L. Burton Trail Act. Through this small action, we recognize and honor a great man and his great work.

AMENDMENTS SUBMITTED AND PROPOSED

SA 809. Mr. SCHUMER submitted an amendment intended to be proposed by him to the bill H.R. 6. To ensure jobs for our future with secure, affordable, and reliable energy; which was ordered to lie on the table.

SA 810. Mr. SCHUMER submitted an amendment intended to be proposed by him to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 811. Mr. SCHUMER (for himself, Ms. CANTWELL, and Mr. LAUTENBERG) submitted an amendment intended to be proposed by him to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 812. Mr. SCHUMER submitted an amendment intended to be proposed by him to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 818. Mr. JEFFORDS submitted an amendment intended to be proposed by him to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 819. Mr. TALENT (for himself and Mr. JOHNSON) submitted an amendment intended to be proposed by him to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 820. Mrs. HUTCHISON (for herself, Mr. CORNYN, Mr. ENHOFER, and Ms. LANDRIEU) submitted an amendment intended to be proposed by him to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 821. Mr. KYL submitted an amendment intended to be proposed by him to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 822. Mr. VOINOVICH (for himself and Mr. DEWINE) submitted an amendment intended to be proposed by him to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 823. Mr. JEFFORDS submitted an amendment intended to be proposed by him to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 824. Ms. COLLINS (for herself, Ms. CANTWELL, Ms. SNOWE, Mr. JEFFORDS, and Mr. DEWINE) submitted an amendment intended to be proposed by her to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 825. Mr. KERRY submitted an amendment intended to be proposed by him to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 826. Mr. MCCAIN (for himself and Mr. LIEBERMAN) proposed an amendment to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 827. Mr. BINGAMAN (for Mr. DORGAN) submitted an amendment intended to be proposed by Mr. BINGAMAN to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 828. Mr. BINGAMAN (for Mr. DORGAN) submitted an amendment intended to be proposed by Mr. BINGAMAN to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 830. Mr. BINGAMAN (for Mr. JEFFORDS) submitted an amendment intended to be proposed by Mr. BINGAMAN to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 831. Mr. BINGAMAN (for Mr. JEFFORDS) submitted an amendment intended to be proposed by Mr. BINGAMAN to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 832. Mr. BINGAMAN (for Mr. JEFFORDS) submitted an amendment intended to be proposed by Mr. BINGAMAN to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 833. Mr. KOHL (for himself, Mr. DEWINE, Mr. LIEBERMAN, Mr. LIEBERMAN, Mr. REID, and Mr. REID) submitted an amendment intended to be proposed by him to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 834. Ms. SNOWE submitted an amendment intended to be proposed by her to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 835. Mrs. CLINTON (for herself and Mr. ALLARD) submitted an amendment intended to be proposed by her to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 836. Mr. BAUCUS submitted an amendment intended to be proposed by him to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 837. Mr. BAUCUS submitted an amendment intended to be proposed by him to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 838. Mr. MCCONNELL submitted an amendment intended to be proposed by him to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 839. Mr. LAUTENBERG (for himself, Mr. REID, Mr. LIEBERMAN, and Mr. JEFFORDS) submitted an amendment intended to be proposed by him to the bill H.R. 6, supra; which was ordered to lie on the table.

SA 840. Mr. SMITH (for himself and Mrs. LINCOLN) submitted an amendment intended to be proposed by him to the bill H.R. 6, supra; which was ordered to lie on the table.

TEXT OF AMENDMENTS

SA 809. Mr. SCHUMER submitted an amendment intended to be proposed by him to the bill H.R. 6, to ensure jobs for our future with secure, affordable, and reliable energy; which was ordered to lie on the table; as follows:

SEC. 109. MANHATTAN PROJECT FOR ENERGY INDEPENDENCE.

(a) Findings. Congress finds that—

(1) the welfare and security of the United States require that adequate provision be made for activities relating to the development of energy-efficient technologies; and

(2) those activities should be the responsibility of, and should be directed by, an independent establishment exercising control over developmental, programmatic, and operational aspects of the development of energy-efficient technologies sponsored by the United States.

(b) PURPOSE. The purpose of this section is to establish an Energy Efficiency Development Administration to develop technologies to increase energy efficiency and to reduce the demand for energy.

(1) DEFINITIONS OF TERMS.:

(1) ADMINISTRATION. —The term ‘‘Administration’’ means the Energy Efficiency Development Administration established by section (d)(1).

(2) ADMINISTRATOR. —The term ‘‘Administrator’’ means the head of the Administration appointed under section (d)(3)(A).

(3) ADVISORY COMMITTEE. —The term ‘‘Advisory Committee’’ means the Policy Advisory Committee established by subsection (f).

(4) ENERGY-EFFICIENT TECHNOLOGY ACTIVITY.—

(A) IN GENERAL. —The term ‘‘energy-efficient technology activity’’ means an activity that improves the energy efficiency of any sector of the economy, including the transportation, building design, electrical generating, appliance, and power transmission sectors.

(B) INCLUSION.—The term ‘‘energy-efficient technology activity’’ includes an activity that produces energy from a sustainable biomass, wind, small-scale hydroelectric, solar, geothermal, or other renewable source.

(d) ENERGY EFFICIENCY DEVELOPMENT ADMINISTRATION.—

(1) ESTABLISHMENT.—There is established as an independent establishment in the executive branch the Energy Efficiency Development Administration.

(2) MISSION.—The mission of the Administration shall be to reduce United States imports of oil by—

(A) 5 percent by 2008;

(B) 20 percent by 2011; and

(C) 50 percent by 2015.

(3) ADMINISTRATOR; DEPUTY ADMINISTRATOR.—

(A) ADMINISTRATOR.—

(i) APPOINTMENT.—The Administrator shall be appointed by the President, by and with the advice and consent of the Senate.

(ii) PAY.—Section 5313 of title 5, United States Code, is amended by adding at the end the following:

‘‘Administrator, Energy Efficiency Development Administration.’’.

(iii) DUTIES.—The Administrator shall—

(I) exercise all powers and perform all duties of the Administration; and

(II) have authority over all personnel and activities of the Administration.

(B) DEPUTY ADMINISTRATOR.—

(i) APPOINTMENT.—There shall be in the Administration a Deputy Administrator, who shall be appointed by the President, by and with the advice and consent of the Senate.

(ii) PAY.—Section 5314 of title 5, United States Code, is amended by adding at the end the following:

‘‘Deputy Administrator, Energy Efficiency Development Administration.’’.

(iii) DUTIES.—The Deputy Administrator shall—

(I) exercise all powers and perform all duties of the Administration; and

(II) have authority over all personnel and activities of the Administration.

(4) TRANSFER OF FUNCTIONS.—

(A) DEFINITION OF TERMS. —In this paragraph, the term ‘‘function’’ means any duty, obligation, power, authority, responsibility, right, privilege, activity, or program.

(B) TRANSFER OF FUNCTION.—

(i) IN GENERAL.—There are transferred to the Administrator—

...
I. All functions previously exercised by the Assistant Secretary of Energy for Efficiency and Renewable Energy; and
II. Any authority to promulgate regulations relating to fuel efficiency previously exercised by the Secretary of Transportation.

I. Inclusions.—Functions transferred under clause (i) include all real and personal property, personnel funds, and records of the Office of Energy Efficiency and Renewable Energy of the Department of Energy.

II. Determination of Functions.—The Director of the Office of Management and Budget shall determine the functions that are transferred under clause (i).

III. Presidential Transfers.—(I) Any function of any other department or agency of the United States, or of any officer or organizational entity of any department or agency, that relates primarily to the duties of the Administrator under this section; and (II) Any records, property, personnel, and funds that are necessary to carry out that function.

IV. Reports.—The President shall submit to Congress a report that describes the nature and effect of any transfer made under clause (i).

V. Establishment.—(A) There is established in the Office of Administration an Office of Energy Efficiency and Renewable Energy of the Department of Energy is abolished.

(VI) Duties.—(A) In General.—The Administrator shall—

(aa) plan, direct, and conduct energy-efficient technology activities; and

(bb) the importance of conserving energy; and

(bb) the most effective use of the scientific and university research community.

(vi) Appointment.—The Speaker of the House of Representatives, and the minority leader of the House of Representatives, and the minority leader of the Senate, the minority leader of the Senate, the minority leader of the House of Representatives, and the Speaker of the House of Representatives, shall be the members described in subclauses (I), (II), and (III) of clause (i).

(v) The most effective use of the scientific resources of the United States, with close cooperation among all interested agencies of the United States so as to avoid duplication of effort, facilities, and equipment.

(e) Powers.—The Administrator shall—

(i) not later than 180 days after the date of enactment of this Act, submit to Congress a personnel plan for the Administration that—

(ii) specifies the initial number and qualifications of employees needed for the Administration; and

(iii) identifies personnel plan for the Administration that

(A) establishes that the Administrator will adhere to or deviate from the civil service system;

(B) describes the functions and General Service classification and pay rates of the initial employees; and

(C) specifies how the Administrator will adhere to or deviate from the civil service system;

(2) appoint and fix the compensation of such officers and employees as are necessary to carry out the functions of the Administration; and

(3) establish the entrance grade for scientific personnel without previous service in the Federal Government at a level up to 2 grades higher than the grade provided for such positions in the General Schedule (within the meaning of section 5104 of title 5, United States Code) and fix the compensation of the personnel accordingly, as the Administrator considers necessary to recruit, retain, and maintain qualified scientific, environmental, and industry-related expertise;

(d) acquire, construct, improve, repair, operate, and maintain laboratories, research and testing sites and facilities, and such other real and personal property or interests in real and personal property, as the Administrator determines to be necessary for the performance of the functions of the Administration;

(e) enter into and perform such contracts, leases, cooperative agreements, or other transactions as are necessary in the performance of the duties of the Administrator with an agency or instrumentality of the United States; (f) State, Territory, or possession; (g) political subdivision of any State, Territory, or possession; and

(h) person, firm, association, corporation, or educational institution;

(2) (A) with the consent of Federal and other agencies, with or without reimbursement, use the services, equipment, personnel, and facilities of those agencies; and

(B) cooperates with other public and private agencies and instrumentalities in the use of services, equipment, personnel, and facilities; and

(3) establish within the Administration such offices and procedures as the Administrator considers appropriate to provide for the greatest possible coordination of the activities of the Administration with related scientific and other activities of other public and private agencies and organizations.

(f) Organizational Structure.—(I) Policy Advisory Committee.—(A) Establishment.—There is established in the Administration a Policy Advisory Committee.

(B) Membership.—(i) Composition.—The Advisory Committee shall be composed of 12 members, of whom—

(I) 4 members shall be representatives of the energy efficiency and environmental protection community;

(II) 4 members shall be representatives of—

(aa) industries involved in the generation, transmission, or distribution of energy products; or

(bb) the transportation industry; and

(III) 4 members shall be representatives of the scientific and university research community.

(ii) Appointment.—The Speaker of the House of Representatives, the majority leader of the Senate, the minority leader of the House of Representatives, and the minority leader of the Senate shall each appoint 1 member described in subclauses (I), (II), and (III) of clause (i). (C) Duties.—The Advisory Committee shall—

(i) act as a steering committee for the Administration; and

(ii) formulate a long-term strategy for—

(I) achieving the mission of the Administration under subsection (d)(2); and

(II) identifying energy-efficient technologies and programs that have the potential to increase energy efficiency over the long term; and

(bb) should be further explored by the Administration.

(D) Staff.—The Advisory Committee may appoint not more than 24 employees to assist in carrying out the duties of the Advisory Committee, of whom—

(i) 8 shall report to the members appointed under subparagraph (B)(i)(I); and

(ii) 8 shall report to the members appointed under subparagraph (B)(i)(II); and

(iii) shall report to the members appointed under subparagraph (B)(i)(III).

(E) Federal Advisory Committee Act (5 U.S.C. App.) shall apply to the Advisory Committee.

(2) Office of Administration.—(A) Establishment.—There is established in the Administration an Office of Administration.

(B) Assistant Deputy Administrator.—The head of the Office of Administration shall be an Assistant Deputy Administrator for Administration, to be appointed by the Administrator.

(C) Public Information Division.—(I) Establishment.—There is established in the Office of Administration a Public Information Division.

(ii) Duties.—The Public Information Division shall serve as a liaison between the Administration, the public, and other entities.

(D) Energy Efficiency Economics Division.—(I) Establishment.—There is established in the Office of Administration an Energy Efficiency Economics Division.

(ii) Staff.—The Energy Efficiency Economics Division shall serve the efforts of existing and proposed energy-efficient technologies on the economy of the United States, with an emphasis on assessing—

(I) the impacts of those technologies on consumers; and

(II) the contributions of those technologies on the economic development of the United States.

(E) Incentives Division.—(I) Establishment.—There is established in the Office of Administration an Incentives Division.

(ii) Duties.—The Incentives Division shall—

(C) Public Information Division.

(i) conduct a study of economic incentives that would assist the Administration in—

(aa) developing energy-efficient technologies; and

(bb) introducing those technologies into the marketplace; and

(ii) submit to Congress a report on the results of the study conducted under subclause (I).

(P) Education Division.—(I) Establishment.—There is established in the Office of Administration an Education Division.

(ii) Duties.—The Education Division shall—

(1) education and training to the public, information concerning—

(AA) what type of products are energy-efficient; and

(2) where such products may be purchased; and

(bb) the importance of conserving energy; and

(C) Public Information Division.

(i) provide to building owners, engineers, contractors, and other businesses persons training in energy-efficient technologies.

(G) Legislative Counsel Division.—There is established in the Office of Administration a Legislative Counsel Division to provide legal assistance to the Administrator.
(3) Office of Policy, Research, and Development.—

(A) Establishment.—There is established in the Administration an Office of Policy, Research, and Development to establish the organizational structure of the Administration relating to the project development and engineering activities of the Administration.

(B) Provisions for Deputy Administrator.—The head of the Office of Policy, Research, and Development shall be an Assistant Deputy Administrator for Policy, Research, and Development, to be appointed by the Administrator.

(C) Powers.—In establishing the organizational structure under subparagraph (A), the Office of Policy, Research, and Development may—

(i) incorporate a flat organizational structure comprised of project-based teams;

(ii) focus on accelerating the development of energy-efficient technologies during the period from fundamental research to implementation;

(iii) coordinate with the private sector; and

(iv) adopt organizational models used by other Federal agencies conducting advanced research.

(D) Office of Venture Capital.—

(A) Establishment.—There is established in the Administration an Office of Venture Capital.

(B) Assistant Deputy Administrator.—The head of the Office of Venture Capital shall be an Assistant Deputy Administrator for Venture Capital, to be appointed by the Administrator.

(C) Duties.—The Office of Venture Capital shall—

(i) accept applications from companies requesting financial assistance for energy-efficient technology proposals;

(ii) accept recommendations and input from the Deputy Administrator and the Policy Advisory Committee on applications submitted under clause (i); and

(iii) from among the applications submitted under clause (i), award financial assistance to applicants to carry out the proposals that are most likely to improve energy efficiency.

(g) Initial Technology Solicitations.—

(1) The Administrator may, based on the criteria described in paragraph (2), initiate the development of technologies for—

(A) fuel-efficient tires;

(B) construction of a hydrogen infrastructure;

(C) high-temperature superconducting cables;

(D) improved switches, resistors, capacitors, software and smart meters for electrical transmission systems;

(E) combined heat and power;

(F) micro turbines;

(G) fuel cells;

(H) energy-efficient lighting;

(I) energy efficiency training for building contractors;

(J) retrofitting or rehabilitation of existing structures to incorporate energy-efficient technologies; and

(K) efficient micro-channel heat exchangers.

(2) Criteria.—In determining which technologies to develop under paragraph (1), the Administrator shall consider—

(A) the current status of development of the technology;

(B) the potential for widespread use of the technology in commercial markets;

(C) the time and costs of efforts needed to bring the technology to full implementation; and

(D) the potential of the technology to contribute to the goals of the Administration.

(3) Report.—As soon as practicable after the date of enactment of this Act, but not later than 1 year after the date of enactment of this Act, the Administrator shall submit to the Congress a report that—

(A) assesses the potential for the technologies described in paragraph (1) to contribute to the goals of the Administration; and

(B) describes the plans of the Administrator to develop the technologies under paragraph (1).

(4) Reports.—

(1) By the Administrator.—(A) Semiannually and at such other times as the Administrator considers appropriate, the Administrator shall submit to the President a report that describes the activities and accomplishments of the Administration.

(B) By the President.—In January of each year, the President shall submit to Congress a report that includes—

(a) a description of the activities and accomplishments of all agencies of the United States in the field of energy efficiency during the preceding calendar year;

(b) an evaluation of the activities and accomplishments of the Administrator in attaining the objectives of this section; and

(C) such recommendations for additional legislation as the Administrator or the President considers appropriate for the attainment of the objectives described in this section.

(5) Authorization of Appropriations.—There are authorized to be appropriated to carry out this section—

(1) $5,000,000,000 for fiscal year 2006;

(2) $6,500,000,000 for fiscal year 2007; and

(3) $7,500,000,000 for each of fiscal years 2008 and 2009.

(6) In addition to any other sums authorized to be appropriated under paragraph (5), there is authorized to be appropriated—

(1) $10,000,000,000 for each of fiscal years 2008 and 2009;

(2) $9,000,000,000 for each of fiscal years 2010 and 2011; and

(3) $10,000,000,000 for each of fiscal years 2011 through 2016.

SA 810. Mr. SCHUMER submitted an amendment intended to be proposed by him to the bill H.R. 6, to ensure jobs for our future with secure, affordable, and reliable energy, which was ordered to lie on the table; as follows:

Beginning on page 395, strike line 3 and all that follows through page 401, line 25.

SA 811. Mr. SCHUMER (for himself, Ms. CANTWELL, and Mr. LAUTENBERG) submitted an amendment intended to be proposed by him to the bill H.R. 6, to ensure jobs for our future with secure, affordable, and reliable energy, which was ordered to lie on the table; as follows:

Page 129, between lines 20 and 21, insert the following:

SEC. 142. MOTOR VEHICLE TIRES SUPPORTING MAXIMUM FUEL EFFICIENCY.

(a) Standards for Tires Manufactured for Interstate Commerce.—Section 30123 of title 49, United States Code, is amended in paragraph (1) by striking “(ii)” and inserting “(ii) the policies, procedures, and standards developed under paragraph (2) and (3).”.

(b) Conforming Amendment.—Section 30123(b) of title 49, United States Code, is amended in paragraph (1) by striking “(2)” and inserting “(2) the policies, procedures, and standards developed under section (3).”.

SA 812. Mr. SCHUMER submitted an amendment intended to be proposed by him to the bill H.R. 6, to ensure jobs for our future with secure, affordable, and reliable energy, which was ordered to lie on the table; as follows:
On page 755, after line 25, add the following:

SEC. 1329. CONSOLIDATION OF GASOLINE INDUSTRY.
(a) In General.—The Comptroller General of the United States shall conduct a study of the consolidation of the refineries, importers, producers, and wholesalers of gasoline with the securities and laws regulating the industry.

(b) Contents.—The study conducted under subsection (a) shall include an analysis of the implications on—

(1) the retail price of gasoline;

(2) small business ownership;

(3) other corollary effects on the market economy and distribution;

(4) local communities; and

(5) other market impacts of the consolidation.

(c) Submission to Congress.—Not later than 1 year after the date of enactment of this Act, the Comptroller General shall submit to Congress the study conducted under subsection (a).

SA 813. Mr. SCHUMER submitted an amendment intended to be proposed by him to title V, section 68, to ensure jobs at New York is withdrawn from Finger Lakes National Forest in the State of New York.

SA 814. Mr. BYRD submitted an amendment intended to be proposed by him to title II, section 235, to ensure jobs and reliable energy; which was ordered to lie on the table; as follows:

SEC. 347. FINGER LAKES NATIONAL FOREST WITHDRAWAL.
All Federal land within the boundary of Finger Lakes National Forest in the State of New York is withdrawn from—

(1) all forms of entry, appropriation, or disposal under the public land laws; and

(2) disposition under all laws relating to oil and gas leasing.

SEC. 1581. EXCLUSION FOR CERTAIN FUEL COSTS OF RURAL COMMUTERS.
(a) In General.—Section 7701 is amended by redesignating subparagraphs (D) and (E) of paragraph (1) under the following new subparagraph:

"(D) In the case of an eligible rural commuter, by striking the period at the end of paragraph (2) and inserting "(2) by striking the paragraph at the end of subparagraph (B) and inserting " and "(D) In the case of an eligible rural commuter, by striking the paragraph at the end of subparagraph (B) and inserting " and "(D) In the case of an eligible rural commuter, by striking the paragraph at the end of subparagraph (B) and inserting " and"

(b) Effectiveness Date.—The amendments made by this subsection shall apply to transactions entered into after the date of the enactment of this Act.

SEC. 1582. CLARIFICATION OF ECONOMIC SUBSTANCE DOCTRINE.
(a) In General.—Section 7701 is amended by redesignating subparagraphs (D) and (E) of paragraph (1) under the following new subparagraph:

"(D) In the case of an eligible rural commuter, by striking the period at the end of paragraph (2) and inserting "(2) by striking the paragraph at the end of subparagraph (B) and inserting " and "(D) In the case of an eligible rural commuter, by striking the paragraph at the end of subparagraph (B) and inserting " and"

(b) Effective Date.—The amendments made by this subsection shall apply to transactions entered into after the date of the enactment of this Act.
measures any amount which would be an understatement under section 6662A(b)(1) if section 6662A were applied by taking into account items attributable to noneconomic substance transactions, rather than the items to which section 6662A would apply without regard to this paragraph. 

(2) Noneconomic Substances Transaction.—The term 'noneconomic substance transaction' means any transaction if—

(A) there is a lack of economic substance (within the meaning of section 7701(o)(1)) for the transaction giving rise to the claimed benefit or the transaction was not respected under section 7701(o)(2); or

(B) the transaction fails to meet the requirements of any similar rule of law.

d) Rules Applicable to Compromise of Penalty.—

(1) In General.—If the last letter of proposed deficiency which allows the taxpayer an opportunity for administrative review in the Internal Revenue Service Office of Appeals has been sent with respect to a penalty to which this section applies, only the Commissioner of Internal Revenue may compromise all or any portion of such penalty.

(2) Applicable Rules.—The rules of paragraph (3) of section 6707A(d) shall apply for purposes of paragraph (1).

(e) Coordination With Other Penalties.—Exception as otherwise provided in this part, the procedures by this section shall be in addition to any other penalty imposed by this title.

(f) Cross References.—

(1) Coordination of penalty with understatements under section 6662 and other special rules, see section 6662A(e).

(2) For reporting of penalty imposed under this section with respect to items under the Securities and Exchange Commission, see section 6707A(e).

(b) Coordination With Other Understatements and Penalties.—

(1) The second sentence of section 6662(d)(2)(A) is amended by inserting “and without regard to items with respect to which a penalty is imposed by section 6662B” before the period at the end.

(2) Subsection (e) of section 6662A is amended—

(A) in paragraph (1), by inserting “and non-economic substance transaction understatement” after “reportable transaction understatement” both places it appears, and

(B) in paragraph (2)(A), by inserting “and a noneconomic substance transaction understatement” after “reportable transaction understatement”,

(C) in paragraph (2)(B), by inserting “6662B or” before “section 6662B”,

(D) in paragraph (2)(C)(i), by inserting “or section 6662B” before the period at the end, and

(E) in paragraph (2)(C)(ii), by inserting “and section 6662B” after “This section”.

(F) in paragraph (3), by inserting “or non-economic substance transaction understatement” after “reportable transaction understatement”, and

(G) by adding at the end the following new paragraph:

(“D) Noneconomic Substance Transaction Understatement.—For purposes of this subsection, the term ‘noneconomic substance transaction understatement’ has the meaning given such term by section 6662B(c)(1)”.

(3) Subsection (e) of section 6707A is amended—

(A) by striking “or” at the end of subparagraph (B), and

(B) by striking subparagraph (C) and inserting the following new subparagraphs:

(C) is required to pay a penalty under section 6662B with respect to any noneconomic substance damage transaction, or

(D) is required to pay a penalty under section 6662B(h) with respect to any transaction and

would but for section 6662A(e)(2)(C) have been subject to penalty under section 6662A at a rate prescribed under section 6662A(c) or under section 6662B.”.

(c) Closing Amendment.—The table of sections for part II of subchapter A of chapter 68 is amended by inserting after the item relating to section 6662A the following new item:

“Sec. 6662B. Penalty for understatements attributable to transactions lacking economic substance, etc.”.

(d) Effective Date.—The amendments made by this section shall apply to transactions entered into after the date of the enactment of this Act.

SEC. 1584. DENIAL OF DEDUCTION FOR INTEREST ON UNDERSUBMISSIONS ATTRIBUTABLE TO NONECONOMIC SUBSTANCE TRANSACTIONS.

(a) In General.—Section 163(m)(3) relating to interest on unpaid taxes attributable to nondisclosed reportable transactions is amended—

(1) by striking “attributable” and all that follows and inserting the following: “attributable to—

(A) the portion of any reportable transaction understatement (as defined in section 6662A(b)) with respect to which the requirement of section 6654(d)(2)(A) is applicable, or

(B) any noneconomic substance transaction understatement (as defined in section 6662B(c))”, and

(2) by inserting “AND NONECONOMIC SUBSTANCE TRANSACTIONS” in the heading thereof after “TRANSACTIONS.”.

(b) Effective Date.—The amendments made by this section shall apply to transactions after the date of the enactment of this Act in taxable years ending after such date.

SA 815. Mr. CORZINE submitted an amendment intended to be proposed by him to the bill H.R. 6, to ensure jobs for our future with secure, affordable, and reliable energy; which was ordered to lie on the table; as follows:

On page 768, after line 20, add the following:

TITLE XV.—ENERGY AND CLIMATE CHANGE

SECTION 1501. SHORT TITLE

This title may be cited as the “Energy and Climate Change Act of 2005”.

Subtitle A—National Strategy

SEC. 1511. DEFINITIONS.

In this subtitle:

(1) CLIMATE-FRIENDLY ENERGY TECHNOLOGY.—The term "climate-friendly energy technology" means energy supply, transmission, or end-use technology that, over the life of the technology and compared to similar technology in commercial use—

(A) reduces the risk for the Security and Exchange Commission, see section 6707A(e).”.

SA 815. Mr. CORZINE submitted an amendment intended to be proposed by him to the bill H.R. 6, to ensure jobs for our future with secure, affordable, and reliable energy; which was ordered to lie on the table; as follows:

On page 768, after line 20, add the following:

TITLE XV.—ENERGY AND CLIMATE CHANGE

SECTION 1501. SHORT TITLE

This title may be cited as the “Energy and Climate Change Act of 2005”.

Subtitle A—National Strategy

SEC. 1511. DEFINITIONS.

In this subtitle:

(1) CLIMATE-FRIENDLY ENERGY TECHNOLOGY.—The term "climate-friendly energy technology" means energy supply, transmission, or end-use technology that, over the life of the technology and compared to similar technology in commercial use—

(A) will lead to the long-term stabilization of greenhouse gas concentrations; or

(B) are consistent with the relevant treaty obligations of the United States; and

(C) are carried out in a manner that supports the long-term economic growth of the United States.

(2) Actions.—The Strategy shall describe appropriate actions by the United States that, in conjunction with actions by other nations:

(A) will lead to the long-term stabilization of greenhouse gas concentrations; or

(B) are consistent with the relevant treaty obligations of the United States; and

(C) are carried out in a manner that supports the long-term economic growth of the United States.

(3) Timing.—The Strategy shall reflect the fact that the stabilization of greenhouse gas concentrations will take from many decades to more than a century to accomplish, but that significant actions by current and prospective major emitters of greenhouse gases must begin in the near term.

(b) ELEMENTS.—The Strategy shall be comprised of—

(1) interim greenhouse gas emission goals and specific near-term and medium-term programs and actions to meet the goals, developed on the basis of a broad range of emissions scenarios (including what is evaluated by the Intergovernmental Panel on Climate Change) and taking into account the need for actions by other nations; and

(2) expanded climate-related technology research, development, demonstration, and commercial application activities, including—

(A) a national commitment to double research and development on climate-friendly energy technologies by public and private sectors in the United States; and

(B) domestic and international demonstration and deployment of innovative, bold, breakthrough technologies (including climate-friendly energy technologies) that will make possible a profound transformation of the energy, transportation, industrial, agricultural, and building sectors of the United States;

(3) Climate adaptation research that—

(A) assesses the sensitivity, adaptive capacity, and vulnerability of natural and human systems to natural climate variability, climate change, and the potential impacts of the variability and climate change; and

(B) identifies potential strategies and actions that can reduce vulnerability to natural climate variability and climate change and damage resulting from impacts of climate change; and

(4) climate science research that—

(5) Stabilization of greenhouse gas concentrations.—The term "stabilization of greenhouse gas concentrations" means the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system, recognizing that such a level should be achieved within a time frame sufficient to allow ecosystems to naturally to adapt, to ensure that food production is not threatened, and to enable economic development to proceed in a sustainable manner, as contemplated by the United Nations Framework Convention on Climate Change, done at New York on May 9, 1992.

(6) Strategy.—The term "Strategy" means the national climate change strategy developed or updated under section 1512.
under subsection (c) and each update under subsection (d), the Director of the National Academy of Sciences, on behalf of the Director and the Interagency Task Force, shall enter force and operate in conjunction with the National Academy of Sciences to conduct a review of the Strategy or update.

(2) Criteria.—The review by the National Academy of Sciences in reviewing the goals and recommendations contained in the Strategy or update, taking into consideration—

(A) the adequacy of effort and the appropriateness of focus of the totality of all public, private, and public-private sector actions of the United States with respect to the Strategy;

(B) the adequacy of the budget and the effectiveness with which each participating Federal agency is carrying out the responsibilities of the Federal agency;

(C) current scientific knowledge regarding climate change and the impacts of climate change;

(D) current understanding of human social and economic responses to climate change, and responses of natural ecosystems to climate change;

(E) advancements in energy technologies that reduce, avoid, or sequester greenhouse gases or otherwise mitigate the risks of climate change;

(F) current understanding of economic costs and benefits of mitigation or adaptation activities;

(G) the existence of alternative policy options that could achieve the Strategy goals at lower economic, environmental, or social cost; and

(H) international activities and the actions taken by the United States and other nations to achieve the long-term goals of the Strategy.

