsection.

(c) State Wildlife Conservation Programs-

(1) IN GENERAL- Funds made available under subsection (a)(2)(D)(ii) shall be used by States to improve the ability of game and other species of fish and wildlife to survive the effects of climate change by--

(A) developing assessment information, conducting research, and undertaking monitoring of game and other species of fish and wildlife and the habitat of the game and other species of fish and wildlife;

(B) developing and undertaking projects to manage, conserve, and restore individual game and other species of fish and wildlife and populations; and

(C) implementing actions to manage, conserve, and restore fish and wildlife habitat.

(2) COORDINATING GAME SPECIES CLIMATE CHANGE CONSERVATION EFFORTS WITH STATE COMPREHENSIVE WILDLIFE CONSERVATION STRATEGIES- A State shall coordinate, to the maximum extent practicable, the efforts of the State under this section to conserve game species in light of climate change impacts on the natural environment with work carried out under the comprehensive wildlife conservation strategy of the State required under section 4(d)(1)(D) of the Pittman-Robertson Wildlife Restoration Act (16 U.S.C. 669c(d)(1)(D)).

(3) MATCHING REQUIREMENT- Notwithstanding any other provision of law, the State matching requirement for use of funds made available under subsection (a)(2)(D)(ii) shall be 10 percent of the cost of the projects carried out under this subsection.

(4) SAVINGS CLAUSE- Nothing in this Act diminishes or affects the authorization by Congress to appropriate funds to carry out the purposes of the Pittman-Robertson Wildlife Restoration Act (16 U.S.C. 669 et seq.) and the Dingell-Johnson Sport Fish Restoration Act (commonly known as the 'Wallop-Breaux Act') (16 U.S.C. 777 et seq.).

(d) Land and Water Conservation Fund-

(1) IN GENERAL- Funds made available under subsection (a)(2)(D)(iii) shall--

(A) be available without further appropriation;

(B) remain available until expended; and

(C) be in addition to any other funds made available from the land and water conservation fund established under section 2 of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 4601-5).

(2) ALLOCATION OF FUNDS- Of funds made available under subsection (a)(2)(D)(iii)--

(A) 50 percent shall be used for Federal land acquisition purposes as provided in section 7 of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 4601-9); and

(B) 50 percent shall be used for financial assistance to States as provided in section 6 of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 4601-8).

(3) FEDERAL LAND ACQUISITION PROJECTS-

(A) PRIORITY LIST- The President shall transmit, as part of the annual budget proposal, a priority list for Federal land acquisition projects to be funded under this section.

(B) AVAILABILITY- Funds for Federal land acquisition provided under paragraph (2) shall be made available, without further appropriation, 15 days after the date Congress adjourns sine die for each year, for the projects identified on the priority list of the President, unless prior to that date, legislation is enacted establishing a different priority list.

(C) SITES UNDER JURISDICTION OF SECRETARY OF THE INTERIOR AND SECRETARY OF AGRICULTURE-

(i) IN GENERAL- In developing the annual land acquisition priority list, the President shall require the Secretary of the Interior and the Secretary of Agriculture to develop the priority list for the sites under the jurisdiction of each Secretary.

(ii) CONSULTATION- The Secretaries shall prepare the lists in consultation with the head of each affected bureau or agency, taking into account the best professional judgment regarding the land acquisition priorities and policies of each bureau or agency.

(D) AREAS- Acquisition of land or interests in land under this section shall be limited to acquisitions within the external boundaries of--

(i) a unit of the National Park System;

(ii) a unit of the National Wildlife Refuge System;

(iii) a federally administered component of the National Wild and Scenic Rivers System;

(iv) a component of the National Trails System;

(v) a component of the National Wilderness Preservation System;

(vi) a National Monument;

(vii) any part of the National Landscape Conservation System established by Congress or if the boundary has been approved by Congress;

(viii) a National Conservation Area; or

(ix) a National Recreation Area administered by the Secretary of Agriculture.

(e) National Climate Change Conservation Wildlife Strategy-

(1) DEVELOPMENT OF STRATEGY-

(A) IN GENERAL- Not later than 2 years of the date of enactment of this Act, the Secretary of the Interior, in consultation and coordination with the Secretaries of Agriculture and Commerce, the National Research Council Science Advisory Board, State fish and wildlife agencies, Indian tribes, conservation organizations, and the public, shall develop a National Climate Change Conservation Wildlife Strategy.