(3) REPORT.—

(A) IN GENERAL.—Not later than 1 year after the date of the submission to Congress of the Strategy or update, as appropriate, the National Academy of Sciences shall prepare and submit to Congress and the President a report concerning the results of the review of the National Academy of Sciences, along with any recommendations, as appropriate.

(B) AVAILABILITY TO PUBLIC.—The report under subparagraph (A) shall be made available to the public.

(I) SAVINGS PROVISION.—Nothing in this section creates a new legal obligation for any person or other entity (except for pre-existing obligations with respect to the development, updating, and review of the Strategy).

(4) CONFORMING AMENDMENT.—Section 1103(b) of the Global Climate Protection Act of 1987 (15 U.S.C. 2301 note; Public Law 100–204) is amended by inserting “, the Department of Energy, and other Federal agencies as appropriate’’ after “Environmental Protection Agency’’.

SEC. 1515. DIRECTOR OF CLIMATE CHANGE POLICY ACTIVITY.

(a) APPOINTMENT.—The President shall appoint a qualified individual within the Executive Office of the President, and with the advice and consent of the Senate, to serve as the Director of Climate Change Policy.

(b) DUTIES.—The Director shall carry out climate change policy activities and shall—

(1) coordinate the development and periodic update of the Strategy;

(2) facilitate the work of the Interagency Task Force and provide as the primary liaison between Federal agencies in developing and implementing the Strategy;

(3) coordinate the submission of Federal agency reports as needed to carry out interagency programs and policies necessary to meet the goals of the Strategy;

(4) advise the President concerning—

(A) necessary changes in organization, management, budgeting, and personnel allocation of Federal agencies involved in climate change activities;

(B) the extent to which existing or newly created tax, trade, or foreign policies and energy, transportation, industrial, agricultural, and forestry, building, and other relevant sector programs are capable of achieving the Strategy individually or in combination; and

(C) the extent to which any proposed international treaties or components of treaties that have an influence on activities that affect greenhouse gas emissions are consistent with the Strategy;

(5) establish and maintain a process to ensure the participation of Federal, State, tribal, and local government agencies, nongovernmental organizations, academia, scientific bodies, industry, the public, and other interested parties in the formulation of climate change-related advice to be provided to the President; and

(6) use public awareness, outreach, and information sharing to further the understanding of climate change-related issues.

(c) PERSONNEL.—

(1) IN GENERAL.—The Director may employ a professional staff of not more than 10 individuals to carry out the responsibilities and duties prescribed in this section.

(2) OTHER AGENCIES AND INSTITUTIONS.—In addition to the personnel employed under paragraph (1), the Director may obtain staff for a limited term from Federal agencies, State agencies, institutions of higher education, nonprofit institutions of a scientific or technical character, or a National Laboratory, pursuant to—

(A) section 337f of title 5, United States Code;

(B) section 14(a)(2) of the National Science Foundation Act of 1950 (42 U.S.C. 1873(a)(2)); or


(d) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Executive Office of the President for the Director to carry out the duties under this section $5,000,000 for each of fiscal years 2006 through 2015, to remain available until expended.

SEC. 1514. INTERAGENCY TASK FORCE ON CLIMATE CHANGE.

(a) IN GENERAL.—The President shall establish an Interagency Task Force on Climate Change to coordinate Federal climate change activities and programs carried out in furtherance of the Strategy.

(b) COMPOSITION.—The Interagency Task Force shall be composed of—

(1) the Director, who shall serve as Chairperson;

(2) the Secretary of State;

(3) the Secretary of Energy;

(4) the Secretary of the Treasury;

(5) the Secretary of Commerce;

(6) the Secretary of Transportation;

(7) the Secretary of Agriculture;

(8) the Secretary of the Interior;

(9) the Director of the National Science Foundation;

(10) the Administrator of the National Aeronautics and Space Administration;

(11) the Administrator of the Environmental Protection Agency;

(12) the Chairman of the Council of Economic Advisers;

(13) the Chairman of the Council on Environmental Quality;

(14) the Director of the Office of Science and Technology Policy;

(15) the Director of the Office of Management and Budget; and
(16) the heads of such other Federal agencies as the President considers to be appropriate.

(c) STRATEGY.—The Interagency Task Force shall serve as the primary forum through which the Federal agencies represented on the Interagency Task Force jointly advance the President’s goals to:

(1) the development and periodic update of the Strategy; and

(2) the implementation of interagency and agency programs to carry out activities in furtherance of the goals and objectives of the Strategy.

(d) WORKING GROUPS.—

(1) FORMATION.—In consultation with the Interagency Task Force, may establish such topical working groups as may be necessary to carry out the duties of the Interagency Task Force in furtherance of the Strategy, taking into consideration the elements of the Strategy as outlined in this subtitle.

(2) COMPOSITION.—The working groups may be comprised of members of the Interagency Task Force or their designees.

(e) STAFF.—The Federal agencies represented on the Interagency Task Force may provide staff from the agencies to support information, data collection, and analyses required by the Interagency Task Force.

(f) HEARINGS.—On the request of the Director, the Interagency Task Force may hold such hearings, meet and act at such times and places, take such evidence, and receive such evidence as the Interagency Task Force considers to be appropriate.

SEC. 1515. ANNUAL REPORT.

In consultation with the Interagency Task Force and other interested parties, the Director shall prepare an annual report for submission to the President and Congress, along with the budget request under section 1105 of title 31, United States Code, that includes—

(1) a description of the Strategy and the goals outlined in the Strategy;

(2) an inventory of Federal programs and activities intended to carry out the Strategy;

(3) an evaluation of Federal programs and activities implemented as part of the Strategy against the goals outlined in the Strategy;

(4) a description of changes to Federal programs or activities implemented to carry out the Strategy, in light of new knowledge of climate change and the impacts and costs or benefits of climate change, or technological capacity to improve mitigation or adaptation activities;

(5)(A) a description of all Federal spending on climate change for the current fiscal year and each of the 5 preceding fiscal years, categorized by Federal agency and program function (including scientific research, energy development and research, international conservation and technology transfer, regulation, education, and other activities); and

(B) a recommendation for Federal spending on climate change for the next fiscal year;

(6) an estimate of the budgetary impact for the current fiscal year and each of the 5 preceding fiscal years of any Federal tax credits, tax deductions, or other incentives claimed by taxpayers that are attributable to greenhouse gas emission reduction activities;

(7) an estimate of the quantity, in metric tons, of greenhouse gas emissions reduced, avoided, or sequestered as a result of the implementation of policies and programs;

(8) recommendations for legislative or administrative actions or adjustments that will accelerate progress towards meeting the goals of the Strategy; and

(9) recommendations for Federal programs that are part of the Strategy.

SEC. 1516. INTEGRATION WITH OFFICE OF SCIENCE AND TECHNOLOGY POLICY.

(a) PRIORITY GOALS.—Section 101(b) of the National Science and Technology Policy, Organization, and Practices Act of 1976 (42 U.S.C. 6601(b)) is amended—

(1) by redesignating paragraphs (7) through (13) as paragraphs (8) through (14), respectively; and

(2) by inserting after paragraph (6) the following:

“(15) improving efforts to understand, assess, predict, mitigate, and respond to global climate change;”.

(b) FUNCTIONS OF THE DIRECTOR.—Section 208(b) of the National Science and Technology Policy, Organization, and Practices Act of 1976 (42 U.S.C. 6613(b)(1)) is amended by striking “not limited to,” and inserting “as follows:” after “by the National Science and Technology Policy Council”.

(c) ADDITIONAL FUNCTIONS OF DIRECTOR. —

Section 207 of the National Science and Technology Policy, Organization, and Practices Act of 1976 (42 U.S.C. 6616) is amended—

(1) by redesignating subsections (a), (b), and (c) as subsections (b), (c), and (d), respectively; and

(2) by inserting before subsection (b) as so redesignated the following:

“(a) ADVICE TO DIRECTOR OF CLIMATE CHANGE POLICY.—In carrying out this Act, the Director shall—

(1) be appointed in the Senior Executive Service; and

(2) report to the Secretary in such manner as the Secretary may prescribe.

(b) The Director shall be a person who, by reason or professional experience, is specially qualified to coordinate climate change policy and technical activities.

(c) The Director shall—

(1) advise the Committee on Earth and Environmental Sciences on the development of a long-term strategy for climate change; and

(2) provide long-term analytical continuity on climate change issues and policy developments; and

(3) advise the Environmental Protection Agency on the development and implementation of policies and programs to reduce greenhouse gas emissions.

SEC. 1517. OFFICE OF CLIMATE CHANGE TECHNOLOGY.

(a) IN GENERAL.—

(1) TITLE.—Title II of the Department of Energy Organization Act (42 U.S.C. 7121 et seq.) (as amended by section 562(a)) is amended by adding at the end the following:

“OFFICE OF CLIMATE CHANGE TECHNOLOGY

SEC. 218. (a) There shall be established within the Department an Office of Climate Change Technology to be headed by a Director, who shall—

(1) be appointed in the Senior Executive Service;

(2) report to the Secretary in such manner as the Secretary may prescribe.

(b) The Director shall be a person who, by reason of professional experience, is specially qualified to coordinate climate change policy and technical activities.

(c) The Director shall—

(1) advise the Committee on Earth and Environmental Sciences on the development of a long-term strategy for climate change; and

(2) provide long-term analytical continuity on climate change issues and policy developments; and

(3) advise the Environmental Protection Agency on the development and implementation of policies and programs to reduce greenhouse gas emissions.

SEC. 1521. OFFICE OF CLIMATE CHANGE TECHNOLOGY.

(a) IN GENERAL.—

(1) TITLE.—Title II of the Department of Energy Organization Act (42 U.S.C. 7121 et seq.) (as amended by section 562(a)) is amended by adding at the end the following:

“OFFICE OF CLIMATE CHANGE TECHNOLOGY

SEC. 218. (a) There shall be established within the Department an Office of Climate Change Technology to be headed by a Director, who shall—

(1) be appointed in the Senior Executive Service;

(2) report to the Secretary in such manner as the Secretary may prescribe.

(b) The Director shall be a person who, by reason of professional experience, is specially qualified to coordinate climate change policy and technical activities.

(c) The Director shall—

(1) advise the Committee on Earth and Environmental Sciences on the development of a long-term strategy for climate change; and

(2) provide long-term analytical continuity on climate change issues and policy developments; and

(3) advise the Environmental Protection Agency on the development and implementation of policies and programs to reduce greenhouse gas emissions.

(b) CONFORMING AMENDMENTS.—


(3) The table of contents for the Department of Energy Organization Act (42 U.S.C. 7191) (as amended by section 562(b)) is amended by adding at the end the item relating to section 218, and the item relating to section 217, and the following:

“SEC. 217. Office of Climate Change Technology.”

SEC. 1522. CLIMATE CHANGE AND CLEAN ENERGY TECHNOLOGY PROGRAMS.

(a) IN GENERAL.—

(1) TITLE.—The Energy Policy Act of 1992 (42 U.S.C. 13381 et seq.) is amended by adding at the end the following:
SEC. 1610. CLIMATE CHANGE TECHNOLOGY PROGRAM.

(a) Establishment.—There is established within the Office of Climate Change Technology of the Department a program to support accelerated research and development projects on energy technologies that—

(1) are not duplication of, are supplemental to, and otherwise further the objectives of programs or activities carried out, funded, or otherwise supported by the Department;

(2) A description of the technology transfer mechanisms and opportunities appropriate to the unique capabilities of National Laboratory and Laboratory Reserve collaboration with that Laboratory, and the extent of any such collaboration proposed; and

(b) Program Plan.—

(1) In General.—Not later than 1 year after the date of enactment of this section, the Secretary shall prepare and submit to Congress a 10-year program plan to guide activities to be carried out under this section.

(2) Updates.—After the initial preparation and submission of the plan, the Secretary shall biennially update and resubmit to Congress the program plan, including—

(A) a multiyear management plan toward meeting the goals of the comprehensive strategy of the Department for energy research, development, demonstration, and commercialization to implement the National Climate Change Strategy;

(B) an evaluation of the contributions of all energy technology programs of the Department to the National Climate Change Strategy; and

(c) recommendations for actions by the Department and other Federal agencies to address the applications of energy-related technology development that are necessary to support the National Climate Change Strategy;

(d) Programs.—

(1) In General.—A proposal may be submitted by an applicant or consortium of 1 or more:

(A) industrial entities;

(B) institutions of higher education (as that term is defined in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a))); or

(C) National Laboratories.

(2) Minimum Requirements.—At a minimum, a proposal shall include—

(A) a multiyear management plan that outlines the manner in which the proposed research, development, demonstration, and deployment will be carried out;

(B) quantitative technology goals and greenhouse gas emission reduction targets that can be used to measure performance against program objectives; and

(C) the cost of the proposal for each year for which funding is requested, and a breakdown of those costs by category;

(3) Submission.—Each proposal shall include—

(i) a multidisciplinary research staff experienced in technologies or practices able to sequence, avoid, or capture greenhouse gas emissions;

(ii) access to facilities and equipment to enable the conduct of laboratory-scale testing of technology that applies to the life cycle of the technology and compared to a similar technology already in commercial use in any developing country or country with an economy in transition;

(iii) availability of trained personnel to deploy and maintain the clean energy technology; and

(iv) a commitment to match funding and other assets directly related to the cost of the proposal;

(v) evidence that the proposed activities are supplemental to, and not duplicative of, existing research, development, demonstration, or other activities carried out, funded, or otherwise supported by the Department;

(vi) a statement whether the unique capabilities of a National Laboratory warrant collaboration with that Laboratory, and the extent of any such collaboration proposed; and

(vii) evidence of the ability of the applicant to undertake and complete the proposed project.

(e) Centers.—

(1) In General.—The Secretary may fund 1 or more centers to—

(A) methods of climate monitoring and prediction;

(B) climate modeling; or

(C) quality and dissemination of climate data from Department or other Federal climate change programs.

(2) Location.—In reviewing proposals for centers under competitive procedures, the Secretary shall consider the central importance of nations that face significant climate-related ecosystem challenges.

(f) Procurement Authorities.—The Office of Climate Change Technology may use any of the authorities available to the Department—

(1) to solicit proposals for projects under this section; and

(2) to encourage partnerships that will increase the likelihood of success of the project.

(g) Relationship to Department Programs.—Each project funded under this section shall be—

(1) initiated only after consultation by the Office of Climate Change Technology with 1 or more appropriate offices in the Department that support research and development in areas relating to the project; and

(2) either—

(A) managed directly by the Office of Climate Change Technology; or

(B) managed by a subsidiary working group as are necessary to carry out this section.

(h) Program.—The Interagency working group shall develop a program, consistent with existing Federal and interagency programs, to provide coordination, oversight, and funding to ensure that the program is effective and efficient.

(i) Reports.—The Secretary shall submit an annual report to Congress describing the activities of the program and the related accomplishments during the report period.

SEC. 1611. CLEAN ENERGY TECHNOLOGY EXPORTS PROGRAM.

(a) Definitions.—In this section:

(1) clean energy technology.—The term ‘‘clean energy technology’’ means an energy technology that applies to the life cycle of the technology and compared to a similar technology already in commercial use in any developing country or country with an economy in transition—

(A) reduces in emissions of greenhouse gases; and

(B) may substantially reduce emissions of air pollutants; or

(ii) may generate substantially smaller or less hazardous quantities of solid or liquid waste.

(2) Country with an economy in transition.—The term ‘‘country with an economy in transition’’ means a country listed in Annex I of the United Nations Framework Convention on Climate Change, done at New York on May 9, 1992, with the notation that the country is 1 of the ‘‘Countries that are undergoing the process of transition to a market economy.’’

(3) Developing country.—The term ‘‘developing country’’ means any country not listed in Annex I of the United Nations Framework Convention on Climate Change, done at New York on May 9, 1992.

(b) Interagency Working Group.—The term ‘‘interagency working group’’ means the Interagency Working Group on Clean Energy Technology Exports established under subsection (a).

(c) Duties.—

(1) In General.—Not later than 90 days after the date of enactment of this section, the Secretary, the Secretary of Commerce, and the Administrator of the United States International Trade Commission shall jointly establish an interagency working group on export programs.

(2) Composition.—The interagency working group shall—

(A) be jointly chaired by representatives appointed by the agency heads under paragraph (1); and

(B) include representatives from—

(i) the Department of State;

(ii) the Department of Commerce; and

(iii) the Environmental Protection Agency.

(3) Minimum Requirements.—At a minimum, a proposal shall include—

(A) a multiyear management plan that outlines the manner in which the proposed research, development, demonstration, and deployment will be carried out;

(B) quantitative technology goals and greenhouse gas emission reduction targets that can be used to measure performance against program objectives; and

(C) the cost of the proposal for each year for which funding is requested, and a breakdown of those costs by category;
“(iv) demonstration and cost-benefit mechanisms to promote first adoption of the technology;

“(C) examine relevant trade, tax, international law, and policy issues and consider what policies would help open markets and improve United States clean energy technology exports in support of—

“(i) energy innovation and cooperation, including energy sector and market reform, capacity building, and financing mechanisms;

“(ii) improving energy end-use efficiency technologies, including buildings and facilities, vehicle, industrial, and cogeneration technology initiatives; and

“(iii) improving supply chain technologies, including fossil, nuclear, and renewable technology initiatives;

“(D) establish an advisory committee involving the private sector and other interested groups on the export and deployment of clean energy technology;

“(E) publish a single coordinated mechanism for information dissemination to the private sector and the public on clean energy technologies and clean energy technology transfer opportunities.

“(F) monitor the progress of each agency represented in the interagency working group towards meeting goals in the 5-year strategic plan submitted to Congress pursuant to the Energy and Water Development Appropriations Act of 2005 (Public Law 108–377), and the Energy and Water Development Appropriations Act of 2006 (Public Law 109–58);

“(G) make recommendations to heads of appropriate Federal agencies on ways to streamline Federal programs and policies to improve the role of each agency in the international development, demonstration, and deployment of clean energy technology;

“(H) make assessments and recommendations on distinct technical, market, regional, and stakeholder challenges necessary to carry out the program; and

“(I) recommend conditions and criteria that will help ensure that United States funds promote sound energy policies in participating countries while simultaneously opening the markets of the participating countries and expanding United States clean energy technology.

“(c) FEDERAL SUPPORT FOR CLEAN ENERGY TECHNOLOGY TRANSFER.—Notwithstanding any other provision of law, each Federal agency or Government corporation carrying out an assistance program in support of the activities of the United States in the environment or energy sector of a developing country or country with an economy in transition shall support, to the maximum extent practicable, the transfer of United States clean energy technology as part of the program.

“(d) ANNUAL REPORT.—

“(1) IN GENERAL.—Not later than 1 year after the date of enactment of this section, and on March 31 of each year thereafter, the interagency working group shall submit to Congress a report describing the manner in which United States funds appropriated for clean energy technology exports and other relevant Federal programs are being directed to the activities of the interagency working group in that year.

“(2) CONTENT.—The report shall include—

“(A) a description of the technology, policy, and market opportunities for international development, demonstration, and deployment of clean energy technology investigated by the interagency working group in that year;

“(B) any policy recommendations to improve the expansion of clean energy markets in the United States; and

“(e) REPORT ON USE OF FUNDS.—Not later than 1 year after the date of enactment of this section, and each year thereafter, the Secretary of State, in consultation with other Federal agencies, shall submit to Congress a report describing the manner in which United States funds appropriated for clean energy technology exports and other relevant Federal programs are being directed toward the activities of the interagency working group in that year; and

“(f) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Department of Energy in accordance with the conditions as the Secretary establishes by regulation—

“(1) equal to the amount authorized by the Secretary to participate in the pilot program, the Secretary shall make available a loan or loan guarantee for not less than 50 percent of the total cost of the project, to be repaid at an interest rate equal to the rate for Treasury obligations then issued for periods of comparable maturity.

“(2) FINANCIAL ASSISTANCE.—

“(A) IN GENERAL.—For each qualifying international energy deployment project selected by the Secretary to participate in the pilot program, the Secretary shall make available a loan or loan guarantee for not less than 50 percent of the total cost of the project, to be repaid at an interest rate equal to the rate for Treasury obligations then issued for periods of comparable maturity.

“(B) DEVELOPED COUNTRIES.—A loan or loan guarantee made available for a project to be carried out in a country listed in Annex I of the United Nations Framework Convention on Climate Change, done at New York on May 9, 1992, shall require at least a 10 percent contribution toward the total cost of the loan or loan guarantee by the host country.

“(C) DEVELOPING COUNTRIES.—A loan or loan guarantee made for a project to be carried out in a developing country shall require at least a 10 percent contribution toward the total cost of the loan or loan guarantee by the host country.

“(D) CAPACITY BUILDING RESEARCH.—IN GENERAL.—A proposal made for a project to be carried out in a developing country may include a research component intended to build technological capacity within the host country.

“(ii) RESEARCH.—The research shall—

“(a) be related to the technologies being deployed; and

“(b) involve both an institution in the host country and a participant from the United States that is either an industrial entity, an institution of higher education, or a National Laboratory.

“(iii) HOST INSTITUTION CONTRIBUTION.—The host institution shall contribute at least 50 percent of funds provided for the capacity-building research.

“(c) COORDINATION WITH OTHER PROGRAMS.—A qualifying international energy deployment project funded under this section shall not be required to be a qualifying clean coal technology under section 415 of the Clean Air Act (42 U.S.C. 7602).

“(d) REPORT AND RECOMMENDATION.—

“(1) REPORT.—Not later than 5 years after the date of enactment of this section, the Secretary shall submit to the President a report on the results of the pilot projects conducted under this section.

“(2) RECOMMENDATION.—Not later than 60 days after receiving the report, the President shall submit to Congress a recommendation, based on the results of the pilot projects as reported by the Secretary, concerning whether the financial assistance program under this section should be continued, expanded, reduced, or eliminated.

“(e) AUTHORIZATION OF APPROPRIATIONS.—The funds authorized to be appropriated to the Secretary to carry out this section $100,000,000 for each of fiscal years 2006 through 2015, to remain available until expended.

“(b) DEFINITION OF NATIONAL LABORATORY.—Section 2 of the Energy Policy Act of 1992 (42 U.S.C. 13201) is amended to read as follows:

“(SEC. 2. DEFINITIONS.

“(A) In this Act:
development, demonstration, and deployment of:

(1) renewable energy systems;
(2) advanced fossil energy technology;
(3) advanced nuclear energy technologies, including the development of power plant design;
(4) high temperature fuel cells for residential, industrial, and transportation applications;
(5) carbon capture and sequestration technologies, including agricultural and forestry practices that store and sequester carbon;
(6) efficient electrical generation, transmission, and distribution technologies; and
(7) efficient end-use energy technologies.

Subtitle C—Greenhouse Gas Emissions Database

SEC. 1531. DEFINITIONS.
In this subtitle:

(1) ADMINISTERING INSTITUTION.—The term "administering institution" means the institution selected under section 1532(c) to operate and administer the database.
(2) CARBON DIOXIDE EQUIVALENT.—The term "carbon dioxide equivalent," measured in metric tons of carbon dioxide, means any of the following:
(A) the depletion, destruction, or emission of substances.--
(1) that are a consequence of activities of a reporting entity;
(2) are a consequence of activities of a reporting entity; but
(3) are a consequence of activities of a reporting entity; or
(4) INDIRECT GREENHOUSE GAS EMISSIONS.--The term "indirect greenhouse gas emissions" means the amount of greenhouse gases emitted by processes or activities in addition to direct greenhouse gas emissions, including greenhouse gases that are a result of activities that:
(A) are a consequence of activities of a reporting entity;
(B) are a consequence of activities of a reporting entity; and
(C) are a consequence of activities of a reporting entity.
(3) DESIGNATED AGENCIES.—The term "designated agencies" means:
(A) the Department of Energy;
(B) the Department of Commerce; and
(C) the Environmental Protection Agency.
(4) DIRECT GREENHOUSE GAS EMISSIONS.—The term "direct greenhouse gas emissions" means greenhouse gas emissions directly emitted from a facility that is owned or controlled by the reporting entity, excluding emissions from:
(A) production of electricity, heat, or steam, or other activities involving combustion in stationary equipment;
(B) physical or chemical processing of materials;
(C) equipment leaks, venting from equipment or facilities, or other types of fugitive emissions (such as emissions from piles, pits, and cooling towers); and
(D) on-road and off-road fuels in transportation vehicles or equipment.
(5) ENTITY.—The term "entity" means:
(A) a person; or
(B) an agency or instrumentality of the Federal Government or State or local government.
(6) FACILITY.—The term "facility" means an establishment or installation, such as a single production or processing unit or any 1 or more contiguous or adjacent properties of an entity in the United States.
(7) FARMING OPERATIONS.—The term "farming operations" means:
(A) the cultivation of crops;
(B) the production of livestock and poultry;
(C) the generation of biogas in anaerobic digesters; and
(D) the generation of biogas in anaerobic digesters.
(8) GREENHOUSE GAS EMISSIONS.—The term "greenhouse gas emissions" means:
(A) the release of greenhouse gases into the atmosphere, including through a biological or geologic process such as reforestation or an underground reservoir.
(9) LEAD AGENCY.—The term "lead agency" means:
(A) a State; or
(B) the District of Columbia; or
(C) the Commonwealth of Puerto Rico; and
(D) any other territory or possession of the United States.
(10) INDIRECT GREENHOUSE GAS EMISSIONS.—The term "indirect greenhouse gas emissions" means:
(A) the release of greenhouse gases into the atmosphere, including through a biological or geologic process such as reforestation or an underground reservoir.

Subsection (a)

(1) renewable energy systems;
(2) advanced fossil energy technology;
(3) advanced nuclear energy technologies, including the development of power plant design;
(4) high temperature fuel cells for residential, industrial, and transportation applications;
(5) carbon capture and sequestration technologies, including agricultural and forestry practices that store and sequester carbon;
(6) efficient electrical generation, transmission, and distribution technologies; and
(7) efficient end-use energy technologies.

Subsection (b)

(1) renewable energy systems;
(2) advanced fossil energy technology;
(3) advanced nuclear energy technologies, including the development of power plant design;
(4) high temperature fuel cells for residential, industrial, and transportation applications;
(5) carbon capture and sequestration technologies, including agricultural and forestry practices that store and sequester carbon;
(6) efficient electrical generation, transmission, and distribution technologies; and
(7) efficient end-use energy technologies.

Subsection (c)

(1) renewable energy systems;
(2) advanced fossil energy technology;
(3) advanced nuclear energy technologies, including the development of power plant design;
(4) high temperature fuel cells for residential, industrial, and transportation applications;
(5) carbon capture and sequestration technologies, including agricultural and forestry practices that store and sequester carbon;
(6) efficient electrical generation, transmission, and distribution technologies; and
(7) efficient end-use energy technologies.

Subsection (d)

(1) renewable energy systems;
(2) advanced fossil energy technology;
(3) advanced nuclear energy technologies, including the development of power plant design;
(4) high temperature fuel cells for residential, industrial, and transportation applications;
(5) carbon capture and sequestration technologies, including agricultural and forestry practices that store and sequester carbon;
(6) efficient electrical generation, transmission, and distribution technologies; and
(7) efficient end-use energy technologies.

Subsection (e)

(1) renewable energy systems;
(2) advanced fossil energy technology;
(3) advanced nuclear energy technologies, including the development of power plant design;
(4) high temperature fuel cells for residential, industrial, and transportation applications;
(5) carbon capture and sequestration technologies, including agricultural and forestry practices that store and sequester carbon;
(6) efficient electrical generation, transmission, and distribution technologies; and
(7) efficient end-use energy technologies.

Subsection (f)

(1) renewable energy systems;
(2) advanced fossil energy technology;
(3) advanced nuclear energy technologies, including the development of power plant design;
(4) high temperature fuel cells for residential, industrial, and transportation applications;
(5) carbon capture and sequestration technologies, including agricultural and forestry practices that store and sequester carbon;
(6) efficient electrical generation, transmission, and distribution technologies; and
(7) efficient end-use energy technologies.

Subsection (g)

(1) renewable energy systems;
(2) advanced fossil energy technology;
(3) advanced nuclear energy technologies, including the development of power plant design;
(4) high temperature fuel cells for residential, industrial, and transportation applications;
(5) carbon capture and sequestration technologies, including agricultural and forestry practices that store and sequester carbon;
(6) efficient electrical generation, transmission, and distribution technologies; and
(7) efficient end-use energy technologies.

Subsection (h)

(1) renewable energy systems;
(2) advanced fossil energy technology;
(3) advanced nuclear energy technologies, including the development of power plant design;
(4) high temperature fuel cells for residential, industrial, and transportation applications;
(5) carbon capture and sequestration technologies, including agricultural and forestry practices that store and sequester carbon;
(6) efficient electrical generation, transmission, and distribution technologies; and
(7) efficient end-use energy technologies.

Subsection (i)

(1) renewable energy systems;
(2) advanced fossil energy technology;
(3) advanced nuclear energy technologies, including the development of power plant design;
(4) high temperature fuel cells for residential, industrial, and transportation applications;
(5) carbon capture and sequestration technologies, including agricultural and forestry practices that store and sequester carbon;
(6) efficient electrical generation, transmission, and distribution technologies; and
(7) efficient end-use energy technologies.

Subsection (j)

(1) renewable energy systems;
(2) advanced fossil energy technology;
(3) advanced nuclear energy technologies, including the development of power plant design;
(4) high temperature fuel cells for residential, industrial, and transportation applications;
(5) carbon capture and sequestration technologies, including agricultural and forestry practices that store and sequester carbon;
(6) efficient electrical generation, transmission, and distribution technologies; and
(7) efficient end-use energy technologies.