(B) CONTENTS- The strategy shall--

(i) be updated at least once every 5 years;

(ii) be based on the best available science, as identified by the Science Advisory Board of the National Research Council;

(iii) identify roles and actions for each participating Federal agency and how that strategy will work to complement State efforts, including coordination with State Comprehensive Wildlife Conservation Strategies and other wildlife conservation plans;

(iv) identify and provide for monitoring of all fish and wildlife populations affected by climate change, including game and nongame species, habitat at risk, and wildlife mitigation strategies;

(v) establish priorities for the conservation of game and nongame fish and wildlife, based on which actions will have the greatest long-term benefit to the species and the ecosystem, considering the likely effects of climate change, including sea level rise and coastal inundation, and shifts in local and regional climate regimes;

(vi) provide for the national climate change and wildlife science centers of the United States Geological Survey to research impacts on wildlife and mechanisms for adaptation, and to support Federal land management agencies;

(vii) be implemented on Federal land and on private land through Department of Agriculture land conservation programs; and

(viii) be implemented through existing Federal wildlife programs.

## (2) WILDLIFE CONSERVATION TREASURY SUBACCOUNT-

(A) ESTABLISHMENT- There is established a Climate Change Wildlife Conservation subaccount in the Treasury to receive transfers of adaptation funds under subsection (a)(2)(D)(iv).

(B) USE- The Secretary of the Interior shall have exclusive use of the funds in the Wildlife Conservation subaccount for the purposes specified in paragraph (3).

(3) IMPLEMENTATION OF THE CLIMATE CHANGE WILDLIFE CONSERVATION STRATEGY- The Secretary of the Interior shall use funds in the Climate Change Wildlife Conservation subaccount as follows:

(A) 4 percent for development of the National Climate Change Conservation Wildlife Strategy, except that if the Secretary of the Interior needs less than 2 percent for that purpose, the Secretary may reallocate unneeded funds to implement the Strategy.

(B) 8 percent for monitoring under the National Climate Change Conservation Wildlife Strategy, except that if the Secretary of the Interior needs less than 4 percent for that purpose, the Secretary may reallocate unneeded funds to implement the Strategy.

(C) 88 percent for implementation of the National Climate Change Conservation Wildlife Strategy through existing Federal programs, including not less than--

- (i) 16 percent to the Secretary of the Interior for--
  - (I) implementation of the North American Wetlands Conservation Act (16 U.S.C. 4401 et seq.);
  - (II) acquisition of easements by the Fish and Wildlife Service; and
  - (III) implementation of a migratory bird climate change-related strategy;
- (ii) 26 percent to the Secretary of Agriculture--
  - (I) for implementation of the climate change mitigation strategy of the Secretary on National Forest land; and
  - (II) to supplement funding for private land conservation programs;
- (iii) 26 percent to the Secretary of the Interior for implementation of the climate mitigation strategy of the Secretary--
  - (I) on Bureau of Land Management land;
  - (II) in units of the National Wildlife Refuge System;
  - (III) in units of the National Park System; and
  - (IV) in areas to improve fish passage and dam removal.
- (iv) 10 percent to the Secretary of the Interior for--
  - (I) the National Fish Habitat Plan;
  - (II) endangered species program of the Fish and Wildlife Services; and
  - (III) multinational species conservation funds.
- (v) 10 percent to the Secretary of Commerce for conservation programs of the National Marine Fisheries Service for programs to--
  - (I) sustain fisheries;
  - (II) protect marine species; and
  - (III) conserve marine habitat.

## **SEC. 403. ASSISTANCE PROGRAMS.**

(a) Auction Proceeds- In addition to any other amounts that are made available for the programs, all proceeds from auctions deposited into the Energy Assistance Fund shall be made available, without further appropriation or fiscal year limitation, to the following programs in the following ratios:

(1) 1/2 of the funds to the low-income home energy assistance program established under the Low-Income Home Energy Assistance Act of 1981 (42 U.S.C. 8621 et seq.);

(2) 1/4 of the funds to the Weatherization Assistance Program for Low-Income Persons established under part A of title IV of the Energy Conservation and Production Act (42 U.S.C. 6861 et seq.); and

(3) 1/4 of the funds to the rural energy assistance program established under subsection (b).

(b) Rural Energy Assistance Program- The Secretary shall use funds made available under subsection (a)(3) to provide financial assistance to promote the availability of reasonably priced electricity in off-grid rural regions in which electricity prices exceed 150 percent of the national average.

## **TITLE V--PERIODIC REVIEW AND INTERNATIONAL LEADERSHIP**

### **SEC. 501. EXECUTIVE BRANCH AND CONGRESSIONAL REVIEW OF PROGRAM.**

(a) Interagency Review-

(1) IN GENERAL- Not later than January 1, 2013, the President shall establish an interagency group--

(A) to conduct the annual review described in section 502(d) regarding comparable action by foreign countries;

(B) not later than January 1, 2014, to make any recommendations with respect to foreign credits and international offset projects under subsections (d) and (e); and

(C) to conduct 5-year reviews under paragraph (2).

(2) 5-year REVIEW-

(A) IN GENERAL- Not later than January 1, 2016, and every 5 years thereafter, the interagency group shall submit to the President the results of the applicable review conducted under paragraph (1)(C).