Subsection (k)

(1) renewable energy systems;
(2) advanced fossil energy technology;
(3) advanced nuclear energy technologies, including the development of power plant design;
(4) high temperature fuel cells for residential, industrial, and transportation applications;
(5) carbon capture and sequestration technologies, including agricultural and forestry practices that store and sequester carbon;
(6) efficient electrical generation, transmission, and distribution technologies; and
(7) efficient end-use energy technologies.
(B) would cause competitive harm if published.

(e) RELATIONSHIP TO OTHER GREENHOUSE GAS DATABASES OR REPORTING REQUIREMENTS.—To the extent practicable, the head of the lead agency shall ensure coordination between the greenhouse gas emissions database and existing and developing Federal and State greenhouse gas databases and registries.

(i) NO EFFECT ON OTHER REQUIREMENTS.—Nothing in this section affects any existing requirements for reporting of greenhouse gas emissions data or other data relevant to calculating greenhouse emissions.

(g) REPORT TO CONGRESS.—If reporting is required under section 1533(b)(2), the head of the lead agency shall, not later than 180 days after the date on which the reporting is required, submit to Congress a report that describes the need for harmonization of legal requirements within the United States relating to greenhouse gas reporting.

SEC. 1533. GREENHOUSE GAS EMISSIONS REPORTING.

(a) VOLUNTARY REPORTING.—

(1) IN GENERAL.—After the establishment of the greenhouse gas emissions database under section 1532 and publication of protocols under section 1535, an entity may voluntarily submit to the administering institution, for inclusion in the database, a report of greenhouse gas emissions in the United States that are associated with greenhouse gas emissions in the United States.

(2) DATE OF SUBMISSION.—Each report under paragraph (1) shall be submitted not later than July 1 of each year thereafter, for inclusion in the database, a greenhouse gas emissions report for the entity that exceeds the threshold for reporting as described in paragraph (1) for that year, each entity that is the result of normal business operations for which the entity submitted a greenhouse gas emissions report under this section at the higher threshold will include at least 60 percent of greenhouse gas emissions in the database.

(b) INCREASE.—The head of the lead agency, by rule, may increase the 10,000 metric ton reporting threshold under paragraph (1) by a higher threshold if the head of the lead agency determines that the results under this section at the higher threshold will include at least 80 percent of greenhouse gas emissions in the United States.

(c) DECREASE.—The head of the lead agency may not decrease the reporting threshold under paragraph (1) to a value lower than 10,000 metric tons of carbon dioxide equivalent.

(d) CONTENT OF REPORTS.—Each greenhouse gas report under this section shall express greenhouse gas emissions in metric tons of each greenhouse gas and in metric tons of the carbon dioxide equivalent of each greenhouse gas.

(e) RELATIONSHIP TO OTHER GREENHOUSE GAS DATABASES.

(f) VERIFICATION OF REPORT REQUIRED.

(1) IN GENERAL.—An entity that submits a greenhouse gas emissions report under this section is responsible to the administering institution for the completeness and accuracy of the information contained in the report, for inclusion in the database, a greenhouse gas emissions report for the entity that exceeds the threshold for reporting as described in paragraph (1) for that year, each entity that are the result of normal business operations for which the entity submitted a greenhouse gas emissions report under this section at the higher threshold will in the database.

(g) PROHIBITION ON CERTAIN ADJUSTMENTS TO PRIOR-YEAR EMISSION DATA.—An entity may not adjust a greenhouse gas emission report under this section or the greenhouse gas emissions report under section 1532 for the year prior to 2007, in order to account for changes by the entity that are the result of normal business growth or decline, including—

(1) increases or decreases in production output;

(2) plant openings or closures; or

(3) changes in the mix of products manufactured sold by the entity.

(h) VOLUNTARY REPORTING OF EARLIER EMISSIONS.

(1) IN GENERAL.—An entity that submits a report under this section in any year prior to 2007 to the administering institution, for inclusion in the database, a greenhouse gas emissions report for the entity that exceeds the threshold for reporting as described in paragraph (1) for that year, each entity that are the result of normal business operations for which the entity submitted a greenhouse gas emissions report under this section at the higher threshold will in the database.

(2) TRANSITION ASSISTANCE TO ENTITIES IN EXISTING PROGRAM.—The head of the lead agency may provide financial assistance to an entity that submitted a report on greenhouse gas emissions under section 1532(b) of the Energy Policy Act of 1992 (42 U.S.C. 13263(b)) for calendar years prior to 2006, for purpose of improving the report so that the entity meets the requirements of subsections (c) and (d) and section 1534.

(3) CONTINUITY OF VOLUNTARY REPORTING.—An entity that reports emissions under subsection (a) or (b) that fails to submit a report in any year after submission of the first report of the entity shall be prohibited from including emissions or reductions reported under this subtitle in the calculation of the baseline of the entity in future years.

(i) VOLUNTARY REPORTING OF OTHER INDIRECT EMISSIONS.—An entity that submits a greenhouse gas emission report under this section may voluntarily include in the report, as separate estimates prepared in accordance with the procedures under section 1535, other indirect greenhouse gas emissions.

(j) CONTINUITY OF INFORMATION ON FACILITIES IN DATABASE.—If ownership or control of a facility for which emissions were included in a report under subsection (b)(2) is transferred to another entity, any entity subseqently owning or controlling a facility for which emissions were included in a report under section 1535, other indirect greenhouse gas emissions.

(k) CONTINUITY OF INFORMATION ON FACILITIES IN DATABASE.—If ownership or control of a facility for which emissions were included in a report under subsection (b)(2) is transferred to another entity, any entity subseqently owning or controlling a facility for which emissions were included in a report under section 1535, may voluntarily include in the report, as separate estimates prepared in accordance with the procedures under section 1535, other indirect greenhouse gas emissions.

SEC. 1534. GREENHOUSE GAS EMISSION REDUCTIONS AND SEQUESTERATION REPORTING.

(a) IN GENERAL.—After the establishment of the greenhouse gas emission database under section 1532, and publication of protocols under section 1535, an entity may voluntarily submit to the administering institution, for inclusion in the database, a report of greenhouse gas emission reductions or sequestration resulting from projects carried out by the entity during the preceding year for—

(1) reduction of direct greenhouse gas emissions; or

(2) sequestration of a greenhouse gas.
(b) DATE OF SUBMISSION.—Each report shall be submitted by the July 1 that follows the end of the calendar year described in the report.

(c) PROJECT TYPES.—Projects referred to in subsection (a) may include projects relating to—

(1) fuel switching;
(2) energy efficiency improvements;
(3) use of renewable energy;
(4) use of combined heat and power systems;
(5) management of cropland, grassland, or grazing land;
(6) a forestry activity that increases forest carbon stocks or reduces forest carbon emissions;
(7) methane recovery;
(8) reduction of natural gas venting or flaring; or
(9) carbon capture and sequestration.

(d) VERIFICATION OF REPORT REQUIRED.—Before including the information from a report under subsection (a) in the database, the administering institution shall—

(1) verify the completeness and accuracy of the report using information provided under section 1535(b)(2).
(2) require the verification of the completeness and accuracy of the report by a certified institutions for achieving and reporting greenhouse gas emissions, or greenhouse gas emission reductions; or
(3) tracking of transfers under paragraph (2).

SEC. 1535. DATA QUALITY AND VERIFICATION.

(a) PROTOCOLS AND METHODS.—

(1) IN GENERAL.—The lead agency, after taking into account the recommendations of the administering institution, shall, by rule, establish protocols and methods to ensure completeness, consistency, accuracy, and transparency of data on greenhouse gas emissions and emission reductions submitted to the database that include—

(A) accounting and reporting standards for greenhouse gas emissions and greenhouse gas emission reductions;
(B) standardized methods for calculating greenhouse gas emissions in specific industries from other readily available and reliable information, such as energy consumption, materials consumption, production data, or other relevant activity data;
(C) standard methods of estimating greenhouse gas emissions (along with information on the accuracy of the estimations), for cases in which the head of the lead agency determines that methods under subparagraph (A) are not feasible;
(D) methods to avoid double-counting of greenhouse gas emissions, or greenhouse gas emission reductions, within a single major category of emission, such as direct greenhouse gas emissions;
(E) protocols to prevent an entity from avoiding the reporting requirements of this section by reporting reductions or sequestration resulting from multiple entities or by outsourcing operations or activities that emit greenhouse gases;
(F) protocols for verification of data on greenhouse gas emissions, and greenhouse gas emission reductions, by reporting entities and verification organizations independent of reporting entities; and
(G) protocols necessary for the database to maintain valid and reliable information on baselines of entities that in the event of any future action by Congress to require entities, individually or collectively, to reduce greenhouse gas emissions, Congress will be able—

(i) to take into account that information; and
(ii) to avoid enacting legislation that penalizes entities for achieving and reporting reductions.

(2) BEST PRACTICES.—The protocols and methods developed under paragraph (1) shall conform, to the maximum extent practicable, to the best practices that have the greatest support of experts in the field.

(3) OUTREACH PROGRAM.—The administering institution shall conduct an outreach program to provide information to all reporting entities and the public on the protocols and methods developed under this subsection.

(b) VERIFICATION.—

(1) INFORMATION BY REPORTING ENTITIES.—Each reporting entity shall—

(A) provide information sufficient for the administering institution to verify, in accordance with the protocols and methods developed under subsection (a), that the greenhouse gas emissions or greenhouse gas emission reductions, of the reporting entity have been completely and accurately reported; and
(B) ensure the submission or retention of data sources, information on internal control activities, information on assumptions used in reporting emissions, uncertainty analysis and relevant data to facilitate the verification of reports submitted to the database.

(2) INDEPENDENT THIRD-PARTY VERIFICATION.—Each reporting entity may—

(A) obtain verification of the completeness and accuracy of the greenhouse gas emissions report, or greenhouse gas emissions reduction report, of the reporting entity from a person independent of the reporting entity that has been certified according to the standards issued under paragraph (1); or
(B) present the results of the verification under subparagraph (A) to the administering institution in lieu of verification by the administering institution under paragraph (1).

(3) CERTIFICATION OF INDEPENDENT VERIFICATION ORGANIZATIONS.—

(A) IN GENERAL.—The head of the lead agency shall, by rule, establish certification and audit standards to be applied by the administering institution in certifying persons who verify greenhouse gas emission reports, or greenhouse gas emission reductions reports, under paragraph (2).

(B) CONFLICTS OF INTEREST.—The standards established under subparagraph (A) shall prohibit conflicts of interest on the part of certified persons.

SEC. 1536. ANNUAL SUMMARY REPORT.

Not later than January 1, 2006, and annually thereafter, the head of the lead agency shall publish an annual summary report on the database that includes—

(1) a report on the quantity of the total greenhouse gas emissions included in the database, and the fraction of total greenhouse gas emissions in the United States reported to the database, relative to the year covered by the report (if applicable);

(2) analyses, by entity and sector of the economy of the United States, of the emissions and emission reductions in paragraph (1), including a comparison to total greenhouse gas emissions in the United States by all sectors of the economy;

(3) information on the operations of the database, including the development of protocols and methods during the year covered by the report; and

(4) a summary of the views of the advisory board under section 1532(c)(1)(B) on the operations and effectiveness of the database during the year covered by the report.

The head of the lead agency may bring a civil action in United States district court against an entity that fails to comply with a requirement of this subtitle, or a rule promulgated under this subtitle, to impose a civil penalty of not more than $25,000 for each day that the failure to comply continues.

Subtitle D—Research Programs

CHAPTER 1—DEPARTMENT OF ENERGY PROGRAMS

SEC. 1541. DEFINITION OF SECRETARY.

In this chapter, the term ‘‘Secretary’’ means the Secretary of Energy, acting through the Office of Science of the Department of Energy.

SEC. 1542. DEPARTMENT OF ENERGY GLOBAL CHANGE SCIENCE RESEARCH.

(a) IN GENERAL.—The research activities shall conduct a comprehensive research program—

(1) to increase understanding of the global climate system; and
(2) to investigate and analyze the effects of energy production and use on that system.

(b) PROGRAM ELEMENTS.—The program under this chapter shall include—

(1) research activities on the radiation balance from the surface of the Earth to the upper limit of the atmosphere, including the effects of aerosols and clouds;
(2) research and modeling activities—

(A) to investigate and understand the global carbon cycle, including the role of the terrestrial biosphere as a source or sink for carbon dioxide; and
(B) to develop, test, and improve carbon cycle models;
(3)(A) research activities to understand the scales of response of complex ecosystems to environmental changes, including identification of the underlying causal mechanisms and partial or integrated assessments and the ways in which those mechanisms and pathways are linked; and

(B) research and modeling activities on the response of ecosystems to changes in climate, atmospheric composition, and land use;

(4) research and modeling activities to develop and apply models for the economic, social, and environmental implications of climate change and policies relating to climate change, with emphasis on—

(A) developing resolution models for integrated assessments on a regional basis;

(B) developing next-generation models and testing those models as pilots on selected regional areas (including States and territories of the United States in the Pacific, on the Gulf of Mexico, or in agricultural or forested areas of the continental United States);

(C) developing and improving models for technology innovation and diffusion; and

(D) developing and improving models of the economic costs and benefits of climate change and policies relating to climate change; and

(5) development of high-end computational resources, information technologies, and data assimilation methods

(A) to carry out the program under this chapter;

(B) to make more effective use of large and distributed data sets and observational data streams; and

(C) to increase the availability and utility of climate change and energy simulations to researchers and policy makers.

(c) EDUCATION AND INFORMATION DISSEMINATION. —

(1) IN GENERAL.—The Secretary, in collaboration with similar programs in other Federal agencies, shall include education and training of undergraduate and graduate students as an integral part of the programs under this chapter.

(2) ANALYSIS CENTER.—The Secretary shall support a Carbon Dioxide Information and Analysis Center—

(A) to serve as a resource for researchers and others interested in global climate change; and

(B) to accommodate data and information requests relating to the greenhouse effect and global climate change.

SEC. 1541. AUTHORIZATION OF APPROPRIATIONS. —

(a) IN GENERAL.—There are authorized to be appropriated to the Secretary to carry out this chapter, to remain available until expended—

(1) $150,000,000 for fiscal year 2006;

(2) $175,000,000 for fiscal year 2007;

(3) $200,000,000 for fiscal year 2008;

(4) $200,000,000 for fiscal year 2009; and

(5) $200,000,000 for fiscal year 2010.

(b) LIMITATION ON FUNDS.—Fund authorized to be appropriated under this section shall not be used for the development, demonstration, or deployment of technologies to reduce, avoid, or sequester greenhouse gas emissions.

CHAPTER 2—DEPARTMENT OF COMMERCE PROGRAMS
SEC. 1551. DEFINITION OF SECRETARY. —

In this chapter, the term ‘Secretary’ means the Secretary of Commerce.

SEC. 1552: ABRUPT CLIMATE CHANGE RESEARCH PROGRAM

(a) DEFINITION OF ABRUPT CLIMATE CHANGE.—In this section, the term ‘abrupt climate change’ means a change in the climate system occurring on a time scale of decades or less, characterized by multiple abrupt transitions or ‘tipping points’ beyond which the climate system evolves to a new equilibrium state, and is significantly different from the historic state.

(b) ESTABLISHMENT OF PROGRAM.—The Secretary shall establish in the Office of Oceanic and Atmospheric Research of the National Oceanic and Atmospheric Administration, an interagency program of scientific research on abrupt climate change.

(c) PURPOSES OF PROGRAM.—The purposes of the program are—

(1) to develop a global array of terrestrial and oceanographic indicators of paleoclimate in order to sufficiently identify and describe past instances of abrupt climate change;

(2) to improve understanding of thresholds and nonlinearities in geophysical systems related to the mechanisms of abrupt climate change;

(3) to incorporate the mechanisms into advanced geophysical models of climate change; and

(4) to test the output of the models against an improved global array of records of past abrupt climate changes.

(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section, to remain available until expended—

(1) $20,000,000 for fiscal year 2006;

(2) $22,000,000 for fiscal year 2007;

(3) $24,000,000 for fiscal year 2008;

(4) $26,000,000 for fiscal year 2009; and

(5) $28,000,000 for fiscal year 2010.

SEC. 1553. REGIONAL CLIMATE ASSESSMENT AND ADAPTATION.—

(a) IN GENERAL.—The Secretary shall establish in the Department of Commerce a National Climate Vulnerability and Adaptation Program for regional impacts related to increasing concentrations of greenhouse gases in the atmosphere and climate variability.

(b) COORDINATION.—In designing the program described in subsection (a), the Secretary shall consult with appropriate Federal, State, tribal, and local government entities.

(c) REGIONAL VULNERABILITY ASSESSMENTS.—The program shall—

(1) evaluate, based on information developed under this subtitle, under the National Climate Program Act (15 U.S.C. 2901 et seq.), and by the global climate modeling community, regional vulnerability to phenomena associated with climate change and climate variability, including—

(A) increases in severe weather events;

(B) sea level rise and shifts in the hydrological cycle;

(C) natural hazards, including tsunami, drought, flood, and fire; and

(D) alteration of ecological communities at the ecosystem or watershed level; and

(2) build upon information developed in the scientific assessments prepared under the Global Change Research Act of 1990 (15 U.S.C. 2921 et seq.), and any other Federal, State, tribal, and local government entities, shall conduct regional assessments on a regional basis; and

(3) R EGIONAL PLANS .—The regional assessments and the national assessments prepared under section 1552 shall be integrated to identify areas of the country that require specific regional adaptation plans.

(d) AUTHORIZATION OF APPROPRIATIONS.—The regional assessments shall be developed with the participation of other Federal, State, tribal, and local government entities that will be critical in the implementation of the plan at the State, tribal, and local level.

SEC. 1554. NATIONAL CLIMATE VULNERABILITY AND ADAPTATION.—

(a) DEFINITION.—Any term used in this section that is defined in section 304 of the Coastal Zone Management Act of 1972 (16 U.S.C. 1453) has the meaning given the term in that section.

(b) REGIONAL ASSESSMENTS.—

(1) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Secretary, in consultation with appropriate Federal, State, tribal, and local government entities, shall conduct regional assessments of the vulnerability of coastal areas to hazards associated with climate change, climate variability, sea level rise, and fluctuation of Great Lakes water levels.

(2) DEVELOPMENT.—The Secretary may consult with the governments of Canada and Mexico as appropriate in developing regional assessments.

(c) R EGIONAL VULNERABILITY ASSESSMENTS.—

(1) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, and periodically thereafter, the Secretary shall submit to Congress a report that identifies and recommends tasks to address coastal impacts associated with climate change, climate variability, sea level rise, and climate variability.

(2) DEVELOPMENT.—The national coastal adaptation plan shall be developed with the participation of other Federal, State, tribal, and local government agencies that will be critical in the implementation of the plan at the State, tribal, and local level.

(3) R EGIONAL PLANS.—The regional plans covered by the national coastal adaptation plan shall—

(A) be based on the information contained in the regional assessments; and

(B) identify special needs associated with Arctic regions and the Central, Western, and South Pacific regions.

(d) A UTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section $45,000,000 for each of fiscal years 2006 through 2010.

(e) I NFORMATION AND TECHNOLOGY.—The Secretary shall—

(1) make available appropriate information, technologies, and products that will assist national, regional, State, and local entities in identifying and reducing property from increased concentrations of greenhouse gases and climate variability; and

(2) coordinate dissemination of such technologies and products.

(f) AuthORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary for each of fiscal years 2006 through 2010

$25,000,000 for the advanced observation system; and

$25,000,000 for the climate community.
(E) economic planning for small communities dependent upon affected coastal resources, including fisheries; and
(F) funding requirements and mechanisms.

(4) APPLICATIONS.—

(1) IN GENERAL.—The Secretary, acting through the National Ocean Service, shall establish a coordinated program to provide technical planning assistance and products to coastal State and local governments as the coastal States and local governments develop and implement adaptation or mitigation strategies and plans.

(2) STATE AND LOCAL PLANS.—Products, information, tools and technical expertise generated from the development of the regional assessment and the regional adaptation plans shall be made available to coastal State and local governments to develop State and local plans.

(e) COASTAL ADAPTATION GRANTS.—

(1) IN GENERAL.—Subject to paragraph (2), the Secretary shall provide grants of financial assistance to coastal States with Federal-approved coastal zone management programs to develop and begin implementing coastal adaptation programs.

(2) ELIGIBILITY.—To be eligible to receive a grant under paragraph (1), a coastal State shall provide a Federal-to-State match—

(A) in the first fiscal year of the program, of 4 to 1;

(B) in the second fiscal year of the program, of 2.5 to 1;

(C) in the third fiscal year of the program, of 2 to 1; and

(D) in each subsequent fiscal year, of 1 to 1.

(3) FORMULA.—Distribution of funds under this subsection to coastal States shall be based on a formula established under subsection 306(c) of the Coastal Zone Management Act of 1972 (16 U.S.C. 1455(c)), adjusted in consultation with the States as necessary to provide financial assistance to particularly vulnerable coastlines.

(f) COASTAL RESPONSE PILOT PROGRAM.—

(1) IN GENERAL.—The Secretary shall establish a 4-year pilot program to provide financial assistance to coastal communities that—

(A) are most adversely affected by the impact of climate change or climate variability; and

(B) are located in States with Federal-approved coastal zone management programs.

(2) APPLICATIONS.—A project eligible for financial assistance under the pilot program if the project—

(A) will restore or strengthen coastal resources, facilities, or infrastructure that have been damaged by the impact of climate change or climate variability;

(B) are located in States with Federal-approved coastal zone management programs.

(3) FUNDS.—

(A) IN GENERAL.—The Federal funding share of any project under this subsection may not exceed 75 percent of the total cost of the project.

(B) ADMINISTRATION.—In carrying out this paragraph—

(i) the Secretary may take into account in-kind contributions and other non-cash support of the recipient; and

(ii) the Secretary may waive the requirements of this paragraph for a project in a community with particularly vulnerable coastal resources.

(i) the Secretary determines that the project is important; and

(I) the economy and available resources of the community in which the project is to be conducted are insufficient to meet the non-Federal share of the cost of the project.

(3) FUNDING SHARE.

(A) IN GENERAL.—The Administrator of the National Oceanic and Atmospheric Administration, a program of grants for competitively awarded 3-year pilot projects to explore the integrated use of sources of remote sensing and other geospatial information to address State, local, regional, and tribal agency needs to forecast a plan for adaptation to coastal zone and land use changes that may result as a consequence of global climate change or climate variability.

(B) PREFERRED PROJECTS.—In awarding grants under this section, the Center shall give preference to projects that—

(1) focus on areas that are most sensitive to the consequences of global climate change or climate variability;

(2) make use of existing public or commercial data sets;

(3) integrate multiple sources of geospatial information (including geographic information system data, satellite-provided positioning data, and remotely sensed data) in innovative ways;

(4) offer diverse, innovative approaches that may serve as models for establishing a future coordinated framework for planning strategies for adaptation to coastal zone and land use changes related to global climate change or climate variability;

(5) include funds for non-Federal contributions from non-Federal sources;

(6) involve the participation of commercial entities that process raw or lightly processed data, other geospatial information, to create data products that have significant value added to the original data; and

(7) demonstrate, together, as a diverse set of public sector applications as practicable.

(c) OPPORTUNITIES.—In carrying out this section, the Center shall seek opportunities to assist—

(1) in the development of commercial applications potentially available from the remote sensing data;

(2) State, local, regional, and tribal agencies in applying remote sensing and other geospatial information technologies for management and adaptation to coastal and land use consequences of global climate change or climate variability.

(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Administrators described in subsection (a) to carry out this section—

(1) $15,000,000 for fiscal year 2006;

(2) $7,500,000 for fiscal year 2007;

(3) $20,000,000 for fiscal year 2008;

(4) $22,500,000 for fiscal year 2009; and

(5) $25,000,000 for fiscal year 2010.

SEC. 1555. RESEARCH AND COOPERATION.

(a) ESTABLISHMENT.—

(1) IN GENERAL.—The Secretary, in cooperation with the Administrator of the National Aeronautics and Space Administration, shall conduct international research in the Pacific region to increase understanding of the nature and predictability of climate variability in the Asia-Pacific sector, including regional aspects of global environmental change.

(2) COOPERATION.—Research activities under this section shall be conducted in cooperation with other nations of the Pacific region.

(b) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section for fiscal year 2006, to remain available until June 30, 2007—

(1) $2,000,000 to the National Oceanic and Atmospheric Administration, including $500,000 for the Pacific El Nino-Southern Oscillation Applications Center; and

(2) $1,500,000 to the National Aeronautics and Space Administration.

SEC. 1557. NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY PROGRAMS.

(a) ESTABLISHMENT, FUNCTIONS, AND ACTIVITIES.—Section 2(c) of the National Institute of Standards and Technology Act (15 U.S.C. 271 et seq.) is amended—

(1) in paragraph (21), by striking “and” and

(2) by redesigning paragraph (22) as paragraph (23); and

(3) by inserting after paragraph (21) the following:

“(22) perform research to develop enhanced measurements, calibrations, standards, and measurement technologies which will enable the reduced production in the United States of greenhouse gases associated with global warming, including carbon dioxide, methane, nitrous oxide, ozone, perfluorocarbons, hydrofluorocarbons, and sulfur hexafluoride; and”.

(b) PROGRAMS RELATED TO CLIMATE CHANGE.—The National Institute of Standards and Technology Act (15 U.S.C. 271 et seq.) is amended—

(1) by redesigning section 32 as section 33; and

(2) by inserting after section 31 the following:

“SEC. 32. PROGRAMS RELATED TO CLIMATE CHANGE.

“(a) IN GENERAL.—The Director shall establish a program to perform and support research, development, and cooperation required to enhance the ability of the United States to measure greenhouse gases, and reference material standards with the goal of providing scientific and technical knowledge and generally recognized measurement standards applicable to the understanding, monitoring, and control of greenhouse gases.

“(b) PROGRAM EXECUTION AND COORDINATION.—

“(1) IN GENERAL.—The Director may conduct the program under this section through—

(A) the National Measurement Laboratories or other appropriate elements of the Institute; or

(B) grants, contracts, and cooperative agreements with appropriate entities.

“(2) VOLUNTARY LABORATORY ACCREDITATION PROGRAM.—The Director may establish a voluntary laboratory accreditation program (including specific calibration and test standards, methods, and protocols) to meet the need for accreditation in the measurement of greenhouse gases.

“(3) CONSULTATION.—The Director shall carry out the program under this section in consultation with appropriate Federal agencies, including the Environmental Protection Agency, the Department of Energy, the
National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration, and the National Science Foundation.

SECTION 2.—INTERAGENCY PROGRAMS

SEC. 1561. GLOBAL CHANGE RESEARCH

(a) FINDINGS.—Section 101(a) of the Global Change Research Act of 1990 (15 U.S.C. 2931(a)) is amended by adding at the end the following:

"(7) The present rate of advance in research and development, and the application of those advances, is inadequate and new developments must be incorporated rapidly into services for the benefit of the public; and"

"(8) The United States lacks adequate infrastructure for research to meet national climate monitoring and prediction needs.".

(b) UPDATING AUTHORIZATION FOR COMMITTEE STRUCTURE.—


(A) in paragraph (1), by inserting before the semicolon the following: ‘‘or a successor committee’’; and

(B) in paragraph (2), by inserting before the semicolon the following: ‘‘or a successor body’’.

(2) COMMITTEE ON EARTH AND ENVIRONMENTAL SCIENCES.—Section 102 of the Global Change Research Act of 1990 (15 U.S.C. 2922) is amended—

(A) in subsection (b), by striking the last sentence and inserting ‘‘The representatives shall consult with actual and potential users of the Program data and other interested persons, including modeling capabilities, in order to determine the nature and extent of the Program’s need and usefulness. The Program shall be managed through the Science and Technology Policy Institute at the University of Virginia’’;

(B) by redesignating subsections (d) and (e) as subsections (e) and (f), respectively;

(C) by inserting after subsection (c) the following:

‘‘(d) COMMITTEES AND WORKING GROUPS.—

(1) IN GENERAL.—There shall be a Subcommittee on Global Change Research, which shall carry out such functions of the Committee as are assigned by the Committee.

(2) OTHER COMMITTEES AND WORKING GROUPS.—The Committee may establish such additional subcommittees and working groups as the Committee considers appropriate:’’; and

(d) in subsection (f) (as redesignated by subparagraph (B)), by striking paragraph (6) and inserting the following:

‘‘(6) routinely consult with actual and potential users of the results of the Program to assess information needs and ensure that the results are useful in developing inter-national, national, regional, and local policy responses to global change; and’’.

(c) NATIONAL GLOBAL CHANGE RESEARCH PLAN.—Section 104 of the Global Change Research Act of 1990 (15 U.S.C. 2923) is amended—

(1) in the last sentence of subsection (a), by inserting before the period the following: ‘‘including not later than 180 days after the date of enactment of the Energy and Climate Change Act of 2005’’;

(2) in subsection (b)—

(A) in paragraph (1)—

(i) by inserting ‘‘short-term and long-term’’ before ‘‘goals’’; and

(ii) by striking ‘‘usable information on which to base policy decisions relating to’’ and inserting ‘‘information relevant and readily usable by Federal, State, tribal, and local decision makers and other end-users, for the formulation of effective decisions and strategies for measuring, predicting, preventing, persisting, and adapting to the effects of global change;’’;

(B) in paragraph (6)(D), by striking ‘‘and at the end;’’ and

(C) by redesignating paragraph (7) as paragraph (9); and

(D) by inserting after subsection (6) the following:

‘‘(7) evaluate and explain the accuracy of provided predictions in a manner that will enhance use of the predictions by Federal, State, tribal, and local decision makers and other end-users; and

‘‘(8) identify the categories of decision makers and describe how the program (including modeling capabilities) will develop decision support capabilities for the decision makers described in paragraph (7); and’’;

(3) in subsection (c), by adding at the end the following:

‘‘(6) Research necessary to monitor and predict societal and ecosystem impacts, to design adaptation and mitigation strategies, and to understand the costs and benefits of climate change and related response options.

(7) Methods for integrating information to provide predictive and other tools for planning and decisionmaking by governments, communities, and the private sector.

(8) The present rate of advance in research and development, and the application of those advances, is inadequate and new developments must be incorporated rapidly into services for the benefit of the public; and

(9) The United States lacks adequate infrastructure for research to meet national climate monitoring and prediction needs.’’.

(e) SCIENTIFIC ASSESSMENT.—Section 106 of the Global Change Research Act of 1990 (15 U.S.C. 2926) is amended—

(1) in paragraph (2), by striking ‘‘and’’ at the end;

(2) in paragraph (3)—

(A) by striking ‘‘human-induced’’ and inserting ‘‘human–induced’’; and

(B) by striking the period at the end and inserting ‘‘; and’’; and

(3) by adding at the end the following:

‘‘(4) evaluates the information being developed under this title, considering in particular the usefulness of the information to national, State, tribal, and local decision makers and other interested persons, including those in the private sector, after providing a meaningful opportunity for considering the views of those persons on the effectiveness of the Program and the usefulness of the information.’’.

(f) NATIONAL CLIMATE SERVICE PLAN.—Title I of the Global Change Research Act of 1990 (15 U.S.C. 2921 et seq.) is amended by adding at the end the following:

‘‘SEC. 109. NATIONAL CLIMATE SERVICE PLAN.

‘‘Not later than 1 year after the date of enactment of the Energy and Climate Change Act of 2005, the Secretary of Commerce, after review by the Interagency Task Force on Climate Change established under section 103 of that Act, shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science of the House of Representatives a plan of action for a National Climate Service that contains recommendations and funding estimates for—

‘‘(1) a national center for operational climate monitoring and predicting with the functional capacity to monitor and adjust observing systems as necessary to reduce biases;

‘‘(2) the design, deployment, and operation of an adequate national climate observing system that builds upon existing environmental monitoring systems and closes gaps in coverage by existing systems;

‘‘(3) the establishment of a national coordinated modeling strategy, including a national climate modeling center to provide a dedicated capability for climate modeling and a regular schedule of predictions on a long-term and short-term time scale and at a range of spatial scales;

‘‘(4) improvements in modeling and assessment capabilities needed to integrate information to predict regional and local climate changes and impacts;

‘‘(5) in coordination with the private sector, improving the capacity to assess the impacts of predicted and projected climate changes and variations;

‘‘(6) a program for long-term stewardship, quality control, development of relevant climate products, and efficient access to all relevant climate data, products, and critical model simulations; and

‘‘(7) mechanisms to coordinate among Federal agencies, State, tribal, and local government entities and the academic community to ensure timely and full sharing and dissemination of climate information and services, both in the United States and internationally.’’.

Subtitle E—Forests and Agriculture

SEC. 1571. DEFINITIONS.

In this section:

(1) ADVISORY PANEL.—The term ‘‘Advisory Panel’’ means the Soil and Forestry Carbon Sequestration Panel established under subsection (a).

(2) ELIGIBLE FOREST CARBON ACTIVITY.—The term ‘‘eligible forest carbon activity’’ means a forest management action that—

(A) restores, enhances, or protects forest lands that have been underproducing or understocked for more than 5 years;
(B) maintains natural forest under a permanent conservation easement;
(C) provides for protection of a forest from nonforest use;
(D) develops a variety of sustainable management alternatives;
(E) maintains or improves a watershed or fish and wildlife habitat; or
(F) demonstrates permanence of carbon sequestration and promotes and sustains native species.

(3) FOREST CARBON RESERVOIR.—The term "forest carbon reservoir" means carbon that is stored in aboveground or underground soil and other forms of biomass that are associated with forest ecosystems.

(4) FOREST CARBON SEQUESTRATION PROGRAM.—The term "forest carbon sequestration program" means the program established under section 1572(a).

(5) FOREST LAND.—
(A) IN GENERAL.—The term "forest land" means a parcel of land that is, or has been, at least 10 percent stocked by forest trees of any size.

(B) INCLUSIONS.—The term "forest land" includes—
(i) land on which forest cover may be naturally or artificially regenerated; and
(ii) a transition zone between a forested area and nonforested area that is capable of sustaining forest growth.

(6) FOREST MANAGEMENT ACTION.—
(A) IN GENERAL.—The term "forest management action" means an action that—
(i) applies principles to the regeneration, management, use, or conservation of forests to meet specific goals and objectives;
(ii) demonstrates permanence of carbon sequestration and promotes and sustains native species; and
(iii) maintains the ecological sustainability of the forests or protects natural forests under a permanent conservation easement.

(B) INCLUSIONS.—The term "forest management action" includes—
(i) reforestation or artificially regenerated forests; and
(ii) natural forest under a permissive use by agricultural producers.

(7) REFORESTATION.—
(A) IN GENERAL.—The term "reforestation" means the reestablishment of forest cover over native or arable land.

(B) INCLUSIONS.—The term "reforestation" includes—
(i) replanting; and
(ii) natural regeneration.

(8) SECRETARY.—The term "Secretary" means the Secretary of Agriculture.

(9) SOIL CARBON SEQUESTRATION PROGRAM.—The term "soil carbon sequestration program" means the program established under section 1573(a)(1).

(10) STATE.—
(A) IN GENERAL.—The term "State" means—
(i) a State; and
(ii) the District of Columbia.

(B) INCLUSION.—The term "State" includes a political subdivision of a State.

(11) WILLING OWNER.—The term "willing owner" means a State or local government, an Indian tribe, private entity, or other person or nonfederal organization that owns forest land and is willing to participate in the forest carbon sequestration program.

SEC. 1572. FOREST CARBON SEQUESTRATION PROGRAM

(a) IN GENERAL.—The Secretary, acting through the Chief of the Forest Service and in collaboration with State foresters, State resource management agencies, and interested nongovernmental organizations, shall establish a forest carbon sequestration program in which the Secretary, directly or through agreements with 1 or more States, may enter into cooperative agreements with willing owners to carry out forest management actions or eligible forest carbon activities on not more than a total of 5,000 acres of forest land holdings to create or maintain a forest carbon reservoir.

(b) ASSISTANCE TO STATES.—
(1) IN GENERAL.—The Secretary shall provide assistance to States to enter into cooperative agreements with willing owners to carry out eligible forest carbon activities on forest land.

(2) REPORTING.—As a condition of receiving assistance under paragraph (1), a State shall annually submit to the Secretary a report disclosing the estimated quantity of carbon stored through the cooperative agreement.

(c) BONNEVILLE POWER ADMINISTRATION.—Each of the States of Idaho, Oregon, Montana, and Washington may apply for funding from the Bonneville Power Administration to fund a cooperative agreement that—
(1) meets the fish and wildlife objectives and priorities of the Bonneville Power Administration under the Pacific Northwest Electric Power Planning and Conservation Act (16 U.S.C. 839 et seq.); and
(2) meets the objectives of this section.

SEC. 1573. SOIL CARBON SEQUESTRATION PROGRAM

(a) ESTABLISHMENT.—
(1) IN GENERAL.—The Secretary, acting through the Chief of the Natural Resources Conservation Service in cooperation with the Consortium for Agricultural Soils Mitigation of Greenhouse Gases, shall carry out at least 4 pilot programs to—
(A) develop, demonstrate, and verify the best management practices for carbon sequestration on agricultural land; and
(B) evaluate and establish standardized monitoring and verification methods and protocols.

(2) CRITERIA.—The Secretary shall select a pilot program that—
(A) the merit of the proposed program; and
(B) the diversity of soil types, climate zones, crop types, cropping patterns, and sequestration practices available at the site of the proposed program.

(b) REQUIREMENTS.—A pilot program carried out under this section shall—
(1) involve agricultural producers in—
(A) the development and verification of best management practices for carbon sequestration; and
(B) the development and evaluation of carbon monitoring and verification methods and protocols on agricultural land;
(2) involve research and testing of the best management practices and monitoring and verification methods and protocols in various soil types and climate zones;
(3) analyze the effects of the adoption of the best management practices on—
(A) greenhouse gas emissions, water quality, and other aspects of the environment at the watershed level; and
(B) the full life cycle greenhouse gases; and
(4) use the results of the research conducted under the program to—
(A) develop best management practices for use by agricultural producers;
(B) provide a comparison of the costs and net greenhouse gas effects of the best management practices;
(C) encourage agricultural producers to adopt the best management practices; and
(D) develop best management practices on a regional basis for use in watersheds and States not participating in the pilot programs.

(c) COMMUNICATION.—The Secretary shall maintain a communication system to facilitate the development and verification of the best management practices and protocols on agricultural land and forest land.

(d) VACANCIES.—Each of the States of Idaho, Oregon, Montana, and Washington may apply for funding from the Bonneville Power Administration to fund a cooperative agreement that—
(1) meets the fish and wildlife objectives and priorities of the Bonneville Power Administration under the Pacific Northwest Electric Power Planning and Conservation Act (16 U.S.C. 839 et seq.); and
(2) meets the objectives of this section.

SEC. 1574. SOIL AND FORESTRY CARBON SEQUESTRATION PANEL

(a) ESTABLISHMENT.—The Secretary, acting through the Chief of the Forest Service and the Chief of the Natural Resources Conservation Service, shall establish a soil and forestry carbon sequestration panel to—
(1) advise the Secretary in the development and updating of guidelines for the voluntary reporting of greenhouse gas sequestration from forest management actions and agricultural best management practices;
(2) evaluate the potential effectiveness (including cost-effectiveness) of the guidelines in verifying carbon inputs and outputs and assessing impacts on other greenhouse gases from various forest management strategies and agricultural best management practices; and
(3) estimate the effect of proposed implementation of the guidelines on—
(A) carbon sequestration and storage; and
(B) the net emissions of other greenhouse gases.

(b) MEMBERSHIP.—The advisory panel shall be composed of the following members with interest and expertise in soil and forest carbon sequestration and forestry management, appointed by the Secretary:
(1) 1 member representing national professional forestry organizations.
(2) 1 member representing national agricultural organizations.
(3) 2 members representing environmental or conservation organizations.
(4) 1 member representing Indian tribes.
(5) 3 members representing the academic scientific community.
(6) 2 members representing State forestry organizations.
(7) 2 members representing State agricultural organizations.
(8) 1 member representing the Environmental Protection Agency.
(9) 1 member representing the Department of Agriculture.

(c) TERMS.—
(1) IN GENERAL.—Except as provided in paragraph (2), a member of the Advisory Panel shall be appointed for a term of 3 years.

(2) INITIAL TERMS.—Of the members first appointed to the Advisory Panel—
(A) 1 member shall serve a term of 3 years;
(B) 2 members shall serve an initial term of 3 years; and
(C) 4 members shall serve an initial term of 2 years.

(3) VACANCIES.—
(A) IN GENERAL.—A vacancy on the Advisory Panel shall be filled in the manner in which the original appointment was made.

(B) IN GENERAL.—A member of the Advisory Panel appointed to fill a vacancy occurring before the expiration of a term shall be appointed only for the remainder of the term.

SEC. 1575. SOIL AND FOREST CARBON SEQUESTRATION PANEL

(a) ESTABLISHMENT.—The Secretary, acting through the Chief of the Forest Service and the Chief of the Natural Resources Conservation Service, shall establish a soil and forestry carbon sequestration panel to—
(1) advise the Secretary in the development and updating of guidelines for the voluntary reporting of greenhouse gas sequestration from forest management actions and agricultural best management practices;
(2) evaluate the potential effectiveness (including cost-effectiveness) of the guidelines in verifying carbon inputs and outputs and assessing impacts on other greenhouse gases from various forest management strategies and agricultural best management practices; and
(3) estimate the effect of proposed implementation of the guidelines on—
(A) carbon sequestration and storage; and
(B) the net emissions of other greenhouse gases.

(b) MEMBERSHIP.—The advisory panel shall be composed of the following members with interest and expertise in soil and forest carbon sequestration and forestry management, appointed by the Secretary:
(1) 1 member representing national professional forestry organizations.
(2) 1 member representing national agricultural organizations.
(3) 2 members representing environmental or conservation organizations.
(4) 1 member representing Indian tribes.
(5) 3 members representing the academic scientific community.
(6) 2 members representing State forestry organizations.
(7) 2 members representing State agricultural organizations.
(8) 1 member representing the Environmental Protection Agency.
(9) 1 member representing the Department of Agriculture.

(c) TERMS.—
(1) IN GENERAL.—Except as provided in paragraph (2), a member of the Advisory Panel shall be appointed for a term of 3 years.

(2) INITIAL TERMS.—Of the members first appointed to the Advisory Panel—
(A) 1 member shall serve a term of 3 years;
(B) 2 members shall serve an initial term of 3 years; and
(C) 4 members shall serve an initial term of 2 years.

(3) VACANCIES.—
(A) IN GENERAL.—A vacancy on the Advisory Panel shall be filled in the manner in which the original appointment was made.

(B) IN GENERAL.—A member of the Advisory Panel appointed to fill a vacancy occurring before the expiration of a term shall be appointed only for the remainder of the term.

(C) IN GENERAL.—An individual may not be appointed to serve on the Advisory Panel for more than 2 full consecutive terms.
(d) EXISTING COMMITTeES.—The Secretary may use an existing Federal advisory committee to perform the tasks of the Advisory Panel if—

(1) representation on the advisory committee, the terms and background of members of the advisory committee, and the responsibilities of the advisory committee reflect those of the Advisory Panel; and

(2) those responsibilities are a priority for the advisory committee.

SEC. 1575. STANDARDIZATION OF CARBON SEQUESTRATION MEASUREMENT PROTOCOLS.

(a) ACCurate MONIToring, MEASUREMENT, AND REPORTING.—In general.—The Secretary, in collaboration with the States, shall—

(1) develop standardized measurement protocols for—

(A) carbon sequestered in soils and trees; and

(B) impacts on other greenhouse gases;

(2) begin to develop standardized forms to monitor sequestration improvements made as a result of the forest carbon sequestration program and the soil carbon sequestration program; and

(b) reporting.—The Secretary, in collaboration with the States, shall—

(1) convene the Advisory Panel to evaluate the碳 storage management practices that will increase the storage of greenhouse gases.

(2) distribute the forms to participants in the forest carbon sequestration program and the soil carbon sequestration program; and

(c) at least once every 5 years, submit to the appropriate committees of Congress a report on the forest carbon sequestration program and the soil carbon sequestration program.

(2) CONTENTS OF REPORT.—A report under paragraph (1) shall describe—

(A) carbon sequestration improvements made as a result of the forest carbon sequestration program and the soil carbon sequestration program; and

(B) carbon sequestration practices on land owned by participants in the forest carbon sequestration program and the soil carbon sequestration program; and

(C) the degree of compliance with any cooperative agreements, contracts, or other arrangements entered into under this section.

SEC. 1610. GREENHOUSE GAS INTEGRITY REDUCING TECHNOLOGY STRATEGY.

(a) DEFINITIONS.—In this section—

(1) CARBON SEQUESTRATION.—The term ‘carbon sequestration’ means the capture of carbon dioxide through terrestrial, geological, or other means, which prevents the release of carbon dioxide into the atmosphere.

(2) COMMITTEE.—The term ‘Committee’ means the Interagency Coordinating Committee on Climate Change Technology established under subsection (c)(1).

(3) DEVELOPING.—The term ‘developing’ has the meaning given in the term in section 1998(m).

(4) GREENHOUSE GAS.—The term ‘greenhouse gas’ means—

(A) carbon dioxide;

(B) methane;

(C) nitrous oxide;

(D) hydrofluorocarbons;

(E) perfluorocarbons; and

(F) sulfur hexafluoride.

(5) GREENHOUSE GAS INTENSITY.—The term ‘greenhouse gas intensity’ means the ratio of greenhouse gas emissions to economic output.

SEC. 1650. NATIONAL LABORATORY.—The term ‘National Laboratory’ means a laboratory owned by the Department of Energy.

(b) OFFICE OF SCIENCE AND TECHNOLOGY POLICY STRATEGY.—In general.—Not later than 18 months after the date of enactment of this section, the Director of the Office of Science and Technology Policy shall, based on applicable laws, make the strategy available to the public; and

(2)Availability of Strategy; Updates.—The President shall—

(A) make the strategy available to the public; and

(b) coordinate federal climate change activities and programs carried out in furtherance of the strategy developed under subsection (b)(1).

(c) INTERAGENCY COORDINATING COMMITTEE ON CLImATE CHANGE TECHNOLOGY.—

(1) IN GENERAL.—Not later than 180 days after the date of enactment of this section, the Secretary shall establish an Interagency Coordinating Committee on Climate Change Technology to—

(A) integrate federal climate change activities and programs carried out in furtherance of the strategy developed under subsection (b)(1).

(b) coordinate Federal climate change activities and programs carried out in furtherance of the strategy developed under subsection (b)(1).

(c) The chairman of the Council on Environmental Quality;

(d) the Secretary of Agriculture;

(e) the Administrator of the Environment Protection Agency; and

(f) the Secretary of Transportation.

(3) STAFF.—The Secretary shall provide such personnel as are necessary to enable the Committee to perform the duties of the Committee.

(4) CLIMATE CHANGE SCIENCE PROGRAM AND CLIMATE CHANGE TECHNOLOGY PROGRAM.—Not later than 180 days after the date on which the strategy is submitted under subsection (b)(1), the Secretary shall—

(A) establish an interagency coordination of climate change science research and related activities, including—

(a) assessments of the state of knowledge on climate change;

(b) carrying out supporting studies, planning, and analyses of the science of climate change.

(c) CLIMATE CHANGE TECHNOLOGY PROGRAM.—Not later than 180 days after the date on which the strategy is submitted under —
subsection (b)(1), the Secretary, in cooperation with the Committee, shall permanently establish within the Department of Energy, the Climate Change Technology Program to assist the Secretary in the interagency coordination of climate change technology research, development, demonstration, and deployment to reduce greenhouse gas intensity.

"(e) TECHNOLOGY INVENTORY.—"(1) IN GENERAL.—The Secretary shall conduct an inventory and evaluation of greenhouse gas intensity reducing technologies that have been developed, or are under development, by the National Laboratories, other Federal agencies, universities, and the private sector to determine which technologies are suitable for commercialization and deployment.

"(2) Report.—Not later than 180 days after the completion of the inventory under paragraph (1), the Secretary shall submit to the Secretary of Commerce and Congress a report that includes the results of the completed inventory and any recommendations of the Secretary.

"(3) Use.—The Secretary, in consultation with the Secretary of Commerce, shall use the results of the inventory as guidance in the commercialization and deployment of greenhouse gas intensity reducing technologies.

"(4) UPDATED INVENTORY.—The Secretary shall—

"(A) periodically update the inventory under paragraph (1); and

"(B) make the updated inventory available to the public.

"(f) CLIMATE CHANGE TECHNOLOGY WORKING GROUP.—"(1) IN GENERAL.—The Secretary, in consultation with the Committee, shall establish within the Department of Energy a Climate Change Technology Working Group to identify statutory, regulatory, economic, and other barriers to the commercialization and deployment of greenhouse gas intensity reducing technologies and practices in the United States.

"(2) DESCRIPTION.—The Working Group shall be composed of the following members, to be appointed by the Secretary, in consultation with the Committee:

"(A) 3 members shall be appointed from each National Laboratory.

"(B) 3 members shall be representatives of energy-consuming trade organizations.

"(C) 3 members shall represent energy-intensive trade organizations.

"(D) 3 members shall represent groups that represent end-use energy and other consumers.

"(E) 3 members shall be employees of the Federal Government who are experts in energy technology, intellectual property, and tax.

"(F) 3 members shall be representatives of universities with expertise in energy technology development that are recommended by the National Academy of Engineering.

"(3) REPORT.—Not later than 1 year after the date of enactment of this section and annually thereafter, the Working Group shall submit to the Committee a report that describes—

"(A) the findings of the Working Group; and

"(B) any recommendations of the Working Group for the removal or reduction of barriers to commercialization, deployment, and increasing the use of greenhouse gas intensity reducing technologies and practices.

"(4) COMPENSATION OF MEMBERS.—"(A) NON-FEDERAL EMPLOYEES.—A member of the Working Group who is not an officer or employee of the Federal Government shall be compensated at a rate equal to the daily equivalent of the annual rate of basic pay prescribed for level IV of the Executive Schedule under section 5315 of title 5, United States Code, for each day (including travel time) during which the member is engaged in the performance of the duties of the Working Group.

"(B) FEDERAL EMPLOYEES.—A member of the Working Group who is an officer or employee of the Federal Government shall serve without compensation in addition to the compensation received for the services of the member as an officer or employee of the Federal Government.

"(5) TRAVEL EXPENSES.—A member of the Working Group shall be allowed travel expenses, including per diem subsistence, at rates authorized for an employee of an agency under subchapter I of chapter 57 of title 5, United States Code, while away from the home or regular place of business of the member in the performance of the duties of the Commission.

"(g) GREENHOUSE GAS INTENSITY REDUCING TECHNOLOGY DEPLOYMENT.—"(1) IN GENERAL.—Based on the strategy developed under subsection (b)(1), the technology inventory conducted under subsection (e)(1), and the greenhouse gas intensity reducing technology study report submitted under subsection (e)(2), the Committee shall submit to the President for implementation by the Climate Credit Board established under section 161(b)(2)(A) that would provide for the removal of domestic barriers to the commercialization and deployment of greenhouse gas intensity reducing technologies and practices.

"(2) REQUIREMENTS.—In developing the program under paragraph (1), the Committee shall consider the aggregate—

"(A) the cost-effectiveness of the technology;

"(B) fiscal and regulatory barriers;

"(C) statutory and other barriers; and

"(D) intellectual property issues.

"(3) REPORT.—Not later than 18 months after the date of enactment of this section, the Committee shall submit to the President and Congress a report that—

"(A) identifies, based on the report submitted under subsection (f)(3), any barriers to, and commercial risks associated with, the deployment of greenhouse gas intensity reducing technologies; and

"(B) includes any recommendations of the Working Group for the removal or reduction of barriers to the commercialization, deployment, and use of greenhouse gas intensity reducing technologies and practices.

"(4) APPLICABLE LAW.—The term ‘‘greenhouse gas intensity reducing technology inventory’’ has the meaning given the term in section 1610(i)(1).

"(j) COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS.—In carrying out greenhouse gas intensity reducing research and technology deployment, the Secretary may enter into cooperative research and development agreements under section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a).

"(k) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as may be necessary to carry out this section.

SEC. 1502. CLIMATE INFRASTRUCTURE CREDIT: Title XVI of the Energy Policy Act of 1992 (42 U.S.C. 13261 et seq.) is amended by adding at the end the following:

"(l) ELIGIBLE PROJECT.—The term ‘‘eligible project’’ means a demonstration project that is recommended for approval under section 1610(b)(1).

"(m) ELIGIBLE PROJECT COST.—The term ‘‘eligible project cost’’ means any amount incurred for an eligible project that is paid by, or on behalf of, an obligor, including the costs of—

"(A) construction activities, including—

"(i) the acquisition of capital equipment; and

"(ii) construction management;

"(B) acquiring land (including any improvements to the land) relating to the eligible project; and

"(C) financing the eligible project, including—

"(i) providing capitalized interest necessary to meet market requirements;

"(ii) default guarantee fee under section 2735a (15 U.S.C. 2735a); and

"(iii) other carrying costs during construction.
"(6) FEDERAL FINANCIAL ASSISTANCE.—The term ‘Federal financial assistance’ means any credit-based financial assistance, including a direct loan, loan guarantee, a line of credit, a credit subsidy, an operating license as a standby default coverage or standby interest coverage, production incentive payment under subsection (g)(1)(B), or any other credit-based financial assistance mechanism for an eligible project that is—

(A) authorized to be made available by the Secretary for an eligible project under this section; and

(B) provided in accordance with the Federal Credit Reform Act of 1990 (2 U.S.C. 661 et seq.).

(7) INVESTMENT-GRADE RATING.—The term ‘investment-grade rating’ means a rating category of BBB minus, Baa3, or higher as assigned by a rating agency for eligible project obligations offered into the capital markets.

(8) LENDER.—The term ‘lender’ means any non-Federal qualified institutional buyer (as defined in section 230.14A(a) of title 17, Code of Federal Regulations (or any successor regulation), known as Rule 14A(a) of the Securities and Exchange Commission and issued under the Securities Act of 1933 (15 U.S.C. 77a et seq.), including a qualified retirement fund (as defined in section 497(c) of the Internal Revenue Code of 1986) that is a qualified institutional buyer and

(B) a governmental plan (as defined in section 414(d) of the Internal Revenue Code of 1986) that is a qualified institutional buyer.

(9) LOAN GUARANTEE.—The term ‘loan guarantee’ means any guarantee or other pledge by the Secretary to pay all or part of the principal of and interest on a loan or other debt obligation that is issued by an obligor, at a future date and on the occurrence of 1 or more events, a direct loan, the proceeds of which shall be used by the obligor to obtain the current status of the obligor on interest payments due on 1 or more loans or other project obligations issued by an obligor and funded by a lender for an eligible project.

(10) OBLIGOR.—The term ‘obligor’ means a person or entity (including a corporation, partnership, joint venture, trust, or governmental entity, agency, or instrumentality) that is primarily liable for payment of the principal of, or interest on, a Federal credit instrument.

(11) PROJECT OBLIGATION.—The term ‘project obligation’ means any note, bond, debenture, or other obligation issued by an obligor in connection with the financing of an eligible project, other than a Federal credit instrument.

(12) RATING AGENCY.—The term ‘rating agency' means a bond rating agency identified by the Securities and Exchange Commission as a Nationally Recognized Statistical Rating Organization.

(13) REGULATORY FAILURE.—The term ‘regulatory failure’ means a situation in which the Secretary determines that, because of a breakdown in a regulatory process or an indefinite delay caused by a judicial challenge to the regulatory consideration of a specific eligible project, the Federal or State regulatory process governing the siting, construction, or commissioning of an eligible project does not produce a definitive determination that the eligible project may go forward within a predetermined and prescribed time period.

(14) SECURED LOAN.—The term ‘secured loan’ means a loan or other secured debt obligation that is guaranteed by the Secretary in connection with the financing of an eligible project.

(15) STANDBY DEFAULT COVERAGE.—The term ‘standby default coverage’ means any guarantee or other pledge by the Secretary to pay all or part of the debt obligation issued by an obligor and funded by a lender, plus all or part of obligor equity required by this section that may fail as a result of an operating license in a period of time established by the Secretary because of a regulatory failure or other specific issue identified by the Secretary.

(16) STANDBY INTEREST COVERAGE.—The term ‘standby interest coverage’ means a pledge by the Secretary to provide to an obligor, at a future date and on the occurrence of 1 or more events, a direct loan, the proceeds of which shall be used by the obligor to fund an amount of standby interest on interest payments due on 1 or more loans or other project obligations issued by an obligor and funded by a lender for an eligible project.

(17) SUBSIDY AMOUNT.—The term ‘subsidy amount’ means the amount of budget authority sufficient to cover the estimated long-term cost to the Federal Government of a Federal credit instrument issued by the Secretary to an eligible project, calculated on a net present basis, excluding administrative costs and any incidental effects on governmental receipts or outlays in accordance with the Federal Credit Reform Act of 1990 (2 U.S.C. 661 et seq.).

(18) SUBSTANTIAL COMPLETION.—The term ‘substantial completion’ means that an eligible project has been determined by the Board to be in, or capable of, commercial operation.

(b) DUTIES OF THE SECRETARY.—

(1) In general.—The Secretary shall make available to eligible project developers and eligible project owners, in accordance with this section, such financial assistance as is necessary to private sector financing for eligible projects.

(2) CLIMATE CREDIT BOARD.—

(A) In general.—Not later than 180 days after the date of enactment of this section, the Secretary shall establish within the Department of Energy a Climate Credit Board composed of

(i) the Under Secretary of Energy, who shall serve as Chairperson;

(ii) the Chief Financial Officer of the Department of Energy;

(iii) the Assistant Secretary of Energy for Policy and International Affairs;

(iv) the Assistant Secretary of Energy for Energy Efficiency and Renewable Energy; and

(v) such other individuals as the Secretary determines to have the experience and expertise (including expertise in corporate and project finance and the energy sector) necessary to carry out the duties of the Board.

(B) DUTIES.—The Board shall—

(i) implement the program developed under section 1610(g)(1) in accordance with paragraph (3); and

(ii) establish regulations and criteria in accordance with paragraph (4).

(c) ELIGIBILITY AND CRITERIA.—The determination of eligibility of, and criteria for selecting, eligible projects to receive assistance under this section shall be carried out in accordance with subsection (c) and the regulations issued under subparagraph (A).

(d) CONDITIONS FOR PROVISION OF ASSISTANCE.—The Board shall not provide assistance under this section to an eligible project unless the Board determines, in accordance with the regulations issued under subparagraph (A), that the terms, conditions, maturity, security, schedule, and amounts of repayments of the assistance are reasonable and appropriate to protect the financial interests of the United States.

(e) CONFIDENTIALITY.—In accordance with section 552 of title 5, United States Code, and any related regulations applicable to the Department of Energy, the Board shall protect the confidentiality of any information provided by an applicant for assistance under this section that the applicant certifies to be commercially sensitive or that is protected intellectual property.

(f) DETERMINATION OF ELIGIBILITY; PROJECT SELECTION.—

(A) IN GENERAL.—To be eligible to receive assistance under this section, an eligible project shall, as determined by the Board—

(i) reducing greenhouse gas intensity; and

(ii) contributing to energy and technology diversity in the energy economy of the United States;

(B) be nationally or regionally significant by—

(i) reducing greenhouse gas intensity; and

(ii) contributing to energy and technology diversity in the energy economy of the United States;

(C) contain an advanced climate technology or system that could—

(i) significantly improve the efficiency, security, reliability, and environmental performance of the energy economy of the United States; and

(ii) reduce greenhouse gas emissions;

(D) have revenue sources dedicated to repaying credit support-based project financing, such as revenue—

(i) from the sale of sequestered carbon; and

(ii) from the sale of energy, electricity, or other products from eligible projects that employ advanced climate technologies and systems;

(iii) from the sale of electricity or generating capacity, in the case of electricity infrastructure; or

(iv) associated with energy efficiency gains, in the case of other energy projects;

(E) contain a process for project financing repayment that demonstrates to the satisfaction of the Board that the dedicated revenue sources described in subparagraph (D) will be adequate to repay project financing provided under this section; and

(F) MEASURES TO ENSURE ECONOMIC FEASIBILITY.—The regulations and criteria under paragraph (d) shall ensure that such financial assistance is provided in a manner that—

(i) is consistent with the current economic forecast of the energy sector and is reasonable and appropriate for the economic feasibility of the eligible project and the economy as a whole; and

(ii) ensures that the offering price for the assistance provided under this section will not be greater than the offering price for similar assistance provided by another entity under this section.
(F) reduce greenhouse gas intensity on a national, regional, or company basis.