(B) REQUIRED CONTENTS- Each 5-year review shall include--

(i) an analysis of whether each of the 5 largest trading partners of the United States, as of the date on which the review is conducted, has taken comparable action (as defined in section 502(a));

(ii) an analysis of whether the programs established under this Act have contributed to an increase in electricity imports from Canada or Mexico;

(iii) an analysis of the status of the best available science and the status of technologies to reduce, sequester, or avoid greenhouse gas emissions based on reports provided by the National Academy of Sciences under paragraph (3); and

(iv) an analysis of the energy security implications of this Act, including the impact on fuel diversity, energy infrastructure, and other relevant factors.

(C) PERMITTED CONTENTS- Each 5-year review may include an analysis of--

(i) the feasibility of regulating owners or operators of entities that--

(I) emit nonfuel-related greenhouse gases; and

(II) that are not subject to this Act;

(ii) whether the percentage of allowances for any calendar year that are auctioned, allocated, or devoted to other purposes under title II should be modified;

(iii) whether regulated entities should be allowed to submit credits issued under foreign greenhouse gas regulatory programs in lieu of allowances under section 102;

(iv) whether the President should distribute credits for offset projects carried out outside the United States that do not receive credit under a foreign greenhouse gas program;

(v) whether and how the value of allowances or credits banked for use during a future calendar year should be discounted if the TAP price increases or the elimination of the TAP provision are recommended under subsection (b)(2)(C)(ii); and

(vi) such other issues as the President may direct.

(3) NATIONAL ACADEMY OF SCIENCES REPORTS- As soon as practicable after the date of enactment of this Act, the President shall offer to enter into an agreement with the National Academy of Sciences to develop periodic and timely reports on the status of the best available science and the status of technologies to reduce, sequester, or avoid greenhouse gas emissions.

(4) STUDY OF ENERGY SECURITY IMPLICATIONS OF GREENHOUSE GAS PROGRAM- Before making any recommendations under subsection (b), the President shall--

(A) conduct a comprehensive study of the energy security implications of the greenhouse gas program established under this Act, including a study of the impact of the program on fuel diversity, energy infrastructure, and other relevant factors; and

(B) submit to Congress a report on the results of the study.

(b) Presidential Recommendations to Congress-

(1) RECOMMENDATIONS TO ACHIEVE LONG-TERM EMISSION REDUCTIONS- If the President determines (based on the interagency review conducted under subsection (a)(1)(C)) that the 5 largest trading partners of the United States are taking comparable actions (as defined in section 502(a)) with respect to greenhouse gas emissions, based on consideration of the best available science and technology information provided under subsection (a)(3), the President shall submit to Congress (in accordance with paragraph (2)) a report that recommends such changes to the quantity of greenhouse gas allowances to be issued in future allocation periods as the President determines are necessary--

(A) to ensure that the United States is undertaking an equitable share of the responsibility for reducing atmospheric greenhouse gas concentrations; and

(B) to reasonably lead the United States to reduce the annual emissions of the United States to levels that are at least 60 percent below 2006 levels by 2050 or to levels consistent with the most recent assessments of the National Academy of Sciences.

(2) REPORTS TO CONGRESS-

(A) 5-year REVIEW REPORT-

(i) IN GENERAL- During the period beginning April 15, 2017, and ending May 31, 2017, and every 5 years thereafter, the President shall submit to Congress a report describing any recommendation of the President with respect to amendments to this Act.

(ii) RECOMMENDATIONS- The recommendations of each report shall take into account--

(I) the results of the review conducted under subsection (a)(1)(C); and

(II) any determinations made under paragraph (1).

(B) OTHER REPORTS- During the period beginning on April 15 and ending on May 31 of any calendar year, the President may submit to Congress a report describing any recommendation of the President with respect to amendments to this Act.

(C) AREAS- In any report submitted under subparagraph (A) or (B), the President shall make recommendations with respect to whether, and the extent to which--

(i) the quantity of greenhouse gas allowances issued for future allocation periods under section 101 should be reduced; and

(ii) the TAP prices under section 102(d) for future calendar years should be increased or the TAP mechanism should be eliminated.

(3) REPORT TO CONGRESS ON ADDITIONAL MEASURES- If, in any calendar year, TAPs made in lieu of allowance submissions under section 102 are substantial, not later than April 30 of the following calendar year, the President shall submit to Congress a report describing the additional actions the President is taking, and the recommendations the President has for additional congressional action, to ensure that TAPs in future years will not interfere with achieving the principal purposes of this Act over the long term.