(ii) LIMITATIONS.—Except as otherwise provided in this section:

(A) ESTABLISHMENT OF SELECTION CRITERIA.—The Board shall require each applicant for financial assistance under this section to provide a description of the eligible project to be implemented, the intended greenhouse gas emissions reductions, and the intended improvements to enhance the efficiency, reduce the greenhouse gas intensity, or improve the safety, of the eligible project.

(B) AGREEMENTS.—Each agreement the Secretary enters into pursuant to this section shall include such information as the Secretary determines to be necessary concerning—

(i) the eligible project; (ii) an estimate of the amount of the Federal financial assistance; (iii) the terms of the agreement; (iv) the conditions to which the Federal financial assistance is subject; and (v) any other financial aspects of the eligible project.

(C) FINANCIAL INFORMATION.—An application for an eligible project under this section shall include such information as the Secretary determines to be necessary concerning—

(i) the eligible project; (ii) an estimate of the amount of the Federal financial assistance; (iii) the terms of the agreement; (iv) the conditions to which the Federal financial assistance is subject; and (v) any other financial aspects of the eligible project.

(D) USE OF PROCEEDS.—The proceeds of stand-by insurance coverage provided under subsection (c) shall be used to finance the eligible project.

(E) RISK ASSESSMENT.—Before entering into any agreement to provide financial assistance for an eligible project under this section, the Board shall take into account the information contained in the preliminary rating opinion letter from at least 1 credit rating agency indicating that the senior obligations of the eligible project have the potential to achieve an investment-grade rating.

(F) ESTIMATE OF ASSETS AT TIME OF TERMINATION.—In the event that regulatory approval to operate a facility is suspended as a result of regulatory failure or other circumstances specified by the Secretary, standby default coverage shall be available beginning on the date of substantial completion and ending not later than 1 year after the date of the suspension of the operation of the facility.

(G) RIGHTS OF THIRD-PARTY CREDITORS.—The Secretary may enter into agreements to provide standby default coverage for an eligible project funded under this section, and such agreements shall be made on behalf of the obligor.

(H) RELATIONSHIP TO OTHER CREDIT INSTRUMENTS.—The proceeds of stand-by insurance coverage provided under this section shall be available to pay the debt service on project obligations issued to finance eligible project costs of an eligible project.
project if a delay in commercial operations occurs due to a regulatory failure or other condition determined by the Secretary.

(2) TERMS AND LIMITATIONS.

(A) DURATION OF INTEREST COVERAGE under this subsection with respect to an eligible project shall be made on such terms and conditions (including a requirement that the project be in operation) as the Secretary determines appropriate.

(B) MAXIMUM AMOUNT.

(i) TOTAL AMOUNT.—The total amount of standby interest coverage for an eligible project under this subsection shall not exceed 25 percent of the reasonably anticipated eligible project costs.

(ii) 1-YEAR DRAWS.—The amount drawn in any 1 year for an eligible project under this subsection shall not exceed 25 percent of the total amount of the standby interest coverage for the eligible project.

(C) PERIOD OF AVAILABILITY.—The standby interest coverage for an eligible project shall be available during the period—

(i) beginning on a date following substantial completion of the eligible project that regulatory approval to operate a facility under the eligible project is suspended as a result of regulatory failure or other condition determined by the Secretary; and

(ii) ending on a date that is not later than 5 years after the eligible project is scheduled to commence commercial operations.

(D) COST OF COVERAGE.

Subject to subsection (c)(5), the total amount of standby interest coverage for an eligible project under this subsection shall be borne by the Secretary.

(E) INTEREST RATE.

Subject to clause (i), the interest rate on a loan resulting from a standby interest coverage shall be—

(i) the sale of electricity or generating capacity;

(ii) the sale or transmission of energy;

(iii) revenues associated with energy efficiency gains; or

(iv) other dedicated revenue sources, such as carbon use.

(F) PREPAYMENT.

(i) USE OF EXCESS REVENUES.—At discretion of the obligor, any excess revenues that remain after satisfying scheduled debt service requirements on the eligible project, and all deposit requirements under the terms of any trust agreement, bond resolution, or similar agreement securing project obligations, may be applied annually to prepay the secured loan without penalty.

(ii) USE OF PROCEEDS OF REFINANCING.

The secured loan may be prepaid at any time without penalty from the proceeds of refinancing from non-Federal funding sources.

(G) SECURITY.

(i) A GAINST FEDERAL GOVERNMENT.

The Secretary may, subject to clause (ii), allow the obligor to add unpaid principal or interest to the outstanding balance of the secured loan.

(ii) ASSIGNMENT.

An obligor may assign the standby interest coverage to 1 or more lenders or to a trustee on behalf of the lenders.

(iii) SUBORDINATION.

A secured loan for an eligible project made under this subsection shall be subordinate to junior private debt issued by a lender for the eligible project.

(3) REPAYMENT.

(A) TERMS AND CONDITIONS.

The Secretary shall establish a repayment schedule and terms and conditions for each loan for an eligible project under this subsection based on the projected cash flow from revenues for the eligible project.

(B) REPAYMENT DUE DATES—Scheduled repayments of principal or interest on a loan under this subsection shall—

(i) commence not later than 5 years after the end of the period of availability specified in paragraph (2)(C); and

(ii) be completed, with interest, not later than 10 years after the end of the period of availability.

(C) SOURCES OF REPAYMENT FUNDS.

The sources of funds for scheduled loan repayments under this subsection shall include—

(i) the sale of electricity or generating capacity;

(ii) the sale or transmission of energy;

(iii) revenues associated with energy efficiency gains; or

(iv) other dedicated revenue sources generated by the eligible project.

(D) PREPAYMENT.

(i) REPRESENTATION OF LOAN.—A loan made under this subsection may be prepaid at any time without penalty from the proceeds of refinancing from non-Federal funding sources.

(ii) USE OF PROCEEDS OF REFINANCING.

The secured loan may be prepaid at any time without penalty from the proceeds of refinancing from non-Federal funding sources.

(E) INTEREST RATE.

(i) IN GENERAL.—Subject to clause (ii), the interest rate on a loan resulting from a draw on standby interest coverage under this subsection shall include—

(A) SCHEDULE AND TERMS.

(i) the sale or transmission of energy;

(ii) the sale of electricity or generating capacity;

(iii) revenues associated with energy efficiency gains; or

(iv) other dedicated revenue sources generated by the eligible project.

(F) SECURITY.

(i) A GAINST FEDERAL GOVERNMENT.

The Secretary may, subject to subsection (c)(5), allow the obligor to add unpaid principal or interest to the outstanding balance of the secured loan.

(ii) ASSIGNMENT.

An obligor may assign the standby interest coverage to 1 or more lenders or to a trustee on behalf of the lenders.

(iii) SUBORDINATION.

A secured loan for an eligible project made under this subsection shall be subordinate to junior private debt issued by a lender for the eligible project.

(i) NONRECOUPMENT STATUS.—A secured loan for an eligible project under this subsection shall be non-recourse to the obligor in the event of bankruptcy, insolvency, or liquidation of the eligible project.

(ii) ASSIGNMENT.—An obligor may assign the secured loan to 1 or more lenders or to a trustee on behalf of the lenders.

(iii) SUBORDINATION.—A secured loan for an eligible project made under this subsection shall be subordinate to senior private debt issued by a lender for the eligible project.

(J) FEES.

The Board may impose fees at a level sufficient to cover all or part of the costs to the Federal Government of providing standby interest coverage for an eligible project under this subsection.

(E) INTEREST RATE.

(i) IN GENERAL.—Subject to clause (ii), the interest rate on a secured loan under this subsection shall be established by the Secretary.

(ii) MINIMUM RATE.—The interest rate on a loan resulting from a secured loan under this subsection shall not be less than the current average market yield on outstanding marketable obligations of the United States of comparable maturity, as of the date of the execution of the loan agreement.

(F) SECURITY.

(i) SECURED LOAN.—The SECURED LOAN.

(ii) shall be payable, in whole or in part, from dedicated revenue sources generated by the eligible project.

(iii) may include a rate covenant, coverage requirement, or similar security feature supporting the project obligations; and

(iii) may have a lien on revenues described in clause (i), subject to any lien securing project obligations.

(G) RIGHTS OF THIRD-PARTY CREDITORS.

(i) AGAINST FEDERAL GOVERNMENT.—A third-party creditor of the obligor shall not have any right against the Federal Government with respect to any payments due to the Federal Government under this subsection.

(ii) ASSIGNMENT.—An obligor may assign the secured loan to 1 or more lenders or to a trustee on behalf of the lenders.

(iii) SUBORDINATION.—A secured loan for an eligible project made under this subsection shall be subordinate to senior private debt issued by a lender for the eligible project.

(i) NONRECOUPMENT STATUS.—A secured loan for an eligible project under this subsection shall be non-recourse to the obligor in the event of bankruptcy, insolvency, or liquidation of the eligible project.

(ii) ASSIGNMENT.—An obligor may assign the secured loan to 1 or more lenders or to a trustee on behalf of the lenders.

(iii) SUBORDINATION.—A secured loan for an eligible project made under this subsection shall be subordinate to senior private debt issued by a lender for the eligible project.

(i) SCHEDULE AND TERMS.—The Board shall establish a repayment schedule and terms and conditions for each secured loan for an eligible project under this subsection based on the projected cash flow from revenues for the eligible project.

(B) REPAYMENT SCHEDULE.—Scheduled repayments on a secured loan for an eligible project under this subsection shall—

(i) commence not later than 5 years after the scheduled start of commercial operations of the eligible project; and

(ii) be completed, with interest, not later than 35 years after the scheduled date of the start of commercial operations of the eligible project.

(C) SOURCES OF REPAYMENT FUNDS.

The sources of funds for scheduled loan repayments under this subsection shall include—

(i) the sale of carbon or carbon compounds;

(ii) the sale of electricity or generating capacity;

(iii) the sale of sequestration services;

(iv) the sale or transmission of energy;

(v) revenues associated with energy efficiency gains; or

(vi) other dedicated revenue sources.

(D) PREPAYMENT.

(i) AUTHORIZATION.—If, at any time during the 10-year period beginning on the date of the scheduled start of commercial operations of the eligible project, the eligible project is unable to generate sufficient revenues to pay the scheduled loan repayments of principal or interest on the secured loan, the Secretary may, subject to the obligation of the obligor to add unpaid principal or interest to the outstanding balance of the secured loan.
‘‘(ii) INTEREST.—Any payment deferred under clause (i) shall—

‘‘(I) continue to accrue interest in accordance with paragraph (2)(E) until fully repaid; and

‘‘(II) be scheduled to be amortized over the number of years remaining in the term of the loan in accordance with subparagraph (B).”

‘‘(iii) CRITERIA.—

‘‘(I) In general.—Any payment deferral under clause (i) shall be contingent on the eligibility of an eligible project under the criteria established by the Secretary.

‘‘(II) REPAYMENT STANDARDS.—The criteria established under clause (i) shall include standards for reasonable assurance of repayment.

‘‘(E) PREPAYMENT.—

‘‘(i) USE OF EXCESS REVENUES.—At the discretion of the obligor, any excess revenues that remain after satisfying scheduled debt service requirements on the project obligations and secured loan, and all deposit requirements under the terms of any trust agreement, bond resolution, or other agreement securing project obligations, may be applied annually to prepay the secured loan without penalty.

‘‘(ii) USE OF PROCEEDS OF REFINANCING.—The secured loan may be prepaid at any time without penalty from the proceeds of refinancing from non-Federal funding sources.

‘‘(F) LOAN GUARANTEES.—

‘‘(A) IN GENERAL.—Subject to subparagraph (B), as soon as practicable after substantial completion of an eligible project and after notifying the obligor, the Board may sell to another entity or reoffer into the capital markets a secured loan for the eligible project if the Board determines that the sale or reoffering can be made on favorable terms.

‘‘(B) CONSENT OF OBLIGOR.—In making a sale or reoffering under subparagraph (A), the Board may change the original terms and conditions of the secured loan without the written consent of the obligor.

‘‘(G) LOAN GUARANTEES.—

‘‘(A) IN GENERAL.—The Board may provide a loan guarantee to a lender, in lieu of making a secured loan, under this subsection if the Board determines that the budgetary cost of the guarantee is substantially the same as that of a secured loan.

‘‘(B) TERMS.—

‘‘(I) IN GENERAL.—Except as provided in clause (ii), the terms of a guaranteed loan shall be subject to the terms for a secured loan under this subsection.

‘‘(ii) INTEREST RATE; PREPAYMENT.—The interest rate on the guaranteed loan and any prepayment features shall be established by negotiations between the obligor and the lender, with the consent of the Board.

‘‘(G) PRODUCTION INCENTIVE PAYMENTS.—

‘‘(1) SECURED LOAN.—

‘‘(A) IN GENERAL.—(i) The Secretary may enter into an agreement with 1 or more obligors to make a secured loan for an eligible project selected under subsection (c)(4) that employs 1 or more advanced climate technologies or systems.

‘‘(B) PRODUCTION INCENTIVE PAYMENTS.—

‘‘(I) IN GENERAL.—Amounts loaned to an obligor under subparagraph (A) shall be made available in the form of a series of production incentive payments provided by the Board to the obligor during a period of not more than 10 years, as determined by the Board, beginning after the date on which commercial project operations start at the eligible project.

‘‘(II) AMOUNTS.—Production incentive payments under clause (i) shall be for an amount equal to 25 percent of the value of—

‘‘(I) the energy produced or transmitted by the eligible project during the applicable year; or

‘‘(II) any gains in energy efficiency achieved by the eligible project during the applicable year.

‘‘(2) TERMS AND LIMITATIONS.—

‘‘(A) IN GENERAL.—A secured loan under this subsection is subject to such terms and conditions, including any covenant, representation, warranty, and requirement (including a requirement for an audit) that the Secretary determines to be appropriate.

‘‘(B) AGREEMENT COSTS.—Subject to subsection (c)(4), any agreement entered into under paragraph (1)(A) shall be paid by the Secretary.

‘‘(C) INTEREST RATE.—

‘‘(I) IN GENERAL.—Clause (ii), the interest rate on a secured loan under this subsection shall be established by the Secretary.

‘‘(II) MINIMUM RATE.—The interest rate on a secured loan under this subsection shall not be less than the current average market yield on outstanding marketable obligations of the United States measured at the time of execution of the agreement as of the date on which the agreement under paragraph (1)(A) is executed.

‘‘(D) SECURITY.—The secured loan—

‘‘(i) shall be subject to whole or in part, from dedicated revenue sources generated by the eligible project;

‘‘(ii) shall include a rate covenant, coverage requirements, or similar security feature supporting the eligible project obligations; and

‘‘(iii) may have a lien on revenues described in clause (i), subject to any lien securing eligible project obligations.

‘‘(E) RIGHTS OF THIRD-PARTY CREDITORS.—

‘‘(A) IN GENERAL.—A third-party creditor of the obligor shall not have any right against the Federal Government with respect to any payments due to the Federal Government under the agreement entered into under paragraph (1)(A).

‘‘(B) ASSIGNMENT.—An obligor may assign production incentive payments to 1 or more lenders or to a trustee on behalf of the lenders.

‘‘(F) SUBORDINATION.—A secured loan under this subsection shall be subordinate to senior private debt issued by a lender for the eligible project.

‘‘(G) NONRECOURSE STATUS.—A secured loan under this subsection shall be nonrecourse to any party to any agreements, representations, warranties, and requirements under the terms and conditions, including any covenant, representation, warranty, and requirement (including a requirement for an audit) that the Secretary determines to be appropriate.

‘‘(H) FEES.—The Secretary may impose fees at a level sufficient to cover all or part of the costs to the Federal Government of providing production incentive payments under this subsection.

‘‘(I) SCHEDULE, TERMS, AND CONDITIONS.—

‘‘(A) SCHEDULE, TERMS, AND CONDITIONS.

‘‘(i) The Secretary shall establish a repayment schedule and terms and conditions for each secured loan under this subsection based on the projected cash flow from revenues of the eligible project.

‘‘(B) REPAYMENT SCHEDULE.—Scheduled repayments of principal or interest on a secured loan under this subsection shall—

‘‘(i) commence not later than 5 years after the date on which the last production incentive payment is made by the Board under paragraph (1)(B); and

‘‘(ii) be completed, with interest, not later than 10 years after the date on which the last production incentive payment is made.

‘‘(C) SOURCES OF REPAYMENT FUNDS.—The sources of funds for scheduled loan repayments under this subsection include—

‘‘(i) the sale of electricity or generating capacity;

‘‘(ii) the sale or transmission of energy;

‘‘(iii) revenues associated with energy efficiency gains; or

‘‘(iv) other dedicated revenue sources.

‘‘(J) DEFERRED PAYMENTS.—

‘‘(I) AUTHORIZATION.—At any time during the 10-year period beginning on the date on which commercial operations of the eligible project start, the eligible project is unable to generate sufficient revenues to pay the scheduled loan repayments of principal or interest on a secured loan under this subsection, the Secretary may, subject to criteria established by the Secretary (including standards for reasonable assurances of repayment), allow the obligor to add unpaid principal and interest to the outstanding balance on the secured loan.

‘‘(II) INTEREST.—Any payment deferred under clause (i) shall—

‘‘(i) continue to accrue interest in accordance with paragraph (2)(C) until fully repaid; and

‘‘(II) be scheduled to be amortized over the number of years remaining in the term of the loan in accordance with subparagraph (B).

‘‘(K) PREPAYMENT.—

‘‘(i) USE OF EXCESS REVENUES.—At the discretion of the obligor, any excess revenues that remain after satisfying scheduled debt service requirements on the eligible project obligations and the secured loan, and all deposit requirements under the terms of any trust agreement, bond resolution, or similar agreement securing eligible project obligations, may be applied annually to prepay loans pursuant to an agreement entered into under paragraph (1)(A) without penalty.

‘‘(II) USE OF PROCEEDS OF REFINANCING.—The secured loan may be prepaid at any time without penalty from the proceeds of refinancing from non-Federal funding sources.

‘‘(3) SALE OF SECURED LOANS.—

‘‘(A) IN GENERAL.—Subject to paragraph (1) as soon as practicable after the date on which the last production incentive payment is made to the obligor under paragraph (1)(B) and after notifying the obligor, the Secretary may sell to another entity or reoffer into the capital markets a secured loan for the eligible project if the Secretary determines that the sale or reoffering can be made on favorable terms.

‘‘(B) CONSENT REQUIRED.—In making a sale or reoffering under subparagraph (A), the Secretary may not change the original terms and conditions of the secured loan without the written consent of the obligor.

‘‘(C) OTHER CREDIT-BASED FINANCIAL ASSISTANCE MECHANISMS FOR ELIGIBLE PROJECTS.—

‘‘(I) AGREEMENTS.—The Board may enter into an agreement with 1 or more obligors to make a secured loan to the obligor for eligible projects selected under subsection (c) that employ advanced technologies or systems, the proceeds of which shall be used to—

‘‘(i) finance eligible project costs; or

‘‘(ii) enhance eligible project revenues.

‘‘(D) CREDIT-BASED FINANCIAL ASSISTANCE.—Amounts made available as a secured loan under subparagraph (A) shall be provided by the Board to the obligor in the form of credit-based financial assistance mechanisms that are not otherwise specifically provided for in subsections (d) through (g), as determined to be appropriate by the Secretary.

‘‘(2) TERMS AND LIMITATIONS.—

‘‘(A) IN GENERAL.—A secured loan under this subsection shall be subject to such terms and conditions (including any covenants, representations, warranties, and requirements under the terms and conditions, including any covenant, representation, warranty, and requirement (including a requirement for an audit) that the Secretary determines to be appropriate).
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"(B) Maximum Amount.—Subject to subsection (C), the total amount of the secured loan under this subsection shall not exceed 30 percent of the reasonably anticipated eligible project costs.

"(C) Period of Availability.—The Board may enter into a contract with the obligor to provide credit-based financial assistance to an eligible project during the period—

"(i) beginning on the date that the financial structure of the eligible project is established; and

"(ii) ending on the date of the start of construction of the eligible project.

"(D) Agreement Costs.—Subject to subsection (C), the cost of carrying out an agreement entered into under paragraph (1)(A) shall be paid by the Board.

"(E) Interest Rate.—

"(i) In General.—Subject to clause (ii), the interest rate on a secured loan under this subsection shall not be less than the current average market interest rate on a privately placed, fixed rate, non-recourse loan, or on a loan under the Federal Home Loan Mortgage Corporation's Federal Home Loan Bank System, with loan terms and conditions comparable to that of the loan under this subsection.

"(ii) Maximum Amount.—Subject to subparagraph (F), the maximum amount of the secured loan under this subsection shall be subordinate to senior third-party creditor of the obligor shall not have an interest rate on a secured loan under this subsection without the obligor's consent.

"(G) Rights of Third-Party Creditors.—

"(1) Against Federal Government.—A third-party creditor of the obligor shall not have any right against the Federal Government with respect to any payments due to the Federal Government under this subsection.

"(2) Assignment.—An obligor may assign payments made pursuant to an agreement to provide credit-based financial assistance under this subsection to 1 or more lenders or to a trustee on behalf of the lenders.

"(3) Repayment.—The Board may establish fees at a level sufficient to cover all or part of the costs to the Federal Government of providing credit-based financial assistance under this subsection.

"(4) Prepayment.—

"(A) Use of Excess Revenues.—At the discretion of the obligor, any excess revenues that remain after satisfying scheduled debt service requirements of an eligible project and secured loan, and all deposit receivables, may be used annually to prepay a secured loan under this subsection without penalty.

"(ii) Use of Proceeds of Refinancing.—A secured loan under this subsection may be prepaid at any time without penalty from the proceeds of refinancing from non-Federal funding sources.

"(D) Deferred Payments.—In making a sale or refinancing under subparagraph (A), the Board may not change the original terms and conditions of the secured loan without the written consent of the Secretary.

"(E) Federal, State, and Local Regulatory Requirements.—The provision of Federal financial assistance to an eligible project under this section shall not—

"(1) relieve any recipient of the assistance of any obligation to obtain any required Federal, State, or local regulatory permits, permit, or approval with respect to the eligible project;

"(2) limit the right of any unit of Federal, State, or local government to approve or regulate any rate, term, condition, or other feature of the project equity invested in the eligible project; or

"(3) otherwise supersede any Federal, State, or local law (including any regulation) applicable to the construction or operation of the eligible project.

"(F) Authorization of Appropriations.—There are authorized to be appropriated such sums as are necessary to carry out this section for each of fiscal years 2006 through 2010, to remain available until expended.

Subtitle B—Climate Change Technology Deployment in Developing Countries

SEC. 1511. CLIMATE CHANGE TECHNOLOGY DEPLOYMENT IN DEVELOPING COUNTRIES

The Global Environmental Protection Assistance Act of 1989 (Public Law 101-240; 103 Stat. 2521) is amending by adding at the end the following:

"PART C——TECHNOLOGY DEPLOYMENT IN DEVELOPING COUNTRIES

"SEC. 731. DEFINITIONS.

"In this part—

"(1) Carbon Sequestration.—The term "carbon sequestration" means the capture of carbon dioxide from combustion processes, industrial processes, agriculture, and landfills and the storage of the captured carbon dioxide in a geological medium for purposes of preventing the release of carbon dioxide into the atmosphere.

"(2) Greenhouse Gas.—The term "greenhouse gas" means carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

"(3) Greenhouse Gas Intensity.—The term "greenhouse gas intensity" means the ratio of greenhouse gas emissions to economic output.

"SEC. 732. REDUCTION OF GREENHOUSE GAS INTENSITY

"(a) Lead Agency.—

"(1) In General.—The Department of State shall act as the lead agency for integrating into United States foreign policy the goal of reducing greenhouse gas intensity in developing countries.

"(2) Reports.—

"(A) Initial Report.—Not later than 180 days after the date of enactment of this part, the Secretary of State shall submit to the appropriate authorizing and appropriating committees of Congress, based on the most recent information available to the Secretary from reliable public sources, that identifies the 25 developing countries that are the greenhouse gas emitters, including for each country—

"(i) an estimate of the quantity and types of emissions;

"(ii) an estimate of the greenhouse gas intensity of the energy, manufacturing, agricultural, cultural, and transportation sectors;

"(iii) a description of the progress of any significant projects undertaken to reduce greenhouse gas intensity;

"(iv) a description of the potential for undertaking projects to reduce greenhouse gas intensity;

"(v) a description of any obstacles to the reduction of greenhouse gas intensity; and

"(vi) a description of the best practices learned by the Agency for International Development from conducting previous pilot and demonstration projects to reduce greenhouse gas intensity.

"(B) Update.—Not later than 18 months after the date on which the initial report is submitted under subparagraph (A), the Secretary shall submit to the appropriate authorizing and appropriating committees of Congress, based on the best information available to the Secretary, an update of the information provided in the initial report.

"(2) Use.—

"(i) Initial Report.—The Secretary of State shall use the initial report submitted under paragraph (A) to establish baselines for the developing countries identified in the report with respect to the information provided under clauses (1) and (2) of that subparagraph.

"(ii) Annual Reports.—The Secretary of State shall use the annual reports prepared under subparagraph (B) and any other information provided to the Secretary by the International Monetary Fund, the Overseas Private Investment Corporation, and other development institutions to provide assistance
to developing countries specifically for projects to reduce greenhouse gas intensity, including projects to—

‘‘(1) leverage, through bilateral agreements and trade agreements for reduction of greenhouse gas intensity;’’

‘‘(2) increase private investment in projects and activities to reduce greenhouse gas intensity;’’

‘‘(3) expedite the deployment of technology to reduce greenhouse gas intensity.’’

(c) Focus.—In providing assistance under subsection (b), the Secretary of State shall focus on—

‘‘(1) promoting the rule of law, property rights, contract protection, and economic freedom; and’’

‘‘(2) increasing capacity, infrastructure, and training.’’

(d) Priority.—In providing assistance under subsection (b), the Secretary of State shall give priority to projects in the 25 developing countries identified in the report submitted under section 732(a)(2)(A); and

SEC. 733. TECHNOLOGY INVENTORY FOR DEVELOPING COUNTRIES.

‘‘(a) In General.—The Secretary of State, in coordination with the Secretary of Energy and the Secretary of Commerce, shall conduct an inventory of greenhouse gas intensity reducing technologies that are developed, or under development in the United States, to identify technologies that are suitable for transfer to, deployment in, and commercialization in the developing countries identified in the report submitted under section 732(a)(2)(A).

‘‘(b) Report.—Not later than 180 days after the date of enactment of this part, and each year thereafter, the Secretary of State shall submit to Congress a report that—

‘‘(1) includes the results of the completed inventory;

‘‘(2) identifies obstacles to the transfer, deployment, and commercialization of the inventoried technologies;

‘‘(3) includes results from previous Federal reports related to the inventoried technologies;

‘‘(4) includes an analysis of market forces related to the inventoried technologies.

SEC. 734. TRADE-RELATED BARRIERS TO EXPORTING GREENHOUSE GAS INTENSITY REDUCING TECHNOLOGIES.

‘‘(a) In General.—Not later than 1 year after the development of this part, the United States Trade Representative shall (as appropriate and consistent with applicable bilateral, regional, and mutual trade agreements) and shall—

‘‘(1) identify trade-relations barriers maintained by foreign countries to the export of greenhouse gas intensity reducing technologies and practices from the United States to the developing countries identified in the report submitted under section 732(a)(2)(A); and

‘‘(2) negotiate with foreign countries for the removal of those barriers.

‘‘(b) Annual Report.—Not later than 1 year after the development of this part, and at which a report is submitted under subsection (a)(1) and annually thereafter, the United States Trade Representative shall submit to Congress a report that identifies the barriers made with respect to removing the barriers identified by the United States Trade Representative under subsection (a)(1).

SEC. 735. GREENHOUSE GAS INTENSITY REDUCING TECHNOLOGY EXPORT INITIATIVE.

‘‘(a) In General.—There is established an interagency working group to carry out a Greenhouse Gas Intensity Reducing Technology Export Initiative to—

‘‘(1) promote the export of greenhouse gas intensity reducing technologies and practices from the United States;

‘‘(2) identify developing countries that should be designated as priority countries for the purpose of exporting greenhouse gas intensity reducing technologies and practices, based on the reports submitted under section 732(a)(2)(A);

‘‘(3) identify potential barriers to adoption of exported greenhouse gas intensity reducing technologies and practices, based on the reports submitted under section 734; and

‘‘(4) identify previous efforts to export energy technologies to learn best practices.

‘‘(b) Working Group.—The working group shall be composed of—

‘‘(1) the Secretary of State, who shall act as the head of the working group;

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

‘‘(3) the United States Trade Representative;

‘‘(4) a designee of the Secretary of Energy; and

‘‘(5) a designee of the Secretary of Commerce.

‘‘(c) Performance Reviews and Reports.—Not later than 180 days after the date of enactment of this part and each year thereafter, the interagency working group shall—

‘‘(1) conduct a performance review of actions taken and results achieved by the Federal Government and the agencies represented on the interagency working group to promote the export of greenhouse gas intensity reducing technologies and practices from the United States; and

‘‘(2) submit to the appropriate authorizing and appropriating committees of Congress a report that describes the results of the performance reviews and evaluates progress in promoting the export of greenhouse gas intensity reducing technologies and practices from the United States, including any recommendations for the export of the technologies and practices.

SEC. 736. TECHNOLOGY DEMONSTRATION PROJECTS.