(c) Expedited Congressional Action on Certain Presidential Recommendations-

(1) CONSIDERATION- Not later than September 30 of any calendar year during which a report is submitted under subsection (b)(2), the Senate and the House of Representatives may consider a joint resolution, in accordance with paragraph (2), that--

(A) amends section 101 to decrease the number of allowances to be issued, if and to the extent specifically recommended by the President pursuant to subsection (b)(2); or

(B) amends section 102(d) to increase the TAP price, or to eliminate the TAP mechanism, if and to the extent specifically recommended by the President pursuant to subsection (b)(2).

(2) REQUIREMENTS- A joint resolution considered under paragraph (1) shall--

(A) be introduced during the 45-day period beginning on the date on which a report is submitted under subsection (b); and

(B) after the resolving clause and `That', contain only 1 or more of the following:

`(i) Effective beginning **XXXXXXXXXX**, the table in section 101 of the Low Carbon Economy Act of 2007 is amended **XXXXXX**.';

`(ii) Effective beginning **XXXXXXXXXX**, section 102(d) of the Low Carbon Economy Act of 2007 is amended **XXXXXX**.'; or

`(iii) Effective beginning **XXXXXXXXXX**, no TAP may be accepted by the President in lieu of an allowance under section 102 of the Low Carbon Economy Act of 2007.';

the blanks being filled in with the effective dates, reductions in the quantity of greenhouse gas allowances to be issued, or increases in the TAP price that were specifically recommended by the President under subsection (b)(2).

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

(d) Foreign Credits-

(1) RULES- After taking into consideration the initial interagency review under subsection (a)(1)(B), the President may promulgate rules that authorize regulated entities to submit credits issued under foreign greenhouse gas regulatory programs in lieu of allowances under section 102.

(2) COMPARABLE PROGRAMS- Rules promulgated by the President under paragraph (1) shall ensure that foreign credits submitted in lieu of allowances are from foreign greenhouse gas regulatory programs that the President determines to have a level of environmental integrity that is not less than the level of environmental integrity of the programs under this Act.

(e) International Offset Project Credits-

(1) ACTION BY THE PRESIDENT- After taking into consideration the results of the interagency review under subsection (a)(1)(B), the President may promulgate rules establishing a program under which the President distributes credits for the greenhouse gas mitigation benefits of offset projects outside the United States that--

(A) meet the requirements of section 601(c); and

(B) maintain the environment integrity of the program under this Act.

(2) STREAMLINED PROCEDURES- Rules promulgated by the President under paragraph (1) shall have streamlined procedures for distributing credits for the greenhouse gas emission mitigation

benefits of projects for which the President determines there are broadly accepted standards or methodologies for quantifying and verifying those benefits.

(f) Limit on International Credits- Rules promulgated by the President under subsection (d) or (e) shall ensure that--

(1) foreign credits or greenhouse gas mitigation benefits of international offset projects have not been and cannot be used in the future for compliance purposes under any foreign greenhouse gas regulatory program; and

(2) a regulated entity does not use international offset project credits to meet more than 10 percent of the compliance obligations of the regulated entity under this Act.

## **SEC. 502. INTERNATIONAL RESERVE ALLOWANCE REQUIREMENT.**

(a) Definitions- In this section:

(1) BASELINE EMISSIONS LEVELS- The term `baseline emissions levels' means the historic greenhouse gas emissions attributed to a category of covered goods of a specific covered foreign country, as determined under subsection (e)(2).

(2) COMPARABLE ACTION- The term `comparable action' means greenhouse gas regulatory programs, requirements, and other measures adopted by a foreign country that are determined by the President to be, in combination, comparable in effect to the action taken by the United States to limit greenhouse gas emissions pursuant to this Act, after taking into account the level of economic development of the foreign country.

(3) COMPLIANCE YEAR- The term `compliance year' means each calendar year for which the international reserve allowance requirements of subsection (f) apply to a category of covered goods of a covered foreign country that is imported into the United States.

(4) COVERED FOREIGN COUNTRY- The term `covered foreign country' means a foreign country that is included on the covered list prepared under subsection (f)(3)(B)(ii).

(5) COVERED GOOD- The term `covered good' means each good that the President identifies, by rule, as a greenhouse gas intensive good that is closely related to goods, the cost of production of which in the United States is affected by this Act.

(6) FOREIGN COUNTRY- The term `foreign country' means a Member of, or observer government to, the World Trade Organization, other than the United States.

(7) GOOD OF A COVERED FOREIGN COUNTRY- The term `good of a covered foreign country' means a good originating in a specific covered foreign country, as determined in accordance with rules of origin generally used by the United States.

(8) GREENHOUSE GAS INTENSIVE GOOD- The term `greenhouse gas intensive good' means a good that--

(A) is a primary product; and

(B) generates, in the course of the manufacture of the good, a substantial quantity of direct and indirect greenhouse gas emissions.

(9) **INDIRECT GREENHOUSE GAS EMISSIONS**- The term `indirect greenhouse gas emissions' means greenhouse gases emitted from the generation of electricity that is consumed during the manufacture of a good.

(10) **INTERNATIONAL AGREEMENT**- The term `international agreement' means any international agreement to which the United States is a party, including the Marrakesh agreement establishing the World Trade Organization (WTO), done at Marrakesh on April 15, 1994.

(11) **INTERNATIONAL RESERVE ALLOWANCE**- The term `international reserve allowance' means an allowance (denominated in units of metric tons of carbon dioxide equivalent) that is--

(A) purchased from a special reserve of allowances pursuant to subsection (f)(4)(A); and

(B) used for purposes of meeting the import allowance requirements of subsection (f).

(12) **PRIMARY PRODUCT**- The term `primary product' means--

(A) iron, steel, aluminum, cement, bulk glass, or paper; or

(B) any other manufactured product that--

(i) is sold in bulk for purposes of further manufacture; and

(ii) generates, in the course of the manufacture of the product, direct and indirect greenhouse gas emissions that are comparable (on an emissions per dollar basis) to emissions generated in the manufacture of products described in subparagraph (A).

(b) **Purposes**- The purposes of this section are--

(1) to ensure that greenhouse gas emissions occurring outside the United States do not undermine the objectives of the United States to address global climate change (as described in section 2(1)); and

(2) to encourage effective international action to achieve those objectives through--

(A) procedures negotiated between the United States and other countries; or

(B) measures taken by the United States that comply with applicable international agreements.

(c) **International Negotiations**-

(1) **FINDING**- Congress finds that the purposes described in subsection (b) can be most effectively addressed and achieved through procedures negotiated between the United States and other countries.

(2) **NEGOTIATING OBJECTIVE**- To the extent that the procedures described in paragraph (1) involve measures affecting international trade in goods or services, the climate change negotiating

objective of the United States shall be to conclude multilateral or bilateral agreements on the reduction of greenhouse gas emissions that will help to achieve the purposes described in subsection (b).

(d) Interagency Review-

(1) IN GENERAL- The interagency group established under section 501(a)(1) shall determine whether, and the extent to which, each foreign country has taken comparable action to limit the greenhouse gas emissions of the foreign country.

(2) REPORT TO THE PRESIDENT- Not later than January 1, 2018, and every year thereafter, the interagency group shall report the findings of the group to the President relating to the review under paragraph (1).

(3) EXCLUSION OF CERTAIN COUNTRIES- The interagency group may exclude from review and report to the President those foreign countries that are identified in clauses (ii) and (iii) of subsection (f)(3)(A).

(e) Presidential Determinations-

(1) COMPARABLE ACTION-

(A) IN GENERAL- Not later than January 1, 2019, and every year thereafter, the President shall determine whether or not each foreign country that is subject to the interagency review under subsection (d) has taken comparable action to limit the greenhouse gas emissions of the foreign country.

(B) PUBLICATION- The President shall--

(i) report to Congress the determinations of the President under subparagraph (A); and

(ii) publish the determinations in the Federal Register.

(2) BASELINE EMISSION LEVELS-

(A) IN GENERAL- The President shall determine baseline emissions levels under this section by determining the total annual average greenhouse gas emissions attributed to each category of covered goods of a covered foreign country during the 3-year period consisting of calendar years 2012 through 2014, based on the emissions, production, and other relevant data that are available for that 3-year period.

(B) OTHER FACTORS- To the extent necessary, the President may also use economic and engineering models and the best available information on technology performance levels for the manufacture of specific categories of covered goods in order to establish representative baseline emissions levels for a specific category of covered goods of a covered foreign country.

(f) International Reserve Allowance Requirements-

(1) IN GENERAL-

(A) REQUIREMENT FOR DECLARATION- Effective beginning January 1, 2020, a United States importer of covered goods shall be required, as a condition of importation or withdrawal for consumption from a warehouse, to make a written declaration with respect to each entry of imported covered goods.

(B) CONTENTS- The declaration shall provide that--

(i) the goods subject to the entry are accompanied by a sufficient number of international reserve allowances, as determined under paragraph (6); or

(ii) the goods are not subject to the requirement to submit international reserve allowances pursuant to the exclusion that is provided under paragraph (3).

(2) CONSEQUENCES OF FAILURE TO MAKE DECLARATION- An imported covered good that is not accompanied by a written declaration pursuant to paragraph (1) shall not be permitted to enter the customs territory of the United States.

(3) EXCLUSION FOR CERTAIN IMPORTS-

(A) DETERMINATION- The requirement set forth in paragraph (1)(B)(i) shall not apply to the covered goods of any foreign country if the President determines that--

(i) the foreign country has taken comparable action to limit the greenhouse gas emissions of the foreign country, as provided under subsection (e)(1);

(ii) the United Nations has identified the foreign country as among the least-developed developing countries; or

(iii) the share of the foreign country of total global greenhouse gas emissions is below a de minimis percentage described in subparagraph (C).