‘‘(a) In General.—The Secretary of State, in coordination with the Secretary of Energy and the Administrator of the United States Agency for International Development, shall promote the adoption of technologies and practices that reduce greenhouse gas intensity in developing countries in accordance with this section.

‘‘(b) Demonstration Projects.—

‘‘(1) In General.—The Secretary and the Administrator shall plan, coordinate, and carry out, or provide assistance for the planning, coordination, and carrying out of, demonstration projects under this section in at least 10 eligible countries, as determined by the Secretary and the Administrator.

‘‘(2) Eligibility.—A country shall be eligible for assistance under this subsection if the Secretary and the Administrator determine that the country has demonstrated a commitment to—

‘‘(A) just governance, including—

‘‘(i) promoting the rule of law;’’

‘‘(ii) respecting human and civil rights;’’

‘‘(iii) protecting private property rights; and

‘‘(B) economic freedom, including economic policies that—

‘‘(i) encourage citizens and firms to participate in global trade and international capital markets;

‘‘(ii) promote private sector growth and the sustainable management of natural resources; and

‘‘(iii) strengthen market forces in the economy.

‘‘(3) Selection.—In determining which eligible countries to provide assistance to under paragraph (1), the Secretaries and the Administrator shall consider—

‘‘(A) the opportunity to reduce greenhouse gas intensity in the eligible country; and

‘‘(B) the opportunity to generate economic growth in the eligible country.

‘‘(4) Types of Projects.—Demonstration projects under this section may include—

‘‘(A) coal gasification, coal liquefaction, and clean coal projects;

‘‘(B) carbon sequestration projects;

‘‘(C) cogeneration technology initiatives;

‘‘(D) renewable projects; and

‘‘(E) lower emission transportation.

SEC. 737. FELLOWSHIP AND EXCHANGE PROGRAMS.

‘‘The Secretary of State, in coordination with the Secretary of Energy, the Secretary of Commerce, and the Administrator of the Environmental Protection Agency, shall carry out fellowship and exchange programs under which officials from developing countries visit the United States to acquire expertise and knowledge of best practices to reduce greenhouse gas intensity in their countries.

SEC. 738. AUTHORIZATION OF APPROPRIATIONS.

‘‘There are authorized to be appropriated such sums as are necessary to carry out this part (other than section 736).

SEC. 739. EFFECTIVE DATE.

‘‘Except as otherwise provided in this part, this part takes effect on October 1, 2005.'
SA 811. Mr. TALENT (for himself and Mr. JOHNSON) submitted an amendment intended to be proposed by him to the bill H.R. 6, to ensure jobs for our future with secure, affordable, and reliable energy; which was ordered to lie on the table; as follows:

At the appropriate place add the following:

SEC. 811. AMENDMENT TO CAPTAL GAIN RATE.

(a) INCREASE IN EXCLUSION EQUIVALENT OF UNIFIED CREDIT.—Subsection (c) of section 2010 of the Internal Revenue Code of 1986 (relating to unified credit against estate tax) is amended to read as follows:

"(c) APPLICABLE CREDIT AMOUNT.—"

"(1) IN GENERAL.—For purposes of this section, the applicable credit amount is the amount of the tentative tax which would be determined under section 2001(c) if the amount with respect to which such tentative tax is to be computed were the applicable exclusion amount. For purposes of the preceding sentence, the applicable exclusion amount is $10,000,000.

(b) INFLATION ADJUSTMENT.—In the case of any decedent dying in a calendar year after 2010, the dollar amount in paragraph (1) shall be increased by an amount equal to—

"(A) such dollar amount, multiplied by—"

"(B) the cost-of-living adjustment determined under section 1(h)(3) for such calendar year by substituting 'calendar year 2009' for 'calendar year 1992' in subparagraph (B) thereof.

If any amount as adjusted under the preceding sentence is not a multiple of $10,000, such amount shall be rounded to the nearest multiple of $10,000.

(b) ESTATE TAX FLAT RATE EQUAL TO CAPI- TAL GAINS RATE.—Subsection (c) of section 2001 of the Internal Revenue Code of 1986 (relating to the impositional rate of tax) is amended to read as follows:

"(c) RATE OF TENTATIVE TAX.—In the case of estates of decedents dying, and gifts made, in any calendar year after 2009, the rate of the tentative tax is the rate specified in section 1(h)(1)(C) for such year.

(e) EFFECTIVE DATE.—The amendments made by this section shall apply to estates of decedents dying, and gifts made, after December 31, 2009.

SEC. 811A. MODIFICATIONS TO ESTATE TAX.—

(1) IN GENERAL.—Subtitles A and E of title V of the Economic Growth and Tax Relief Reconciliation Act of 2001, and the amendments made by such Act and any other law enacted after such date, are repealed; and the Internal Revenue Code of 1986 shall be applied as if such subtitles, and amendments, had never been enacted.

(2) SUNSET NOT TO APPLY.—

(A) Subsection (a) of section 901 of the Economic Growth and Tax Relief Reconciliation Act of 2001 is amended by striking “this Act” and all that follows thereafter, and inserting “the Act (other than title V) shall not apply to taxable, plan, or limitation years beginning after December 31, 2010.”.

(B) Subsection (b) of such section 901 is amended by striking “, estates, gifts, and transfers”.

(3) CONFORMING AMENDMENT.—Subsection (e) of section 511 of the Economic Growth and Tax Relief Reconciliation Act of 2001, and the amendment made by such subsection, are hereby repealed; and the Internal Revenue Code of 1986 shall be applied as if such subsection and amendment had never been enacted.

SA 822. Mr. VOINOVICH (for himself and Mr. DEWINE) submitted an amendment intended to be proposed by him to the bill H.R. 6, to ensure jobs for our future with secure, affordable, and reliable energy; which was ordered to lie on the table; as follows:

At the appropriate place add the following:

SEC. 822. INCREASE IN EXCLUSION EQUIVALENT OF UNIFIED CREDIT AGAINST ESTATE TAX, REDUCTION IN ESTATE TAX RATE TO CAPTAL GAIN RATE.

(a) INCREASE IN EXCLUSION EQUIVALENT OF UNIFIED CREDIT.—Subsection (c) of section 2010 of the Internal Revenue Code of 1986 (relating to unified credit against estate tax) is amended to read as follows:

"(c) APPLICABLE CREDIT AMOUNT.—"

"(1) IN GENERAL.—For purposes of this section, the applicable credit amount is the amount of the tentative tax which would be determined under section 2001(c) if the amount with respect to which such tentative tax is to be computed were the applicable exclusion amount. For purposes of the preceding sentence, the applicable exclusion amount is $10,000,000.

(b) INFLATION ADJUSTMENT.—In the case of any decedent dying in a calendar year after 2010, the dollar amount in paragraph (1) shall be increased by an amount equal to—

"(A) such dollar amount, multiplied by—"

"(B) the cost-of-living adjustment determined under section 1(h)(3) for such calendar year by substituting 'calendar year 2009' for 'calendar year 1992' in subparagraph (B) thereof.

If any amount as adjusted under the preceding sentence is not a multiple of $10,000, such amount shall be rounded to the nearest multiple of $10,000.

(b) ESTATE TAX FLAT RATE EQUAL TO CAPI- TAL GAINS RATE.—Subsection (c) of section 2001 of the Internal Revenue Code of 1986 (relating to the impositional rate of tax) is amended to read as follows:

"(c) RATE OF TENTATIVE TAX.—In the case of estates of decedents dying, and gifts made, in any calendar year after 2009, the rate of the tentative tax is the rate specified in section 1(h)(1)(C) for such year.

(e) EFFECTIVE DATE.—The amendments made by this section shall apply to estates of decedents dying, and gifts made, after December 31, 2009.

SEC. 822A. MODIFICATIONS TO ESTATE TAX.—

(1) IN GENERAL.—Subtitles A and E of title V of the Economic Growth and Tax Relief Reconciliation Act of 2001, and the amendments made by such Act and any other law enacted after such date, are repealed; and the Internal Revenue Code of 1986 shall be applied as if such subtitles, and amendments, had never been enacted.

(2) SUNSET NOT TO APPLY.—

(A) Subsection (a) of section 901 of the Economic Growth and Tax Relief Reconciliation Act of 2001 is amended by striking “this Act” and all that follows thereafter, and inserting “the Act (other than title V) shall not apply to taxable, plan, or limitation years beginning after December 31, 2010.”.

(B) Subsection (b) of such section 901 is amended by striking “, estates, gifts, and transfers”.

(3) CONFORMING AMENDMENT.—Subsection (e) of section 511 of the Economic Growth and Tax Relief Reconciliation Act of 2001, and the amendment made by such subsection, are hereby repealed; and the Internal Revenue Code of 1986 shall be applied as if such subsection and amendment had never been enacted.

SA 828. Mr. VINO

future with secure, affordable, and reliable energy; which was ordered to lie on the table; as follows:

On page 120, between lines 20 and 21, insert the following:

SEC. 14. FUEL EFFICIENT ENGINE TECHNOLOGY FOR AIRCRAFT.

(a) In general.—The Secretary and the Administrator of the National Aeronautics and Space Administration shall enter into a cooperative agreement to carry out a multiyear engine development program to advance technologies to enable more fuel efficient, turbine-based propulsion and power systems for aeronautical and industrial applications.

(b) Performance objectives.—The fuel efficiency performance objective for the program shall be to achieve a fuel efficiency improvement of more than 10 percent by exploring—

(1) advanced concepts, alternate propulsion, and power configurations, including hybrid fuel cell powered systems; and

(2) the use of alternate fuel in conventional or nonconventional turbine-based systems.

(c) Authorization of Appropriations.—There are appropriated to the Secretary to carry out this section $60,000,000 for each of fiscal years 2006 through 2010.

SA 823. Mr. JEFFORDS submitted an amendment intended to be proposed by him to the bill H.R. 6, to assure jobs for our future with secure, affordable, and reliable energy: which was ordered to lie on the table; as follows:

On page 15, strike lines 3 through 20. On page 719, strike lines 11 through 20 and insert the following:

as part of the process of updating the Master Plan Study for the Capitol complex, shall—

(A) prepare a study to evaluate the terrestrial and oceanographic indicators of paleoclimate in order to sufficiently identify and describe past instances of abrupt climate change.

(B) improve understanding of thresholds and nonlinearities in geophysical systems related to the mechanisms of abrupt climate change.

(C) incorporate such mechanisms into advanced geophysical models of climate change.

(D) test the output of such models against an improved global array of records of past abrupt climate changes.

SA 825. Mr. KERRY submitted an amendment intended to be proposed by him to the bill H.R. 6, to ensure jobs for our future with secure, affordable, and reliable energy: which was ordered to lie on the table; as follows:

On page 208, after line 24, insert the following:

SEC. 303. SMALL BUSINESS AND AGRICULTURAL PRODUCER ENERGY EMERGENCY MASTER LOAN PROGRAM.

(a) Small Business Producer Energy Emergency Disaster Loan Program.—

(1) Disaster loan authority.—Section 7(b) of the Small Business Act (15 U.S.C. 636(b)) is amended by inserting after paragraph (3) the following:

(4) In this paragraph—

(A) ‘‘Producer energy emergency disaster loan’’ means—

(i) a loan that is made in order to assist a small business concern that has suffered or that is likely to suffer substantial economic injury or for our future with secure, affordable, and reliable energy; which was ordered to lie on the table; as follows:

On page 556, between lines 9 and 10, insert the following new section:

SEC. 972. ABRUPT CLIMATE CHANGE RESEARCH PROGRAM.

(a) Establishment of Program.—The Secretary of Commerce shall establish within the Office of Oceanic and Atmospheric Research of the National Oceanic and Atmospheric Administration, and shall carry out, a program of scientific research on abrupt climate change.

(b) Purposes of Program.—The purposes of the program are as follows:

(1) To develop a global array of terrestrial and oceanographic indicators of paleoclimate in order to sufficiently identify and describe past instances of abrupt climate change.

(2) To improve understanding of thresholds and nonlinearities in geophysical systems related to the mechanisms of abrupt climate change.

(3) To incorporate such mechanisms into advanced geophysical models of climate change.

(4) To test the output of such models against an improved global array of records of past abrupt climate changes.

4. Any loan or guarantee extended pursuant to this paragraph shall be made at the same interest rate as economic injury loans under paragraph (2).

(5) No loan may be made under this paragraph, either directly or in cooperation with other lending institutions, unless such loan constitutes a major source of employment in its surrounding area, as determined by the Administration, and such case the Administration may, with the advice and consent of the Senate, set forth in regulations, in its discretion, may waive the $1,500,000 limitation.

(E) For purposes of assistance under this paragraph—

(i) a declaration of a disaster area based on conditions specified in this paragraph shall be required, and shall be made by the President or the Administrator, or for our future with secure, affordable, and reliable energy; which was ordered to lie on the table; as follows:

On page 120, between lines 20 and 21, insert the following:

Notwithstanding any other provision of law, loans made under this paragraph may be used by a small business concern described in subparagraph (B) to convert from the use of heating oil, natural gas, gasoline, propane, or kerosene to a renewable or alternative energy source, including agriculture and urban waste, geothermal energy, cogeneration, solar energy, wind energy, or fuel cells.”

(2) Conforming Amendments.—Section 3(k) of the Small Business Act (15 U.S.C. 632(k)) is amended—

(A) by inserting ‘‘significant increase in the price of heating oil, natural gas, gasoline, or kerosene’’ after ‘‘cubic divorces’’;

(B) by inserting ‘‘other’’ before ‘‘economic’’;

(3) AGRICULTURAL PRODUCER ENERGY EMERGENCY LOANS.—

(1) In General.—Section 221(a) of the Consolidated Farm and Rural Development Act (7 U.S.C. 1961(a)) is amended—

(A) in the first sentence, by striking ‘‘operations have’’ and inserting ‘‘operations (i) have’’; and

(B) by inserting ‘‘Provided, that’’ before the following:

(ii) the term ‘‘cubic divisor’’ means—

(iii) the term ‘‘significant increase’’ means—

(1) with respect to the price of heating oil, natural gas, gasoline, or propane, any time the current price index exceeds the base price index by not less than 45 percent; and

(2) with respect to the price of kerosene, any increase which the Administrator, in consultation with the Secretary of Energy, determines to be significant.

(B) The Administration may make such loans, either directly or in cooperation with other lending institutions, through agreements to participate on an immediate or deferred basis, to assist a small business concern that has suffered or that is likely to suffer substantial economic injury on or after January 1, 2005, as the result of a significant increase in the price of heating oil, natural gas, gasoline, or kerosene occurring on or after January 1, 2005.

(C) Any loan or guarantee extended pursuant to this paragraph shall be made at the same interest rate as economic injury loans under paragraph (2).

(D) No loan may be made under this paragraph, either directly or in cooperation with other lending institutions, unless such loan constitutes a major source of employment in its surrounding area, as determined by the Administration, and in such case the Administration may, with the advice and consent of the Senate, set forth in regulations, in its discretion, may waive the $1,500,000 limitation.”
the Small Business Act (15 U.S.C. 632), and (II) have suffered or are likely to suffer substantial economic injury on or after January 1, 2005, as the result of a significant increase in energy costs or input costs from energy sources occurring on or after January 1, 2005, in connection with an energy emergency declared by the President or the Secretary; (B) otherwise, by inserting, before the period at the end of the following: “or by an energy emergency declared by the President or the Secretary”; and (C) the fourth sentence—

(i) by inserting “or natural disaster” each place that term appears; and

(ii) by inserting “or declaration” after “emergency designation”.

(2) FUNDING.—Funds available on the date of enactment of this Act for emergency loans under subsection (b) of the Small Business Act of the House of Representatives shall be held in a permanent account under subsection (c)(1), and annually the Secretary of Agriculture issues guidelines to carry out this section.

(3) PROVISIONS.—Not later than 30 days after the date of enactment of this Act, the Administrator of the Small Business Administration, after consultation with the Secretary of Agriculture, shall promulgate regulations specifying the method for determining a significant increase in the price of kerosene under section 7(b)(4)(A)(iii)(II) of the Small Business Act (15 U.S.C. 636(b)(4)(A)(iii)(II)), as added by this section.

(4) REPORTS.—(1) SMALL BUSINESS ADMINISTRATION.—Not later than 12 months after the date on which the Administrator of the Small Business Administration issues guidelines under subsection (c)(1), and annually thereafter, the Administrator shall submit to the Committee on Small Business and Entrepreneurship of the Senate and the Committee on Small Business of the House of Representatives, a report on the effectiveness of the assistance provided under section (c)(1) of the Small Business Act, as added by this section, including—

(A) the number of small business concerns that applied for a loan under such section (c)(1) and the number of those that received such loans;

(B) the dollar value of those loans;

(C) the States in which the small business concerns that received such loans are located;

(D) the type of energy that caused the significant increase in the cost for the participating small business concerns; and

(E) recommendations for ways to improve the assistance provided under such section (c)(1), if any.

(2) DEPARTMENT OF AGRICULTURE.—Not later than 12 months after the date on which the Secretary of Agriculture issues guidelines under subsection (c)(1), and annually thereafter, the Secretary shall submit to the Committee on Small Business and Entrepreneurship and the Committee on Agriculture, Nutrition, and Forestry of the Senate and to the Committee on Small Business and the Committee on Agriculture of the House of Representatives, a report that—

(A) describes the effectiveness of the assistance made available under section 321(a) of the Consolidated Farm and Rural Development Act (7 U.S.C. 1961), as amended by this section; and

(B) contains recommendations for ways to improve the assistance provided under such section.

(5) EFFECTIVE DATE.—

(1) SMALL BUSINESS.—The amendments made by subsection (a) shall apply during the 4-year period beginning on the earlier of the date on which guidelines are published by the Administrator of the Small Business Administration under subsection (c)(1) or 30 days after the date of enactment of this Act, with respect to assistance under section 7(b)(4) of the Small Business Act, as added by this section.

(2) AGRICULTURE.—The amendments made by subsection (b) shall apply during the 4-year period beginning on the earlier of the date on which guidelines are published by the Secretary of Agriculture under subsection (c)(1) or 30 days after the date of enactment of this Act, with respect to assistance under section 7(b)(4)(A)(iii)(II) of the Small Business Act, as added by this section.

SA 826. Mr. McCAIN (for himself and Mr. LIEBERMAN) proposed an amendment to the bill H.R. 6, to ensure jobs for our future with secure, affordable, and reliable energy; which was ordered to lie on the table; as follows:

DIVISION IV—CLIMATE STEWARDSHIP AND INNOVATION

SEC. 401. SHORT TITLE.

This division may be cited as the “Climate Stewardship and Innovation Act of 2005”.

SEC. 402. TABLE OF CONTENTS.

Table of contents for this division is as follows:

Sec. 401. Title.
Sec. 402. Table of contents.
Sec. 403. Definitions.

TITLE I—FEDERAL CLIMATE CHANGE RESEARCH AND RELATED ACTIVITIES

Sec. 401. National Science Foundation fellowships.
Sec. 403. Research grants.
Sec. 404. Abrupt climate change research.
Sec. 405. Impact on low-income populations.
Sec. 406. NIST greenhouse gas functions.
Sec. 407. Development of new measurement technologies.
Sec. 408. Environmental measurement measurements and standards.
Sec. 409. Technology development and diffusion.
Sec. 410. Agricultural outreach program.

TITLE II—NATIONAL GREENHOUSE GAS DATABASE

Sec. 4201. National greenhouse gas database and registry established.
Sec. 4202. Inventory of greenhouse gas emissions for covered entities.
Sec. 4203. Greenhouse gas reduction reporting.
Sec. 4204. Measurement and verification.

TITLE III—MARKET-DRIVEN GREENHOUSE GAS REDUCTIONS

SUBTITLE A—EMISSION REDUCTION REQUIREMENTS; USE OF TRADEABLE ALLOWANCES

Sec. 4301. Covered entities must submit allowances for emissions.
Sec. 4302. Compliance.
Sec. 4303. Borrowing against future reductions.
Sec. 4304. Other uses of tradeable allowances.
Sec. 4305. Exemption of source categories.
The term "carbon dioxide equivalents" means, for each greenhouse gas, the amount of each such greenhouse gas that makes the same contribution to warming the atmosphere as one metric ton of carbon dioxide, as determined by the Administrator.

Covered sectors.—The term "covered sectors" means the electricity, transportation, industry, and commercial sectors, as such terms are used in the Inventory.

Indirect emissions.—The term "indirect emissions" means greenhouse gas emissions that are not directly emitted by an entity from a facility owned or operated by the entity, and that are not being addressed by Federal, State, or local government, (including a branch, department, agency, or instrumentality of the Federal, State, or local government) that—

(1) owns or operates a single facility owned by the entity, over 10,000 metric tons of greenhouse gas per year, measured in units of carbon dioxide equivalents, or produces or imports petroleum products for use in transportation, or produces or imports hydrofluorocarbons, perfluorocarbons, or sulfur hexafluoride; and

(2) captures, sequesters, or otherwise converts greenhouse gas emissions in the electric power, industrial, or commercial sectors of the United States economy (as defined in the Inventory), refineries or imports petroleum products for use in transportation, or produces or imports hydrofluorocarbons, perfluorocarbons, or sulfur hexafluoride; and

(3) is not a source of greenhouse gas emissions from the atmosphere.

Database.—The term "database" means the national greenhouse gas database established under section 420.

Direct emissions.—The term "direct emissions" means greenhouse gas emissions by an entity from a facility that is owned or controlled by that entity.

Facility.—The term "facility" means a building, structure, or installation located on any one or more contiguous or adjacent properties of an entity in the United States.

Greenhouse gas.—The term "greenhouse gas" means any of the following:

(A) carbon dioxide;

(B) methane;

(C) nitrous oxide;

(D) hydrofluorocarbons;

(E) perfluorocarbons; and

(F) sulfur hexafluoride.

Greenhouse gas emissions.—The term "greenhouse gas emissions" means greenhouse gas emissions that are—

(a) a result of the activities of an entity; but

(b) emitted from a facility owned or controlled by another entity.

Inventory.—The term "Inventory" means the Inventory of U.S. Greenhouse Gas Emissions and Sinks, prepared in compliance with the United Nations Framework Convention on Climate Change Decision 3/CP.5.

Leakage.—The term "leakage" means—

(A) an increase in greenhouse gas emissions by one facility or entity caused by a reduction in greenhouse gas emissions by another facility or entity; or

(B) a decrease in sequestration that is caused by an increase in sequestration at another location.

Permanence.—The term "permanence" means the extent to which greenhouse gases that are sequestered will not later return to the atmosphere.

Registry.—The term "registry" means the registry of greenhouse gas emission reductions established under section 420(1).

Secretary.—The term "Secretary" means the Secretary of Commerce.

Sequestration.—The term "sequestration" means the capture, long-term separation, isolation, or removal of greenhouse gases from the atmosphere.

Inclusions.—The term "inclusions" includes—

(1) agricultural and conservation practices; and

(2) reforestation.

Exclusions.—The term "exclusions" includes—

(1) any conversion of, or negative impact on, a native ecosystem; or

(2) any introduction of non-native species.
SEC. 105. DEVELOPMENT OF NEW MEASUREMENT TECHNOLOGIES.

To facilitate implementation of section—204, the Secretary shall initiate a program to develop and support research on technologies to measure carbon changes and other greenhouse gas emissions and reductions from agriculture, forestry, and other land use practices; and (2) technologies to calculate non-carbon dioxide greenhouse gas emissions from transportation.

SEC. 106. ENHANCED ENVIRONMENTAL MEASUREMENT STANDARDS AND STANDARDS.

The National Institute of Standards and Technology Act (15 U.S.C. 271 et seq.) is amended by—

1. redesignating sections 17 through 32 as sections 18 through 33, respectively; and
2. by inserting after section 16 the following:

SEC. 17. CLIMATE CHANGE STANDARDS AND PROCESSES.

(a) IN GENERAL.—The Director shall establish within the Institute a program to perform and support research on global climate change standards and processes research programs, with the goal of providing scientific and technical knowledge applicable to the reduction of greenhouse gas emissions or the implementation of section—2004 of that Act.

(b) RESEARCH PROJECTS.—The specific contents and priorities of the research program shall be determined in consultation with appropriate federal agencies, including the National Oceanic and Atmospheric Administration, the National Aeronautics and Space Administration, and the program generally shall include basic and applied research—

(A) to develop and provide the enhanced measurements, calibrations, data, models, and reference material standards which will enable the monitoring of greenhouse gases;
(B) to assist in establishing a baseline reference in agriculture and other industries, including emerging private sector industries and participation by entities.

(c) NATIONAL MEASUREMENT LABORATORIES.—

1. IN GENERAL.—In carrying out this section, the Director shall utilize the collective skills of the National Measurement Laboratories of the National Institute of Standards and Technology to improve the accuracy of measurements that will permit better understanding and control of these industrial chemical processes and result in the reduction or elimination of greenhouse gases.

2. MAXIMUM EFFICIENCY RESEARCH.—The National Measurement Laboratories shall conduct research under this subsection that includes—

(A) developing material and manufacturing processes which are designed for energy efficiency and reduced greenhouse gas emissions into the environment;
(B) developing chemical processes to be used by industry that, compared to similar processes in commercial use, result in reduced emissions of greenhouse gases or increased sequestration of greenhouse gases; and
(C) enhancing building performance with a focus in developing standards or tools that will help incorporate low- or no-emission technologies into building designs.

3. STANDARDS AND TOOLS.—The National Measurement Laboratories shall develop standards and tools under this subsection that include software to assist designers in selecting alternate building materials, performance data on materials, artificial intelligence-aided design procedures for building design, and improved test methods and rating procedures for evaluating the energy performance of residential and commercial appliances and products.

(d) NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM.—The Director shall utilize the National Voluntary Laboratory Accreditation Program under this section to establish a program to include specific calibration or test standards and related methods and protocols assembled to satisfy the unique needs for accreditation in measuring the production of greenhouse gases. In carrying out this program the Director may cooperate with other departments and agencies of the Federal Government, State and local governments, and private organizations.

SEC. 108. TECHNOLOGY DEVELOPMENT AND DIFFUSION.

The Secretary of Agriculture, acting through the Global Change Program Office and in consultation with the heads of other appropriate departments and agencies, shall establish the Climate Change Policy and Outreach Initiative Program to educate, and to disseminate information to, agricultural organizations and individual farmers on global climate change.

SEC. 109. AGRICULTURAL OUTREACH PROGRAM.

(a) IN GENERAL.—The Secretary of Agriculture, acting through the Global Change Program Office and in consultation with the heads of other appropriate departments and agencies, shall establish the Climate Change Policy and Outreach Initiative Program to educate, and to disseminate information to, agricultural organizations and individual farmers on global climate change.

(b) PROGRAM COMPONENTS.—The program—

1. shall be designed to ensure that agricultural organizations and individual farmers receive detailed information about—
2. may incorporate existing efforts in any area of activity referenced in paragraph (1) or in related areas of activity;
3. shall provide—
(A) outreach materials to interested parties; and
(B) workshops; and
(C) technical assistance; and
4. may include the creation and development of regional centers on climate change education made by an entity relative to the baseline of the entity.

5. may include the tracking of the registered reductions associated with the serial numbers; and
6. may be necessary to protect counterfeiting of the registered reductions.

TITLe II—NATIONAL GREENHOUSE GAS DATABASE

SEC. 201. NATIONAL GREENHOUSE GAS DATABASE AND REGISTRY ESTABLISHED.

(a) ESTABLISHMENT OF DATABASE.—Not later than 2 years after the date of enactment of this Act, the Administrator and in coordination with the Secretary, the Secretary of Energy, the Secretary of Agriculture, and nongovernmental organizations, shall establish, operate, and maintain a database, to be known as the National Greenhouse Gas Database, to collect, verify, and analyze information on greenhouse gas emissions by entities.

(b) NATIONAL GREENHOUSE GAS DATABASE COMPONENTS.—The database shall consist of—

1. an inventory of greenhouse gas emissions; and
2. a registry of greenhouse gas emission reductions and increases in greenhouse gas sequestrations.

(c) COMPREHENSIVE SYSTEM.—In general.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations to implement a comprehensive system for greenhouse gas emissions reporting, inventorying, and reductions registration.

(d) REQUIREMENTS.—The Administrator shall ensure, to the maximum extent practicable, that—

1. the comprehensive system described in paragraphs (1) is designed to—
(i) maximize completeness, transparency, and accuracy of information reported; and
(ii) minimize costs incurred by entities in monitoring and reporting greenhouse gas emissions; and
2. the regulations promulgated under paragraph (1) establish procedures and protocols necessary—
(i) to prevent the double-counting of greenhouse gas emissions or emission reductions reported by more than 1 reporting entity;
(ii) to provide for corrections to errors in data submitted to the database;
(iii) to provide for adjustment to data by reporting entities that are subject to significant organizational change (including mergers, acquisitions, and divestiture), in order to maintain comparability among data in the database over time;
(iv) to provide for adjustments to reflect new technologies or methods for measuring or calculating greenhouse gas emissions; and
(v) to account for changes in registration of ownership of emission reductions resulting from a voluntary private transaction between reporting entities; and
3. the reliability of reporting for the case of any facility owned or controlled by more than 1 entity.

3. SERIAL NUMBERS.—Through regulations promulgated under paragraph (1), the Administrator shall develop and implement a system that provides—

1. for the verification of submitted emissions and reduction registered under section—204;
2. for the provision of unique serial numbers to identify the registered emission reductions made by an entity relative to the baseline of the entity; and
3. for the tracking of the registered reductions associated with the serial numbers; and
4. to prevent counterfeiting of the registered reductions.
SEC. 202. INVENTORY OF GREENHOUSE GAS EMISSIONS FOR COVERED ENTITIES.

(a) In General.—Not later than July 1st of each calendar year after 2008, each covered entity shall submit to the Administrator a report that states, for the preceding calendar year, the entity-wide greenhouse gas emissions (as reported at the facility level), including—

(1) the total quantity of direct greenhouse gas emissions from stationary sources, expressed in units of carbon dioxide equivalents, that are sold or imported by the entity and will ultimately be emitted in the United States, as determined by the Administrator under section 6031(b); (2) the amount of petroleum products sold or imported by the entity and the amount of greenhouse gases, expressed in units of carbon dioxide equivalents, that were emitted when these products are used for transportation in the United States, as determined by the Administrator under section 6031(b); (3) the amount of hydrofluorocarbons, perfluorocarbons, or sulfur hexafluoride, expressed in units of carbon dioxide equivalents, that are sold or imported by the entity and will ultimately be emitted in the United States, as determined by the Administrator under section 6031(b); and (4) such other categories of emissions as the Administrator determines in the regulations promulgated under section 6031(c)(1) may be practicable and useful for the purposes of this division, such as—

(A) indirect emissions from imported electricity, heat, and steam; (B) process and fugitive emissions; and (C) production or importation of greenhouse gases.

(b) COLLECTION AND ANALYSIS OF DATA.—The Administrator shall collect and analyze information reported under subsection (a) for use under this section.

SEC. 203. GREENHOUSE GAS REDUCTION REPORTING.

(a) In General.—Subject to the requirements described in subsection (b)—

(1) a covered entity may register greenhouse gas emissions reductions achieved after 1990 and before 2010 under this section; and

(2) an entity that is not a covered entity may register greenhouse gas emissions reductions achieved at any time since 1990 under this section.

(b) REQUIREMENTS.

(1) IN GENERAL.—The requirements referred to in subsection (a) are that an entity (other than an entity described in paragraph (2)) shall—

(A) establish a baseline; and

(B) submit the report described in subsection (a) and verifiable greenhouse gas report of the reporting entity; and

(2) REQUIREMENTS APPLICABLE TO ENTITIES ENTERING INTO CERTAIN AGREEMENTS.—An entity that enters into an agreement with a participant in the registry for the purpose of a carbon sequestration project shall not be required to comply with the requirements specified in paragraph (1) unless that entity is required to comply with the requirements by reason of a current business and other relevant practices of persons and entities in the private and public sectors that may be expected to participate in the database.

(c) REPORTS.

(1) REQUIRED REPORT.—Not later than July 1st of each calendar year beginning more than 2 years after the date of enactment of this Act, but subject to paragraph (3), an entity described in subsection (a) shall submit to the Administrator a report that states, for the preceding calendar year, the entity-wide greenhouse gas emissions (as reported at the facility level), including—

(A) the total quantity of direct greenhouse gas emissions from stationary sources, expressed in units of carbon dioxide equivalents; (B) the amount of petroleum products sold or imported by the entity and the amount of greenhouse gases, expressed in units of carbon dioxide equivalents, that would be emitted when these products are used for transportation in the United States, as determined by the Administrator under section 6031(b); (C) the amount of hydrofluorocarbons, perfluorocarbons, or sulfur hexafluoride, expressed in units of carbon dioxide equivalents, that are sold or imported by the entity and will ultimately be emitted in the United States, as determined by the Administrator under section 6031(b); (D) such other categories of emissions as the Administrator determines in the regulations promulgated under section 6031(c)(1) may be practicable and useful for the purposes of this division, such as—

(i) indirect emissions from imported electricity, heat, and steam; (ii) process and fugitive emissions; and (iii) production or importation of greenhouse gases.

(2) VOLUNTARY REPORTING.—An entity described in subsection (a) may (along with establishing a baseline and reporting emissions under this section)—

(A) submit a report described in paragraph (1) before the date specified in that paragraph for the purposes of achieving and commoditizing greenhouse gas reductions through use of the registry and for other purposes; and

(B) submit to the Administrator, for inclusion in the registry, information that has been verified in accordance with regulations promulgated under section 6031(c)(1) and that relates to—

(i) any asset that resulted in the net reduction of the greenhouse gas emissions of the entity or a net increase in sequestration by the entity that were carried out during or after the period in which the measurement of the database, verified in accordance with regulations promulgated under section 6031(c)(1), and submitted to the Administrator before the date that is 4 years after the date of enactment of this Act; and

(ii) with respect to the calendar year preceding the calendar year in which the information is submitted, any project or activity that resulted in the net reduction of the greenhouse gas emissions of the entity or a net increase in net sequestration by the entity.

(3) PROVISION OF VERIFICATION INFORMATION BY REPORTING ENTITIES.—Each entity that submits a report under paragraph (1) shall—

(A) obtain independent third-party verification; and

(B) present the results of the third-party verification to the Administrator.

(4) AVAILABILITY OF DATA.

(A) IN GENERAL.—The Administrator shall ensure that information in the database is—

(i) published; and

(ii) available to the public, including in electronic format on the Internet.

(B) EXCEPTION.—Subparagraph (A) shall not apply in any case in which the Administrator determines that publishing or otherwise making available information described in that subparagraph poses a risk to national security or discloses confidential business information that can be derived from information that is otherwise publicly available and that would cause competitive harm if published.

(5) DATA INFRASTRUCTURE.—The Administrator shall ensure, to the maximum extent practicable, that the database uses, and is integrated with, Federal, State, and regional greenhouse gas data collection and reporting systems in effect as of the date of enactment of this Act.

(6) ADDITIONAL ISSUES TO BE CONSIDERED.

In delegating the responsibilities under section 6031(c)(1) and implementing the database, the Administrator shall take into consideration a broad range of issues involved in establishing an effective database, including—

(A) the data and information systems and measures necessary to identify, track, and verify greenhouse gas emissions in a manner that will encourage private sector trading and exchanges;

(B) the greenhouse gas reduction and sequestration measurement and estimation methods and standards applied in other countries, as applicable or relevant;

(C) the extent to which available fossil fuel and greenhouse gas emissions, greenhouse gas production and importation data are adequate to implement the database; and

(D) the differences in, and potential uniqueness of, the facilities, operations, and business and other relevant practices of persons and entities in the private and public sectors that may be expected to participate in the database.

(d) ANNUAL REPORT.—The Administrator shall publish an annual report that—

(1) describes the total greenhouse gas emissions and emission reductions reported to the database during the year covered by the report;

(2) provides entity-by-entity and sector-by-sector analyses of the emissions and emission reductions reported;

(3) describes the atmospheric concentrations of greenhouse gases;

(4) provides a comparison of current and past atmospheric concentrations of greenhouse gases; and

(5) describes the activity during the year covered by the period in the trading of greenhouse gas emission allowances.

SEC. 204. MEASUREMENT AND VERIFICATION.

(a) STANDARDS.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary shall establish, by rule, in coordination with the Administrator, the Secretary of Energy, and the Secretary of Agriculture, comprehensive measurement and verification methods and standards to ensure a consistent and technically accurate record of greenhouse gas emissions, emission reductions, sequestration, and atmospheric concentrations for use in the registry. The methods and standards established under paragraph (1) shall include—

(A) obtain independent third-party verification; and

(B) present the results of the third-party verification to the Administrator.
A) a requirement that a covered entity use a continuous emissions monitoring system, or another system of measuring or estimating emissions that is determined by the Secretary to provide information with precision, reliability, accessibility, and timeliness similar to that provided by a continuous emissions monitoring system where technologically feasible;

B) establishment of standardized measurement and verification practices for reports made by all entities participating in the registry as of the date of development of the methods and standards under paragraph (1);

ii) boundary issues, such as leakage;

iii) the ability of geological storage sites that in-house gas emissions and emission reductions;

iv) protocols to prevent a covered entity from avoiding the requirements of this division by reorganizing into multiple entities that are under common control; and

v) such other factors as the Secretary, in consultation with the Administrator, determines appropriate;

C) establishment of methods of—

i) estimating greenhouse gas emissions, for those cases in which the Secretary determines submission of information or reporting of such emissions is not technologically feasible at present; and

ii) reporting the accuracy of such estimations;

D) establishment of measurement and verification standards applicable to actions taken to reduce, avoid, or sequester greenhouse gas emissions;

E) in coordination with the Secretary of Agriculture, standards to measure the results of the use of carbon sequestration and carbon capture technologies, including—

i) soil carbon sequestration practices; and

ii) forest preservation and reforestation activities that adequately address the issues of permanence, leakage, and verification;

F) establishment of such other measurement and verification standards as the Secretary, in consultation with the Secretary of Agriculture, the Administrator, and the Secretary of Energy, determines to be appropriate;

G) establishment of other features that, as determined by the Secretary, will allow entities to adequately establish a fair and reliable measurement and reporting system.

(b) Review and Revision.—The Secretary shall periodically review, and revise as necessary, the methods and standards developed under subsection (a).

(c) Public Participation.—The Secretary shall—

i) make available to the public for comment, in draft form and for a period of at least 90 days, the methods and standards developed under subsection (a); and

ii) the period referred to in paragraph (1), in coordination with the Secretary of Energy, the Secretary of Agriculture, and the Administrator, adopt the methods and standards developed under subsection (a) for use in implementing the database.

(d) Experts and Consultants.—(1) The Secretary may obtain the services of experts and consultants in the private and nonprofit sectors in accordance with section 3109 of title 5, United States Code, in the areas of greenhouse gas measurement, certification, and emission trading.

(2) Availability Arrangements.—In obtaining expertise developed under this paragraph (1), the Secretary may use any available grant, contract, cooperative agreement, or other arrangement authorized by law.
(2) will be realized within 5 years after the year in which the credit is used.

(c) CARRYING COST.—If a covered entity uses a credit under this section to meet the requirements of this division for a calendar year (referred to as the use year), the tradeable allowance requirement for the year from which the credit was taken (referred to as the source year) shall be increased by an amount equal to—

(1) 10 percent for each credit borrowed from the source year; multiplied by

(2) the number beginning after the use year and before the source year.

(d) MAXIMUM BORROWING PERIOD.—A credit from a year beginning more than 5 years after the current year may not be used to meet the requirements of this division for the current year.

(e) FAILURE TO ACHIEVE REDUCTIONS GENERATING CREDIT.—If a covered entity that uses a credit under this section fails to achieve the anticipated reduction for which the credit was granted for the year from which the credit was taken, then—

(1) the covered entity’s requirements under this Act for that year shall be increased by the amount of the credit, plus the amount determined to be necessary to prevent counterfeiting of tradeable allowances.

(2) any tradeable allowances submitted by the covered entity for that year shall be counted first against the increase in those requirements.

(3) the covered entity may not use credits under this section to meet the increased requirements.

SEC. 304. OTHER USES OF TRADEABLE ALLOWANCES.

(a) IN GENERAL.—Tradeable allowances may be sold, exchanged, purchased, retired, or used as provided in this section.

(b) COVERED ENTITIES.— Covered entities may purchase or otherwise acquire tradeable allowances from other covered sectors to satisfy the requirements of section 6331.

(c) CLIMATE CHANGE CREDIT CORPORATION.—The Climate Change Credit Corporation established under section 6351 may sell tradeable allowances allocated to it under section 6332(a)(2) to any covered entity or to any investor, broker, dealer, or agent in such tradeable allowances. The Climate Change Credit Corporation shall use all proceeds from such sales in accordance with the provisions of section 6332.

(d) BANKING OF TRADEABLE ALLOWANCES.—Notwithstanding the requirements of section 6331, the Administrator shall, by regulation, establish a sufficient amount of tradeable allowances to satisfy the requirements of section 6331, may refrain from submitting a tradeable allowance to satisfy the requirements in order to sell, exchange, or use the tradeable allowance in the future.

SEC. 305. EXEMPTION OF SOURCE CATEGORIES.

(a) IN GENERAL.—The Administrator may grant an exemption under subsection (a) to carbon dioxide produced from fossil fuel.

SUBTITLE B—ESTABLISHMENT AND ALLOCATION OF TRADEABLE ALLOWANCES

SEC. 331. ESTABLISHMENT OF TRADEABLE ALLOWANCES.

(a) IN GENERAL.—The Administrator shall promulgate regulations to establish tradeable allowances, denominated in units of carbon dioxide equivalents, for calendar years beginning after 2009, equal to—

(1) 856 million metric tons measured in units of carbon dioxide equivalents, reduced by

(2) the amount of emissions of greenhouse gases in calendar year 2000 from non-covered entities.

(b) SERIAL NUMBERS.—The Administrator shall allocate tradeable allowances under subsection (a) and shall take such action as may be necessary to prevent counterfeiting of tradeable allowances.

(c) NATURE OF TRADEABLE ALLOWANCES.—A tradeable allowance is not a property right, and nothing in this title or any other provision of law limits the authority of the United States to terminate or limit a tradeable allowance.

(d) NON-COVERED ENTITY.—In interpreting this section the term "non-covered entity" means an entity that—

(1) owns or controls a source of greenhouse gas emissions in the electric power, industrial, or commercial sectors of the United States economy as defined in the Incentives for New Entrants, refineries or imports of petroleum products for use in transportation, or producers or importers of hydrofluorocarbons, perfluorocarbons, or sulfur hexafluoride; and

(2) is not a covered entity.

(2) EXCEPTION.—Notwithstanding paragraph (1), the Administrator may not require a non-covered entity to purchase tradeable allowances if the entity—

(3) has not been granted a credit under section 332 or 3051; or

(4) has agreed to sell, exchange, or use the tradeable allowance established under this section before the source year; multiplied by

(5) will be realized within 5 years after the current year may not be used to meet the requirements of this division for the current year, including the allocations to such initial allocations and the allocation to the Climate Change Credit Corporation established under section 6331; and

(6) allocate to the Climate Change Credit Corporation established under section 6331 the tradeable allowances allocated to such non-covered entity.

(b) INTRAINDUSTRIAL ALLOTMENTS.—The Administrator shall by regulation establish a process for the allocation of tradeable allowances under this section, without cost to covered entities, that will encourage investments that increase the efficiency of the processes that produce greenhouse gas emissions;

(2) minimize the costs to the government of allocating the tradeable allowances;

(3) penalize a covered entity for emissions reductions made before 2010 and registered with the database; and

(4) provide sufficient allocation for new entrants into the sector.

(c) POINT SOURCE ALLOCATION.—The Administrator shall allocate the tradeable allowances for the electricity generation, industrial, and commercial sectors to the entities owning or controlling the point sources of greenhouse gas emissions within that sector.

(d) HYDROFLUOROCARBONS, PERFLUOROCARBONS, AND SULFUR HEXAFLUORIDE.—The Administrator shall allocate the tradeable allowances for producers or importers of hydrofluorocarbons, perfluorocarbons, or sulfur hexafluoride to such producers or importers.

(e) SPECIAL RULE FOR ALLOCATION WITHIN THE TRANSPORTATION SECTOR.—The Administrator shall allocate the tradeable allowances for the transportation sector to petroleum refiners or importers that produce or import petroleum products that will be used as fuel for transportation.

(f) ALLOCATIONS TO RURAL ELECTRIC COOPERATIVES.—For each electric generating unit that is owned or operated by a rural electric cooperative, the Administrator shall allocate each year, at no cost, allowances in an amount equal to the greenhouse gas emissions of each such unit in 2000, plus an amount equal to the difference between the projected emissions growth expected for all such units. The allocations shall be offset from the allowances allocated to the Climate Change Credit Corporation and shall be subject to the terms and conditions of such allocations.

(g) EARLY AUCTION FOR TECHNOLOGY DEPLOYMENT AND DISSEMINATION.—

(1) IN GENERAL.—Within 1 year after the date of enactment of this Act, the Administrator, in consultation with the Secretary of Energy and the Secretary of Commerce, shall allocate a sufficient number of tradeable allowances by an auction of the Climate Change Credit Corporation established under section 6331 before 2010. The Climate Change Credit Corporation shall use the proceeds of the
auction, together with any funds received as reimbursements under subtitle C of title IV of this division, to support the programs established by that subtitle until the secretary of Energy and the Corporation jointly determine that the purposes of those programs have been accomplished. The Corporation shall also use the proceeds of the auction to support the programs established by subtitle D of title IV of this division until 2010.

(2) DETERMINATION OF ALLOCATION.—In determining the amount of tradeable allowances to be allocated to the Climate Change Credit Corporation under this subsection, the Administrator shall consider—

(A) the expected market value of tradeable allowances for purposes of paragraphs (a) and (b);

(B) the annual funding required for the programs established by subtitle C of title IV of this division;

(C) the repayment provisions of those programs; and

(D) the allocation factors in section 0332(b).

(3) LIMITATION.—In allocating tradeable allowances under paragraph (1) the Administrator shall take into account the purposes of section 0331 and the impact, if any, the allocation under paragraph (1) may have on achieving those purposes.

(b) ALLOCATION TO COVERED ENTITIES IN STATES ADOPTING MANDATORY GREENHOUSE GAS EMISSIONS REDUCTION PROGRAMS.—For a covered entity operating in any State that has adopted a legally binding and enforceable program to achieve and maintain reductions in the levels of greenhouse gases, or more stringent than, reductions mandated by this Act, and which requirements are effective prior to 2010, the Administrator shall consider such binding state actions in making the final determination of allocation to such covered entities.

SEC. 334. ENSURING TARGET ADEQUACY.

(a) IN GENERAL.—Beginning 2 years after the date of enactment of this Act, the Under Secretary of Commerce for Oceans and Atmosphere shall review the allowances established by section 0331 no less frequently than biennially—

(1) to re-evaluate the levels established by that subsection, after taking into account the best available science and the most currently available data, and

(2) to re-evaluate the environmental and public health impacts of specific concentration levels of greenhouse gases, to determine whether the allowances established by subsection (a) continue to be consistent with the objective of the United Nations’ Framework Convention on Climate Change of stabilizing levels of greenhouse gas emissions at a level that will prevent dangerous anthropogenic interference with the climate system.

(b) REVIEW OF 2010 LEVELS.—The Under Secretary shall specifically review in 2008 the level established under section 0331, and report on his review, together with any recommendations, including legislative recommendations, for modification of the levels, to the Senate Committee on Commerce, Science, and Transportation, the Senate Committee on Environment and Public Works, the House of Representatives Committee on Science, and the House of Representatives Committee on Energy and Commerce.

SEC. 335. INITIAL ALLOCATIONS FOR EARLY PARTICIPATION AND ACCELERATED ADOPTION.

(a) Before making any allocations under section 0333, the Administrator shall allocate—

(1) to any covered entity an amount of tradeable allowances equivalent to the amount of greenhouse gas emissions reductions registered by that covered entity in the national greenhouse gas database if—

(A) the covered entity has requested to use the registered reduction in the year of allocation;

(B) the reduction was registered prior to 2010; and

(C) the Administrator retires the unique serial support for the reduction under section 0301(c)(3); and

(2) to any covered entity that has entered into an accelerated participation agreement with the Administrator under which tradeable allowances as the Administrator has determined to be appropriate under that section,

(b) TERMINATION.—The Corporation shall not be considered to be an eligible entity under that section.

(c) USE OF TRADEABLE ALLOWANCES AND PROCEEDS.—

(1) IN GENERAL.—The Corporation shall use the tradeable allowances, and proceeds derived from its trading activities in tradeable allowances, to reduce costs borne by consumers as a result of the greenhouse gas reduction requirements of this division.

(2) TRANSITION ASSISTANCE TO DISLOCATED WORKERS AND COMMUNITIES.—The Corporation shall allocate a percentage of the proceeds derived from its trading activities in tradeable allowances to provide transition assistance to dislocated workers and communities. Transition assistance may take the form of—

(A) grants to employers, employer associations, and representatives of employees—

(i) to provide training, adjustment assistance, and employment services to dislocated workers; and

(ii) to make income-maintenance and needs-related payments to dislocated workers;

(B) grants to State and local governments to assist communities in attracting new employers or providing essential local government services;

(C) grants to employers, employer associations, and representatives of employees—

(i) to provide training, adjustment assistance, and employment services to dislocated workers; and

(ii) to make income-maintenance and needs-related payments to dislocated workers;

(D) grants to State and local governments to assist communities in attracting new employers or providing essential local government services; and

(E) grants to employers, employer associations, and representatives of employees—

(i) to provide training, adjustment assistance, and employment services to dislocated workers; and

(ii) to make income-maintenance and needs-related payments to dislocated workers;

(b) TERMINATION.—The Corporation shall not be considered to be an eligible entity under that section.

(c) USE OF TRADEABLE ALLOWANCES AND PROCEEDS.—

(1) IN GENERAL.—The Corporation shall use the tradeable allowances, and proceeds derived from its trading activities in tradeable allowances, to reduce costs borne by consumers as a result of the greenhouse gas reduction requirements of this division.

(2) TRANSITION ASSISTANCE TO DISLOCATED WORKERS AND COMMUNITIES.—The Corporation shall allocate a percentage of the proceeds derived from its trading activities in tradeable allowances to provide transition assistance to dislocated workers and communities. Transition assistance may take the form of—

(A) grants to employers, employer associations, and representatives of employees—

(i) to provide training, adjustment assistance, and employment services to dislocated workers; and

(ii) to make income-maintenance and needs-related payments to dislocated workers;

(b) TERMINATION.—The Corporation shall not be considered to be an eligible entity under that section.

(c) USE OF TRADEABLE ALLOWANCES AND PROCEEDS.—

(1) IN GENERAL.—The Corporation shall use the tradeable allowances, and proceeds derived from its trading activities in tradeable allowances, to reduce costs borne by consumers as a result of the greenhouse gas reduction requirements of this division.
Pittman-Robertson Wildlife Restoration Act (16 U.S.C. 669b). Amounts deposited in the subaccount under this paragraph shall be available without further appropriation for obligations incurred by the Administrator.

(6) Technology deployment programs.—The Corporation shall establish and carry out a program, through direct grants, revolving loan funds, or other financial resources, to provide support for the deployment of technology to assist in compliance with this Act by distributing the proceeds from no less than 5 percent of the total allowances allocated in support of the program established under section 401.

(7) Appropriations.—Notwithstanding any other provisions of law, no funds may be obligated or expended by the Corporation except as provided by appropriations Acts.

S21PT1

Subtitle D—Sequestration Accounting

Title IV—Sequestration Accounting

(a) Sequestration Accounting.—If a covered entity uses a registered net increase in sequestration to satisfy the requirements of section 401 for any year, that covered entity shall submit information to the Administrator every 5 years thereafter sufficient to allow the Administrator to determine, using the methods and standards created under section 404, whether that net increase in sequestration still exists. Unless the Administrator determines that the net increase in sequestration does not exist, the covered entity shall offset any loss of sequestration by submitting additional tradeable allowances of equivalent amount in the calendar year following that determination.

(b) Regulations Required.—The Secretary, acting through the Under Secretary of Commerce for Science and Technology, in coordination with the Secretary of Agriculture, the Secretary of Energy, and the Administrator, shall issue regulations establishing the sequestration accounting rules for all classes of sequestration projects.

(c) Criteria for Regulations.—In issuing regulations under this section, the Secretary shall use the following criteria:

(1) If the range of possible amounts of net increase in sequestration for a particular class of sequestration project is not more than 10 percent of the median of that range, the administration award shall be equal to the median value of that range.

(2) If the range of possible amounts of net increase in sequestration for a particular class of sequestration project is more than 10 percent of the median of that range, the amount of sequestration awarded shall be equal to the fifth percentile of that range.

(3) The regulations shall include procedures for accounting for potential leakage from sequestration projects and for ensuring that any registered increase in sequestration is in which would have occurred if this Act had not been enacted.

(d) Updates.—The Secretary shall update the sequestration accounting rules for every class of sequestration project at least once every 5 years.

Title V—Innovation Infrastructure

Sec. 421. The Innovation Administration.

(a) In General.—Section 5 of the Steven-son-Wylder Technology Innovation Act of 1990 (15 U.S.C. 3704) is amended—

(1) Innovation, the process that ultimately provides new and improved products, manu-facturing processes, and services, is the basis for technological progress. This techno-
ological advancement is a key element of sus-
tained economic growth.

(2) The innovation economy is fundamen-
tally different from the industrial or even the informational economy. It requires a new vision and new approaches.

(3) Changing innovation processes and the evolution of the relative contribution made by the public and private sectors have em-
phasized the need for strong industry-science linkages.

(4) Patent regimes play an increasingly central role in the innovation dynamics, dis-
seminating scientific and technical knowl-
edge, and enhancing market entry and firm creation.

(5) Increasing participation and maintain-
ing quality standards in tertiary education in science and technology are imperative to meet growing demand for workers with sci-
cient and technological knowledge and skills.

(6) Research, innovation, and human cap-
ital are our principal strengths. By sus-
taining United States investments in re-
search and finding collaborative arrange-
ments to leverage existing resources and funds in a scarce budget environment, we en-
sure that America remains at the forefront of scientific and technological capability.

(7) Technology transfer of publicly funded research is a critical mechanism for opti-
mizing the return on taxpayer investment, particularly where other benefits are not measurable at all or are very long-term.

(8) Identifying metrics to quantify program effectiveness is of increasing importance because the entire innovation process is con-
tinuing to evolve in an arena of increasing global competition. Metrics need to take into account many steps in a highly complex process, as well as the ultimate product or service, but should not constrain the continued evolution or development of new technology transfer approaches.

(9) The United States lacks a national in-
novation strategy and agenda, including an aggressive public policy strategy that ener-
gizes the environment for national innova-
tion, and no Federal agency is responsible for developing national innovation policy.

(b) Innovation Administration.—The Administrator shall—

(1) provide advice to the President with respect to the policies and conduct of the In-
novation Administration, including ways to improve research and development con-
cerning climate change technology development and deployment; and the methods of collecting and disseminating findings of such research;

(2) provide advice to the President and the Congress on the development of climate change innovation research programs;

(3) develop and monitor metrics to be used by the Federal Government in managing the innovation process;

(4) develop and establish government-wide climate change innovation policy and strategic plans, consistent with the strategic plans of the United States Climate Change Science Program and the United States Cli-
technology Challenge Program, in-
cluding an implementation plan, developed in consultation with the Secretary of Energy and the Climate Change Credit Corporation, for the Climate Technology Challenge Pro-
grams and climate change technology pri-
torities, total funding, opportuni-
ties for Federal procurement, and other issues;

(5) review and evaluate on a continuing basis—

(1) technologies available for transfer and deployment to the commercial sector;

(2) all statutes and regulations pert-
inating to Federal programs which assist in the transfer and deployment of technologies, both domestically and internationally; and

(3) new and emerging innovation policy issues impacting the development of new tech-
nologies, including identification of barriers to commercialization and recommendations for removal of those barriers;

(6) assess the extent to which such poli-
cies, programs, practices, and procedures fa-
cilitate or impede the promotion of the poli-
cies set forth in subsection (b);

(7) gather information about the imple-
mentation, effectiveness, and impact of the deployed climate change related tech-
nologies based on metrics developed under chapter 391.

(8) make recommendations to the President and the Congress and other offi-
cials of Federal agencies or other Federal en-
tities, regarding ways to better promote the policies developed under paragraph (1)(B);

(9) provide advice, recommendations, legislative proposals to the Congress on a continuing basis, and any additional infor-
mation the Agency or the Congress deems appropriate;

(10) make recommendations to the Presi-
dent, the Congress, and Federal agencies or entities regarding policy on Federal pur-
chasing behavior that would provide incen-
tives to industry to bring new products to market faster;

(11) conduct economic analysis in support of climate change technology development and deployment;

(12) work with academia to develop edu-
cation programs to support the multi-dis-
циплярное наука;

(13) establish partnerships with industry to determine the needs for the future work-
force to support deployed technologies;

(14) assist in the search for partners to establish public-private partnerships and in searching for capital funds from the invest-
ment community for new businesses in the climate change technology sector; and

(15) identify opportunities to promote co-
operation on research, development, and commercialization with other countries and make recommendations, based on the opportu-
nities so identified to the Secretary of State.

(6) Annual Report.—

(1) In General.—The Administrator shall—

(1) prepare and submit to the appropriate committees of the Congress a re-
port entitled ‘Climate Change Innovation: A Progress Report’ within 6 months after the date of enactment of the Climate Change Stewardship and Innovation Act of 2005 and annually thereafter.

Title VI—Innovation and Competitiveness

Title VI—Innovation and Competitiveness

 Sec. 401. FINDINGS.

The Congress finds the following:

(1) Innovation, the process that ultimately provides new and improved products, manu-
facturing processes, and services, is the basis for technological progress. This techno-
logical advancement is a key element of sus-
tained economic growth.

(2) The innovation economy is fundamen-
tally different from the industrial or even the informational economy. It requires a new vision and new approaches.

(3) Changing innovation processes and the evolution of the relative contribution made by the public and private sectors have em-
phasized the need for strong industry-science linkages.

(4) Patent regimes play an increasingly central role in the innovation dynamics, dis-
seminating scientific and technical knowl-
edge, and enhancing market entry and firm creation.

(5) Increasing participation and maintain-
ing quality standards in tertiary education in science and technology are imperative to meet growing demand for workers with sci-
cient and technological knowledge and skills.

(6) Research, innovation, and human cap-
ital are our principal strengths. By sus-
taining United States investments in re-
search and finding collaborative arrange-
ments to leverage existing resources and funds in a scarce budget environment, we en-
sure that America remains at the forefront of scientific and technological capability.

(7) Technology transfer of publicly funded research is a critical mechanism for opti-
mizing the return on taxpayer investment, particularly where other benefits are not measurable at all or are very long-term.

(8) Identifying metrics to quantify program effectiveness is of increasing importance because the entire innovation process is con-
tinuing to evolve in an arena of increasing global competition. Metrics need to take into account many steps in a highly complex process, as well as the ultimate product or service, but should not constrain the continued evolution or development of new technology transfer approaches.

(9) The United States lacks a national in-
novation strategy and agenda, including an aggressive public policy strategy that ener-
gizes the environment for national innova-
tion, and no Federal agency is responsible for developing national innovation policy.
(ii) CONTENTS.—The report shall assess the status of the Nation in achieving the purposes set forth in subsection (b), with particular focus on the new and emerging issues surrounding deployment of climate change technologies. The report shall present, as appropriate, available data on research, education, workforce, financing, and markets. The report shall include recommendations for policy change.

(iii) CONSULTATION REQUIRED.—In determining the findings, conclusions, and recommendations of the report, the Agency shall seek input from industry, academia, and other interested parties.