(B) COUNTRY LISTS- Not later than January 1, 2020, and every year thereafter, the President shall develop and publish in the Federal Register the following 2 lists of foreign countries:

(i) EXCLUDED LIST- In the excluded list, the President shall identify those foreign countries the covered goods of which the President has determined under subparagraph (A) are not subject to the international reserve allowance requirements of this subsection.

(ii) COVERED LIST-

(I) IN GENERAL- In the covered list, the President shall identify those foreign countries the covered goods of which are subject to the international reserve allowance requirements of this subsection.

(II) CONTENT- The list shall consist of the names of those foreign countries that are not included on the excluded list prepared under clause (i).

(C) DE MINIMIS THRESHOLD-

(i) IN GENERAL- For purposes of this paragraph, a de minimis percentage shall not be greater than 0.5 percent of total global greenhouse gas emissions, as determined by the President, for the most

recent calendar year for which emissions and other relevant data is available.

(ii) DEFORESTATION RATE- To the extent that the President determines to be necessary to achieve the purposes of this section, the President may consider the annual average deforestation rate of a developing country during a representative period in determining that the share of the country of total global greenhouse gas emissions.

(4) SOURCE OF ALLOWANCES-

(A) INTERNATIONAL RESERVE ALLOWANCES-

(i) IN GENERAL- A United States importer may meet the obligations of the importer under this subsection by submitting international reserve allowances that are issued in accordance with this subparagraph.

(ii) OFFER FOR SALE-

(I) IN GENERAL- During the 1-year period ending on January 1 of the first calendar year for which compliance with this Act is required, the President shall offer for sale international reserve allowances.

(II) SOURCE- The international reserve allowances shall be issued from a special reserve of allowances that are separate from, and in addition to, the allowances issued under section 201(b).

(iii) PRICE-

(I) IN GENERAL- Subject to subclause (II), the President shall determine, by rule, the methodology for setting the price of international reserve allowances for each compliance year at a level that does not exceed the market price of allowances issued under section 201(b) for the same year.

(II) MAXIMUM PRICE- The price for international reserve allowances shall not exceed--

(aa) the TAP price (as determined under section 102(d)); or

(bb) the clearing price for current year allowances established in the most recent auction of allowances by the President under section 208.

(iv) SERIAL NUMBER- The President shall assign a unique serial number to each international reserve allowance issued under this subparagraph.

(v) TRADING SYSTEM- The President may establish, by rule, a trading system for the sale, exchange, purchase, transfer, and banking of international reserve allowances.

(vi) REGULATED ENTITIES- International reserve allowances may not be submitted by regulated entities to comply with the allowance submission requirements of section 102.

(vii) PROCEEDS- All proceeds from the sale of international reserve allowances under this subparagraph shall be--

(I) deposited into a special fund in the Treasury known as the 'International Energy Technology Deployment Fund'; and

(II) available for expenditure only for international technology development under section 401(f).

**(B) FOREIGN ALLOWANCES-**

(i) **IN GENERAL-** A United States importer may submit, in lieu of international reserve allowances issued under this subsection, foreign allowances or similar compliance instruments that a foreign country has distributed under a comparable cap and trade program.

(ii) **COMPARABLE CAP AND TRADE PROGRAM-** For purposes of clause (i), a comparable cap and trade program shall include any greenhouse gas regulatory program that a foreign country has adopted to limit the greenhouse gas emissions of the foreign country, if the President certifies that the program--

(I) places a quantitative limitation on the total quantity of greenhouse gas emissions of the foreign country (expressed in terms of tons per year) and achieves that limitation through an allowance trading system;

(II) satisfies criteria that the President shall establish for key requirements related to the enforceability of the cap and trade program, including requirements for monitoring, reporting, verification procedures, and allowance tracking; and

(III) is a comparable action.

**(C) FOREIGN CREDITS-**

(i) **IN GENERAL-** A United States importer may submit, in lieu of international reserve allowances issued under this subsection, foreign credits and credits for international offset projects that the President has authorized for use under subsections (d) and (e) of section 501.

(ii) **APPLICATION-** The quantitative limit placed on the use of the allowances by a regulated entity under subsection 501(f)(2) shall not apply to a United States importer under this section.

**(5) WRITTEN DECLARATION OF IMPORTER-**

(A) **UNIQUE SERIAL NUMBERS-** A United States importer shall include in each written declaration subject to paragraph (1) the unique serial numbers of the international reserve allowances, foreign allowances, or foreign credits associated with the covered goods subject to entry.

(B) **RETIREMENT OF ALLOWANCES-** The President shall retire the international reserve allowances, foreign allowances, or foreign credits that are included in a written declaration subject to paragraph (1).

**(C) CORRECTED DECLARATION-**

(i) **IN GENERAL-** If, after making the declaration required under paragraph (1), the United States importer has reason to believe that a declaration contains information that is not correct, the importer shall, not later than 30 calendar days after the date of discovery of the error, make a corrected

declaration.

(ii) METHOD- A corrected declaration shall be made by submission of a letter or other written statement to the Customs office where the original declaration was filed.

(6) CALCULATION OF SUFFICIENCY OF ALLOWANCES-

(A) METHODOLOGY-

(i) IN GENERAL- The President shall establish, by rule, the methodology for calculating the required number of international reserve allowances that a United States importer must submit with the written declaration under subsection (a) for each category of covered goods of each covered foreign country.

(ii) FORMULA- The President shall develop a general formula for calculating the international reserve allowance requirement that applies, on a per unit basis, to each covered good of a covered foreign country that is imported during each compliance year.

(B) INITIAL COMPLIANCE YEAR- Subject to subparagraph (C), the formulas under subparagraphs (A) and (C) shall establish an international reserve allowance requirement (per unit imported into the United States) for the first compliance year for each category of covered goods of each covered foreign country that is equal to the quotient obtained by dividing--

(i) the excess, if any, of the total emissions from the foreign country that are attributable to the category of covered goods produced during the most recent year for which data are available, over the baseline emissions level of the foreign country determined for that category of covered goods; by

(ii) the total number of units of output of the covered good produced in the foreign country during the most recent year.

(C) ADJUSTMENTS FOR INITIAL COMPLIANCE YEAR- The President shall adjust the international reserve allowance requirement applicable to the first compliance year to--

(i) reflect the ratio that--

(I) allowances that were allocated at no cost under title II to entities within the industry sector manufacturing the covered goods for the year when the covered goods were imported into the United States; bears to

(II) the emissions of that industry sector; and

(ii) take into account the level of economic development of the foreign country of origin of the imported covered goods.

(D) ADJUSTMENTS FOR SUBSEQUENT COMPLIANCE YEARS- For each subsequent compliance year, the President shall revise, as appropriate, the international reserve allowance requirement applicable to each category of imported covered goods of each covered foreign country to reflect changes in--

(i) the factors described in subparagraphs (B) and (C);

(ii) the total quantity of the annual greenhouse gas allowances issued under section 201 and payments made in lieu of the submission of allowances pursuant to section 102(a)(2); and

(iii) other matters that the President considers to be relevant in revising the international reserve allowance requirement to achieve the purposes of this section.

(E) PUBLICATION- Not later than 90 days before the beginning of each applicable calendar year, the President shall publish in the Federal Register a schedule describing the required number of international reserve allowances for each category of imported covered goods of each covered foreign country, as calculated under this paragraph.

(7) CONSISTENCY WITH INTERNATIONAL AGREEMENTS- The President shall adjust the international reserve allowance requirements established under this subsection (including the number of international reserve allowances required for each category of covered goods of a covered foreign country) as necessary to ensure that the United States complies with all applicable international agreements.

(8) TERMINATION OF INTERNATIONAL RESERVE ALLOWANCE REQUIREMENT- The international reserve allowance requirements of this subsection shall not apply to the covered goods of a covered foreign country on a determination made by the President under paragraph (3)(A) with respect to covered goods of that foreign country.

(9) IMPLEMENTING RULES- Not later than January 1, 2019, the President shall issue, pursuant to notice and comment rulemaking, final rules for implementing the international reserve allowance requirements established under this subsection.

(g) Adjustment of International Reserve Allowance Requirements-

(1) IN GENERAL- Not later than January 1, 2023, and each year thereafter, the President shall prepare and submit to Congress a report that assesses the effectiveness of the existing international reserve allowance requirements of subsection (f) with respect to covered goods of each covered foreign country.

(2) INADEQUATE REQUIREMENTS- If the President finds that those international reserve allowance requirements are not adequate to achieve the purposes of this section, the President shall, simultaneously with the submission of the report under paragraph (1), adjust the stringency of the existing international reserve allowance requirements applicable to imported covered goods or take other such actions for improving the effectiveness of the international reserve allowance requirements with respect to imported covered goods in any manner that complies with all applicable international agreements.

(3) EFFECTIVE DATE- The revised international reserve allowance requirements take effect beginning on January 1 of the calendar year immediately following the date that the President adjusts the requirements under this subsection.

## **TITLE VI--GENERAL PROVISIONS**

## **SEC. 601. MONITORING AND REPORTING.**

(a) In General- The President shall require, by rule, that a regulated entity shall perform such monitoring and submit such reports as the President determines to be necessary to carry out this Act.

(b) Submission of Information- The President shall establish, by rule, any procedure the President determines to be necessary to ensure the completeness, consistency, transparency, and accuracy of reports under subsection (a), including--

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

(2) standardized methods of calculating covered greenhouse gas emissions in specific industries from other information the President determines to be available and reliable, such as energy consumption data, materials consumption data, production data, or other relevant activity data;

(3) if the President determines that a method described in paragraph (2) is not feasible for a regulated entity, a standardized method of estimating covered greenhouse gas emissions of the regulated entity;

(4) a method of avoiding double-counting of covered greenhouse gas emissions;

(5) a procedure to prevent a regulated entity from avoiding the requirements of this Act by--

(A) reorganization into multiple entities; or

(B) outsourcing the operations or activities of the regulated entity with respect to covered greenhouse gas emissions; and

(6) a procedure for the verification of data relating to covered greenhouse gas emissions by--

(A) regulated entities; and

(B) independent verification organizations.

(c) Determining Eligibility for Credits, Agricultural Sequestration Allowances, Bonus Allowances for Geological Sequestration, and Early Reduction Allowances-

(1) IN GENERAL- An entity shall provide the President with the information described in paragraph

(2) in connection with any application to receive--

(A) an agricultural project allowance under section 205;

(B) an early reduction allowance under section 206 (unless, and to the extent that, the President determines that providing the information would not be feasible for the entity);

(C) a carbon capture and sequestration bonus allowance under section 207; or

(D) a credit under section 301, 302, or 303.

(2) REQUIRED INFORMATION-

(A) GREENHOUSE GAS EMISSIONS REDUCTION- In the case of a greenhouse gas emissions reduction, the entity shall provide the President with information verifying that, as determined by the President--

(i) the entity has achieved an actual reduction in greenhouse gas emissions--

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

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

(ii) if the reduction exceeds the net reduction of direct greenhouse gas emissions of the entity, the entity reported a reduction that was adjusted so as not to exceed the net reduction.

(B) GREENHOUSE GAS SEQUESTRATION- In the case of a greenhouse gas sequestration, the entity shall provide the President with information verifying that, as determined by the President, the entity has achieved actual increases in net sequestration, taking into account the total use of materials and energy by the entity in carrying out the sequestration.

(d) Harmonization With International Standards- The President shall, to the maximum extent practicable, harmonize the rules and procedures developed under this Act with the rules and procedures of other countries that have market-based greenhouse gas regulatory programs.

## **SEC. 602. ENFORCEMENT.**

(a) Failure To Submit Allowances-

(1) PAYMENT TO PRESIDENT- A regulated entity that fails to submit an allowance (or a credit or TAP in lieu of an allowance) for a calendar year not later than March 31 of the following calendar year shall pay to the President, for each allowance the regulated entity failed to submit, an amount equal to the product obtained by multiplying--

(A) the TAP price for that calendar year; and

(B) 3.

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

(b) Civil Enforcement-

(1) PENALTY- A person that the President determines to be in violation of this Act (including any rules promulgated under this Act) shall be subject to a civil penalty of not more than \$25,000 for each day during which the entity is in violation, in addition to any amount required under subsection (a)(1).

(2) INJUNCTION- The President may bring a civil action for a temporary or permanent injunction against any person described in paragraph (1).

(c) Criminal Penalties- A person that willfully fails to comply with this Act (including any rules

promulgated under this Act) shall be subject to a fine under title 18, United States Code, or imprisonment for not to exceed 5 years, or both.

## **SEC. 603. ADMINISTRATIVE PROVISIONS.**

(a) Delegation- To carry out this Act, the President may--

- (1) delegate and assign any duties or powers imposed on or assigned to the President; and
- (2) promulgate any rules necessary to carry out this Act.

(b) Data-

(1) IN GENERAL- In carrying out this Act, the President may use any authority provided under section 11 of the Energy Supply and Environmental Coordination Act of 1974 (15 U.S.C. 796).

(2) DEFINITION OF ENERGY INFORMATION- For the purposes of carrying out this Act, the definition of the term `energy information' under section 11 of the Energy Supply and Environmental Coordination Act of 1974 (15 U.S.C. 796) shall be considered to include any information the President determines to be necessary or appropriate to carry out this Act.

## **SEC. 604. JUDICIAL REVIEW.**

(a) In General- Except as provided in subsection (b), section 336(b) of the Energy Policy and Conservation Act (42 U.S.C. 6306(b)) shall apply to a review of any rule issued under this Act in the same manner, and to the same extent, that section applies to a rule issued under sections 323, 324, and 325 of that Act (42 U.S.C. 6293, 6294, 6295).

(b) Exception- A petition for review of a rule under this Act shall be filed in the United States Court of Appeals for the District of Columbia.

## **SEC. 605. SAVINGS PROVISION.**

Nothing in this Act affects the authority of Congress to--

- (1) limit, terminate, or change the value of an allowance or credit issued under this Act; or
- (2) modify allocations of allowances or the distribution of proceeds of allowance auctions.

*END*