(b) REFERENCES.—Any reference to the Technology Administration in any other law, Executive order, rule, regulation, or delegation of authority, or any document or report of the Technology Administration, is deemed to refer to the Innovation Administration or an officer or employee of the Innovation Administration, as appropriate.

SEC. 422. TECHNOLOGY TRANSFER OPPORTUNITIES.

(a) IN GENERAL.—The Secretary of Commerce shall conduct a study of technology transfer barriers, best practices, and outcomes of technology transfer activities at Federal laboratories related to the licensing and commercialization of energy efficient technologies, and other technologies that, compared to similar technologies in commercial and other intellectual property of a Federal laboratory upon termination of any employment, or other intellectual property of a Federal laboratory, is deemed to refer to the Innovation Administration or an officer or employee of the Innovation Administration, as appropriate.

(b) BUSINESS OPPORTUNITIES STUDY.—The Secretary of Commerce shall perform an analysis of business opportunities, both domestically and internationally, available for climate change technologies. The Secretary shall transmit the Secretary’s findings and recommendations from the first such analysis to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science within 6 months after the date of enactment of this Act. The Secretary shall work with the existing interagency working group to address identified barriers to technology transfer.

(b) AUTHORIZED ACTIVITIES.—

(1) COMMERCIAL DEVELOPMENT PARTICIPATION ARRANGEMENTS.—

(A) IN GENERAL.—The head of a Federal laboratory may, under the authority provided by section 12(b)(5) of this Act, authorize an employee to serve, as an officer or employee, in the creation of an enterprise established to commercially exploit research work realized in carrying out research sponsored by the corporation or Federal laboratory upon termination of any employment, or other business enterprise for a period of not more than 24 months. The authority may be renewed for an additional 12-month period.

(B) LIMITATIONS.—In addition to the requirements set forth in section 12, an employee may not be authorized under subparagraph (A) to participate in such an enterprise if—

(i) it would be prejudicial to the normal functioning of the laboratory;

(ii) by its nature, terms and conditions, or the manner in which the authority would be exercised, participation by that employee would reflect adversely on the functions exercised by that employee as an officer of the laboratory, or risk compromising or calling into question the independence or neutrality of the laboratory; or

(iii) the interests of the enterprise are of such a nature as to be prejudicial to the mission or integrity of the laboratory or employee.

(C) SERVICE SCIENCE DEFINED.—In this section, the term “service science” means the melding together of the fields of computer science, operations research, industrial engineering, mathematics, management science, decision sciences, social sciences, and legal sciences in a manner that may transform entire enterprises and drive innovation at the intersection of business and technology expertise.

SEC. 423. GOVERNMENT-SPONSORED TECHNOLOGY INNOVATION PERSONNEL INCENTIVES.

(a) PURPOSE.—The Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.) is amended by adding at the end the following:

“SEC. 24. FEDERAL TECHNOLOGY INNOVATION PERSONNEL INCENTIVES.

The Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.) is amended by adding after the date of enactment of this Act, 6 months after the date of enactment of this Act, and shall transmit a revised report setting forth the findings and conclusions of the study to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science on its operations during that preceding calendar quarter.

(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary of Commerce for the use of the enterprise established under subsection (b) such sums as may be necessary to carry out the purpose of this section.

SEC. 424. FEDERAL TECHNOLOGY INNOVATION PERSONNEL INCENTIVES.

(a) IN GENERAL.—The head of a Federal laboratory may, under the authority provided by section 12(b)(5) of this Act, authorize an employee to serve, as an officer or employee, in the creation of an enterprise established to commercially exploit research work realized in carrying out research sponsored by the corporation or Federal laboratory upon termination of any employment, or other business enterprise for a period of not more than 5 years in order to achieve the purposes of this division.

(b) AUTHORIZED ACTIVITIES.—

(1) COMMERCIAL DEVELOPMENT PARTICIPATION ARRANGEMENTS.—

(A) IN GENERAL.—The head of a Federal laboratory may, under the authority provided by section 12(b)(5) of this Act, authorize an employee to serve, as an officer or employee, in the creation of an enterprise established to commercially exploit research work realized in carrying out research sponsored by the corporation or Federal laboratory upon termination of any employment, or other business enterprise for a period of not more than 5 years in order to achieve the purposes of this division.

(B) LIMITATIONS.—In addition to the requirements set forth in section 12, an employee may not be authorized under subparagraph (A) to participate in such an enterprise if—

(i) it would be prejudicial to the normal functioning of the laboratory;

(ii) by its nature, terms and conditions, or the manner in which the authority would be exercised, participation by that employee would reflect adversely on the functions exercised by that employee as an officer of the laboratory, or risk compromising or calling into question the independence or neutrality of the laboratory; or

(iii) the interests of the enterprise are of such a nature as to be prejudicial to the mission or integrity of the laboratory or employee.

(C) SERVICE SCIENCE DEFINED.—In this section, the term “service science” means the melding together of the fields of computer science, operations research, industrial engineering, mathematics, management science, decision sciences, social sciences, and legal sciences in a manner that may transform entire enterprises and drive innovation at the intersection of business and technology expertise.

SEC. 426. CLIMATE INNOVATION PARTNERSHIPS.

(a) IN GENERAL.—The Secretary of Commerce, in consultation with the Director of the National Science Foundation, shall establish a program of public-private partnerships that—

(1) focus on supporting climate change related regional innovation;

(2) bridge the gap between the long-term research and commercialization;

(3) focus on deployment of technologies needed by a particular region in adapting or mitigating the impacts of climate change; and
(4) support activities that are selected from proposals submitted in merit-based competitions.

(b) INSTITUTIONAL DIVERSITY.—In creating the program, the Secretary and the Administrator shall—

(1) encourage institutional diversity; and

(2) provide that universities, research centers, national laboratories, and other non-profit organizations are allowed to partner with private industry in submitting applications.

(c) GRANTS.—The Secretary may make grants under the program to the partnerships, but the Federal share of funding for any grant may exceed 50 percent of the total investment in any fiscal year.

(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary for each fiscal year such sums as may be necessary to carry out this section.

SEC. 427. NATIONAL MEDAL OF CLIMATE STEWARDSHIP INNOVATION.—

(a) IN GENERAL.—There is established a National Medal of Climate Stewardship Innovation, which shall be of such design and materials, and bear such inscription, as the President shall prescribe. The President shall award the medal on the basis of recommendations submitted by the National Science Foundation and the Secretary of Commerce to individuals who, in the judgment of the President, are deserving of special recognition by reason of their outstanding contributions to knowledge in the field of climate innovation.

(b) CRITERIA.—The medal shall be awarded in accordance with the following criteria:

(1) ANNUAL LIMIT.—No more than 20 individuals may be awarded the medal in any calendar year.

(2) CITIZENSHIP.—No individual may be awarded the medal unless at the time the award is made, the individual is—

(A) a citizen or other national of the United States; or

(B) an alien lawfully admitted to the United States for permanent residence who—

(i) has filed a petition for naturalization in the manner prescribed by section 334 of the Immigration and Nationality Act (8 U.S.C. 1445); and

(ii) is not permanently ineligible to become a citizen of the United States.

(c) POSTHUMOUS.—A medal under this section shall not be awarded posthumously to an individual after the fifth anniversary of that individual’s death.

(d) INSRIPTION AND CERTIFICATE.—Each medal shall be suitably inscribed. Each individual awarded the medal shall also receive a citation descriptive of the award.

(e) PRESENTATION.—The presentation of the medal shall be made by the President with such ceremonies as the President deems proper, including attendance by appropriate Members of Congress.

SEC. 428. MATH AND SCIENCE TEACHERS’ ENHANCEMENT PROGRAM.—

(a) IN GENERAL.—The Director of the National Science Foundation shall establish within the Foundation a climate change science and technology enhancement program for teachers.

(b) PURPOSE.—The purpose of the program is to provide for professional development of mathematics and science teachers at elementary, middle, and secondary schools (as defined in section 1410(7)), including improving the education and skills of those teachers with respect to—

(1) teaching strategies; 

(2) subject-area expertise; and

(3) the understanding of climate change science and technology and the environmental, economic, and social impacts of climate change on commerce.

(c) PROGRAM AREAS.—In carrying out the program under this section, the Director shall fund—

(1) scientific measurements; 

(2) tests and standards development; 

(3) industrial competitiveness and quality; 

(4) manufacturing; 

(5) technology transfer; and

(6) any other area of expertise that the Director determines to be appropriate.

(d) APPLICATION PROCEDURE.—The Director shall prescribe procedures and selection criteria for participation in the program.

(e) AWARDS.—The Director shall issue awards under the program to participants. In issuing the awards, the Director shall ensure that the maximum number of participants practicable participate in the program. In order to ensure a maximum level of participation of participants, the program under this section shall be conducted on an annual basis during the summer months, when a majority of students, and secondary schools are not in classes.

(f) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Director for carrying out this section—

(1) $2,500,000 for fiscal year 2006; and

(2) $2,500,000 for fiscal year 2007.

SEC. 429. PATENT STUDY.—

(a) IN GENERAL.—The Director of the Patent and Trademark Office, in consultation with representatives of interested parties in the private sector, shall conduct a study to determine the extent to which changes to the United States patent system are necessary to increase the flow of climate change-related technologies. The study shall address—

(1) the balance between the protection of the inventor and the disclosure of information;

(2) the role of patents in innovation within the covered sectors;

(3) the extent to which patents facilitate increased investments in climate change research and development;

(4) the international deployment of United States developed climate change related technologies on the United States patent system;

(5) ways to leverage databases as innovation tools;

(6) best practices for collaborative standard setting; and

(7) any other issues the Director deems appropriate.

(b) REPORT.—Within 6 months after the date of enactment of this Act, the Director shall transmit a report setting forth the findings and conclusions of the study to the Congress.

SEC. 430. LESSONS-LEARNED PROGRAM.—

(a) IN GENERAL.—Within 180 days after the date of enactment of this Act, the Secretary of Energy shall establish a national lessons-learned and best practices program to ensure that lessons learned and best practices concerning energy efficiency and greenhouse gas emission reductions are available to the public.

(b) PROGRAM CONTENT.—The program—

(1) may include experiences realized outside of the United States;

(2) shall include criteria by which entries in the program are determined;

(3) shall use a standardized, user-friendly format for data reports; and

(4) may include any other matters the Secretary deems appropriate.

SEC. 431. PROGRAM INITIATIVES.—

(a) IN GENERAL.—The Secretary, the Administrator of the Environmental Protection Agency, and the Secretary of Transportation shall establish jointly a competitive, merit-based research program to fund proposals that—

(1) develop technologies that aid in reducing use or reducing greenhouse gas emissions associated with any fuel;

(2) further develop existing or new technologies to create renewable fuels created from less carbon or energy-intensive practices than current renewable fuel production; or

(3) remove existing barriers for deployment of existing fuels that dramatically reduce greenhouse gas emissions;

(4) support low-carbon transportation fuels, including renewable hydrogen, advanced cellulosic ethanol, and biomass-based diesel substitutes, and the technical hurdles to market entry;

(5) support short-term and long-term technology improvements for existing cars and light trucks that reduce greenhouse gas emissions, including advanced, high-power hybrid vehicle batteries, advanced gasoline engine designs, fuel cells, power electronics, lightweight materials;

(6) support advanced heavy-duty truck technology to reduce greenhouse gas emissions from the existing and new fleets, including aerodynamics, weight reduction, improved tires, anti-idling technology, high-efficiency engines, and lightweight materials;

(7) expand research into the climatological impacts of air travel and support advanced technologies to reduce greenhouse gas emissions from aircraft including advanced turbines, aerodynamics, and logistics technology that reduces delays, increases load factors and cuts in-air emissions.

(b) REAL-WORLD TEST PROCEDURES.—The Administrator of the Environmental Protection Agency, in consultation with the Secretary of Transportation, shall—

(1) conduct research and establish a Federal test procedure for certifying fuel economy of heavy duty vehicles; and

(2) update Federal test procedures for certifying fuel economy of automobiles and light duty trucks so the results better reflect real-world operating conditions.

(c) TECHNOLOGIES PROGRAM.—The Secretaries shall ensure that the program established under subsection (a) is incorporated into the United States Climate Technology Challenge Program.

(d) MARKETING STUDY.—The Secretary of Transportation, in coordination with the Secretary of Commerce, shall conduct a study on how the government can accelerate the market for low-carbon vehicles. The results of the study shall be submitted to the Congress within 6 months after the date of enactment of this Act.

SEC. 432. AGRICULTURAL SEQUESTRATION.—

(a) IN GENERAL.—The Director of the Office of Science and Technology Policy shall establish within the Department of Energy an interagency program to facilitate awareness initiatives including product labeling and campaigns to raise public awareness. The Secretary shall determine the process and frequency by which the information is provided.

(b) PROGRAM CONTENT.—The program—

(1) may include experiences realized outside of the United States;

(2) shall include criteria by which entries in the program are determined;

(3) shall use a standardized, user-friendly format for data reports; and

(4) may include any other matters the Secretary deems appropriate.
(a) IN GENERAL.—The Secretary of Energy, in consultation with the Secretaries of Agriculture and the Administrator of the Environmental Protection Agency, shall establish guidelines for setting individual project baselines for reductions of greenhouse gas emissions and greenhouse gas storage capacity in various types of agricultural and forestry activities that result in atmospheric benefits that would not otherwise have occurred.

SEC. 453. GEOLOGICAL STORAGE OF SEQUESTRATED GREENHOUSE GASES.

SEC. 454. ENERGY EFFICIENCY AUDITS.
costs that should be anticipated for adaptation to the impacts of climate change. The Director shall develop those estimates for low, medium, and high probabilities of climate change, and potential impacts. The assessments shall be provided to the Senate Committee on Commerce, Science, and Transportation and the House of Representative's Committee on Science within 1 year after the date of enactment of this Act.

SEC. 456. ADVANCED RESEARCH AND DEVELOPMENT FOR SAFETY AND NON-PROLIFERATION

The Secretary of Energy shall establish, operate, and report biannually to Congress the results of—

(a) any and all of nuclear research and development focused on advanced one-through fuel cycles;

(b) a Nuclear System Modeling project to carry out the analysis, research, simulation, and collection of engineering data needed to evaluate all fuel cycles with respect to cost, inherent safety, waste management and proliferation avoidance and resistance; and

(c) an Advanced Diversified Waste-Disposal Research Program for deep-bore hole disposal options, alternative geological environments, and engineered barriers.

SUBTITLE C—CLIMATE TECHNOLOGY DEPLOYMENT PROGRAM

PART I—PROGRAM AUTHORITY

SEC. 471. GOVERNMENT-INDUSTRY PARTNERSHIPS TO DEPLOY FIRST-OF-A-KIND ENGINEERING DESIGN.

(a) IN GENERAL.—The Corporation may provide funding for a cost-sharing program to address first-of-a-kind engineering costs inherent in building the first facility of a substantially new design that generates electricity with low or no net greenhouse gas emissions and demonstrates two or more of the following:

(1) C ORPORATION.

(2) N UCLEAR REACTORS.

(3) an Advanced Diversified Waste-Disposal Program for deep-bore hole disposal, alternative geological environments, and engineered barriers.

(b) PROJECT SELECTION.—The Secretary of Energy in coordination with the Corporation shall establish procedures to be supported, in terms of reducing greenhouse gas emissions, demonstrating a new technology, meeting existing vehicle or vehicle component manufacturing goals, generating economic benefits, contributing to energy security, contributing to fuel and technology diversity, maintaining price stability, improving cost effectiveness and economic competitiveness.

(c) COST-SHARING LIMITATIONS.—

(1) CORPORATION’S SHARE OF COSTS.—Costs for the program shall be shared equally between the Corporation and the builder of such first facilities.

(2) NUCLEAR REACTORS.—Funding under this section shall be supported by the Nuclear Regulatory Commission.

(d) REIMBURSEMENT OF COSTS.—For any subsequently-built facility that uses a design supported by the cost-sharing program under this section, the Secretary of Energy and the Corporation shall specify an amount to be paid to the Corporation in order for the Corporation to fully reimburse the cost incurred in connection with the design, considering the program’s objectives, including the costs of promoting the deployment of advanced engineering options.

SEC. 472. DEMONSTRATION PROGRAMS.

(a) N UCLEAR REGULATORY COMMISSION LICENSING PROCESS.—

(i) the Chief Financial Officer of the Department, and

(ii) at least 1 representative of the Corporation; and

(b) REGULATIONS.

The Climate Technology Financing Board shall be comprised of—

(A) the Secretary of Energy, who shall serve as chair; and

(B) 6 additional members appointed by the Secretary, including—

(i) the Chief Financial Officer of the Department of Energy; and

(ii) at least 1 representative of the Corporation; and

(iii) other members with experience in corporate finance, project finance, or energy sector as deemed necessary by the Secretary to carry out the functions of the Board.

(c) REPRESENTATION OF FEDERAL INTEREST.—The Climate Technology Financing Board shall represent the Federal government’s interest in all negotiations with project developers interested in forming joint venture partnerships and obtaining secured loans or loan guarantees under this subtitle.

SEC. 481. CLIMATE TECHNOLOGY FINANCING BOARD.

(a) PURPOSE.—The Climate Technology Financing Board shall work with the Secretary of Energy to make financial assistance available to joint venture partnerships and promote private sector participation in financing eligible projects under this subtitle.

(b) ESTABLISHMENT.—

(1) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, the Secretary of Energy shall establish the Climate Technology Financing Board, which shall be responsible for assisting the Secretary in carrying out this subtitle.

(c) REGULATIONS.—

(1) IN GENERAL.—Not later than 12 months after the date of enactment of this Act, the Climate Technology Financing Board shall establish regulations as may be necessary to implement this subtitle.

(2) PROJECT SELECTION CRITERIA.—In selecting eligible projects for financial assistance under this subtitle, the Board shall consider, among other relevant criteria—

(A) the extent to which the project reduces greenhouse gas emissions, demonstrates economic benefits, contributes to energy security, contributes to fuel diversity, and maintains price stability, cost effectiveness, and economic competitiveness;
(B) the extent to which assistance under this subtitle would foster innovative public-private partnerships and attract private equity investment;
(C) the likelihood that assistance under this subtitle would enable the project to proceed at an earlier date than the project would otherwise be able to proceed without such assistance;
(D) the extent to which the project represents the construction of the first generation of facilities that use substantially new technologies and processes;
(E) any other criteria deemed necessary by the Secretary for the promotion of long-term cost effective climate change-related technologies.

3) MANDATORY REGULATORY PROVISIONS—
The regulations required by paragraph (1) shall include the following:
(A) The general terms and conditions under which non-recourse financial assistance will be provided. Those terms shall include—
(i) a debt-to-equity ratio of up to 80 percent debt from the Corporation, approved by the Secretary, and no less than 20 percent equity from the project developer;
(ii) a pledge of the eligible project’s assets to the project developer to secure their respective loan and equity contributions; and
(iii) the project developer’s financial terms generally consistent with financial terms available to project developers in the United States power generation industry;
(B) The general terms and conditions under which loan guarantees will be provided, which shall be consistent with section 483(c);
(C) The procedures by which project owners and project developers may request such financial assistance.

D) A process under which the Climate Technology Financing Board, the joint venture partnership, and the project developer shall negotiate commercially reasonable terms consistent with terms generally available in the United States power generation industry regarding cost, construction schedule, and other conditions under which the project developer shall acquire the loan from the joint venture partnership and repay the secured loan and acquire an undivided interest in the eligible project when the project achieves commercial operation. Terms prescribed under this subparagraph shall include—
(i) a defined right of the joint venture partnership to terminate the loan agreement upon the occurrence of project delays that are not the fault of the project developer; and
(ii) may not refer to the Federal Acquisition Regulations.

E) Provisions to retain independent third-party engineering assistance, satisfactory to the Climate Technology Financing Board, the project developer, and the joint venture partnership, to verify and validate construction costs and construction schedules, to monitor construction, and authorize draws on financing. Construction assistance that is consistent with generally accepted utility practice, and to make recommendations as to the cause of delay or cost increases should such delays or cost increases occur.

F) Provisions to ensure—
(i) continued project development and construction, construction cost overruns, and the ability to achieve commercial operation caused by an event outside the control of the joint venture partners and the project developer; and
(ii) the continuation of project operations in the event the sale of the eligible project to the project developer is not executed due to an event outside the control of the project developer.

G) Any other information necessary for the Secretary of Energy to discharge fully the obligations under this subtitle, including a process for negotiating the terms and conditions of such financial assistance.

H) COMPREHENSIVE IMPLEMENTATION PLAN.—Not later than 2 months after the date of enactment of this Act, the Climate Technology Financing Board shall prepare and transmit to the President and Congress a comprehensive plan for implementation of this subtitle.

I) PROGRESS REPORTS.—Not later than 12 months after the comprehensive plan required by subparagraph (H) is submitted by the Secretary, and annually thereafter, the Secretary shall prepare and submit to the President and Congress a report summarizing progress in satisfying the requirements established by this subtitle.

SEC. 482. RESPONSIBILITIES OF THE SECRETARY.

1) FINANCIAL ASSISTANCE.—Subject to the requirements of the Federal Credit Reform Act of 1990 (2 U.S.C. 651 et seq.), the Secretary, in coordination with the Corporation, may make available to joint venture partnerships for eligible projects such Federal financial assistance as the Climate Technology Financing Board determines is necessary to enable access to, or to supplement, private sector financing for projects if the Secretary determines that projects are needed to reduce greenhouse gas emissions, contribute to energy security, fuel or technological diversity, or clean air attainment goals. The Secretary, in coordination with the Corporation, shall prescribe such terms and conditions for financial assistance as the Secretary deems necessary or appropriate to protect the financial interests of the United States.

2) REQUIREMENTS.—Approval criteria for financial assistance under subsection (a) shall include—
(A) the creditworthiness of the project;
(B) the extent to which Federal financial assistance would encourage public-private partnerships, attract private-sector investment, and demonstrate safe and secure electric generation or fuel production technology;
(C) the likelihood that Federal financial assistance would hasten commencement of the project;
(D) in the case of a nuclear power plant, whether the application demonstrates reasonable assurance to the Secretary that the project developer can successfully manage nuclear power plant operations;
(E) the extent to which the project will demonstrate safe and secure reduced or zero greenhouse gas emissions utilizing electric generating or fuel production technology; and
(F) any other criteria the Secretary deems necessary or appropriate.

3) RESERVE AMOUNT.—Before entering into any agreements under this subtitle, the Secretary, in consultation with the Director of the Office of Management and Budget, shall determine an appropriate capital reserve subsidy amount for any loan or loan guarantee provided by the agreement. The Secretary, in consultation with the project developer, shall determine the appropriate type of Federal financial assistance to be provided for each project.

4) CONFIDENTIALITY.—The Secretary and the Corporation shall protect the confidentiality of any information that is certified by a project developer to be commercially sensitive.

5) FULL FAITH AND CREDIT.—All loans or loan guarantees provided by the Secretary shall be payable to the United States. The obligations of the United States backed by the full faith and credit of the United States.

SEC. 483. LIMITATIONS.

1) SECURED LOANS.—

(A) IN GENERAL.—The financial assistance provided by this subtitle for secured loans or loan guarantees—
(A) shall be available for new low or zero greenhouse gas emitting energy generating or fuel production facilities, including—
(i) no more than 3 large scale biofuels production facilities that encourage a diversity of pioneer projects relying on different feedstocks in different regions of the country and maximizing the use of cellulosic biomass; and
(ii) no more than the first of each of the 3 advanced reactor design projects for which applications for combined construction and operating licenses have been filed on or before December 31, 2015;
(B) may not exceed 80 percent of eligible project costs for each project.

2) GOVERNMENT-CAUSED DELAYS.—Paragraph (1)(B) of this subsection does not apply if—
(A) with respect to a nuclear power plant—
(i) the conditions specified in the construction and operation license issued by the Nuclear Regulatory Commission change; and
(ii) the changed conditions result in project delays or changes in project scope after the start of construction that are not attributable to private sector project management, construction, or changes from the Nuclear Regulatory Commission’s approved design criteria or safety requirements; or
(B) with respect to an advanced coal power plant—
(i) the conditions specified in project technical assistance and loan guarantees provided by the Secretary for the promotion of long-term cost effective climate change-related technologies.

3) ADDITIONAL ASSISTANCE.—If paragraph (1)(B) of this subsection does not apply for any reason described in paragraph (2), then the financial assistance payable to the project developer shall include additional capital construction loans of project capital replacement power facility, or other eligible facility—
(A) the conditions specified in the construction permit change; and
(B) the changed conditions result in project delays or changes in project scope after the start of construction that are not attributable to private sector project management, construction, or changes from the approved design criteria or safety requirements.

4) ADDITIONAL ASSISTANCE.—If paragraph (1)(B) of this subsection does not apply for any reason described in paragraph (2), then the financial assistance payable to the project developer shall include additional capital construction loans of project capital replacement power facility, and calculated interest, as determined appropriate by the Secretary of Energy.

5) LOAN REPAYMENT TERMS.—

(A) The repayment terms for non-recourse secured loans made under this subtitle shall be negotiated among the Climate Technology Financing Board, the joint venture partnership, and the project developer prior to issuance of the loan and commencement of construction.

(B) The project developer shall purchase the joint venture partnership’s interest in the project after the start of the eligible project’s commercial operation pursuant to the conditions of the loan with the proceeds of refinancing from non-Federal funding sources.

(C) The value of the joint venture partnership’s interest in the eligible project shall be determined in negotiations prior to issuance of a secured loan under the subtitle.

(D) The interest rate on loans made under this subtitle shall be yield on United States Treasury securities of a similar maturity to the maturity of the loan.
SEC. 486. DEFINITIONS.

In this subtitle:

(1) ADVANCED REACTOR DESIGN.—The term ‘‘advanced reactor design’’ means any reactor design that
(i) on which a new nuclear power plant has received a full power 40-year operating license from the
Nuclear Regulatory Commission;
(ii) by which all Federal, State, and local appeals and legal challenges to such operating license have become final;
(iii) with respect to an advanced coal power plant, the term ‘‘commercial operation’’ means the date
on which a new power plant has received a full power rating; and
(iv) by which all Federal, State, and local appeals and legal challenges to the operating license for the power plant have become final.

(2) POWER PLANTS.—With respect to an advanced coal power plant, the term ‘‘commercial operation’’ means the date
on which a new power plant has received a full power rating; and

(3) CORPORATION.—The term ‘‘Corporation’’ means the Climate Change Credit Corporation.

(4) ELIGIBLE PROJECT.—The term ‘‘eligible project’’ means
(A) any commercial nuclear power facility for the production of electricity that uses one or more fixed power reactors;
(B) any advanced coal power plant utilizing the integrated gasification combined cycle technology with carbon capture and geological storage of greenhouse gases;
(C) any biofuels production facility which uses cellulose feedstock; or
(D) any fuel cell or Brayton cycle power plant which uses solar energy for the production of more than 75 percent of its annual output, which output capacity shall not be less than 10 megawatts as determined by common engineering practice.

(5) ELIGIBLE PROJECT COSTS.—The term ‘‘eligible project costs’’ means all costs related to the construction of an eligible project under this subtitle, includ-
ing, without limitation, the cost of—
(A) development phase activities, including site acquisition, real property agreements, environmental reviews, licensing and permitting, engineering and design work, off-taker agreements and arrange-
ments for financing activities;
(B) fabrication and acquisition of equipment, project construction activities and construction contingencies, project management costs, and labor and engineering costs incurred during construction;
(C) capitalized interest necessary to meet market requirements, reasonably required reserve funds, capital issuance expenses, and other carrying costs during construction; and
(D) any other costs that the Climate Technology Financing Board deems reasonable and appropriate as eligible project costs.

(6) LOAN.—The term ‘‘Federal financial assistance’’ means any loan or guarantee or other Federal financial assistance.

(7) LOAN GUARANTEE.—The term ‘‘loan guarantee’’ means any guarantee or other Federal financial assistance.

(8) FIRST-OF-A-KIND ENGINEERING COSTS.—The term ‘‘first-of-a-kind engineering costs’’ means the engineering and construction expenditures for the first units of a design category for engineer-

ing work that develops the design details that finish plant standardization up to a complete plant design and that can be reused for building subsequent units.

(9) JOINT VENTURE PARTNERSHIP.—The term ‘‘joint venture partnership’’ means a special purpose entity, including corporations, part-
nerships, or other legal entities established to develop, construct, and finance an eligible project and to receive financing proceeds in the form of a non-recourse secured loan or loan guarantee.

(10) LOAN.—The term ‘‘loan’’ means any loan which meets the requested services for a specified period of time; or
(B) the requested product within a specified period of time.

(11) LOAN GUARANTEE.—The term ‘‘loan guarantee’’ means any guarantee or other financial assistance.

(12) PROJECT DEVELOPER.—The term ‘‘project developer’’ means a corporation, partnership, or limited liability company that—
(A) provides reasonable assurance to the Secretary that the project developer can succeed-

fully manage plant operations;
(B) has the financial capability to contribute 20 percent equity to the development of the project; and
(C) upon commercial operation, will purchase the project from the joint venture partnership.

(13) SECRETARY.—The term ‘‘Secretary’’ means the Secretary of Energy.

(14) SUBSIDY AMOUNT.—The term ‘‘subsidy amount’’ means the amount of credit authority sufficient to cover the estimated cost of the Government’s investment of an eligible project. For a loan, calculated on a net present value basis, excluding administrative costs and any incidental effects on governmental receipts or outlays, in accordance with the provisions of the Federal Credit Reform Act of 1990 (2 U.S.C. 611 et seq.).
to acquire, support, or stimulate basic and applied research, technology development, or prototype demonstration projects that promote reduced greenhouse gas emissions.

SA 827. Mr. BINGAMAN (for Mr. DORGAN) submitted an amendment intended to be proposed by Mr. BINGAMAN to the bill H.R. 6, to ensure jobs for our future with secure, affordable, and reliable energy; which was ordered to lie on the table; as follows:

At the appropriate place insert the following:

SEC. 5. EXTENSION OF RENEWABLE ELECTRICITY PRODUCTION CREDIT THROUGH 2020.

Paragraphs (2), (5), (6), (7), (9), and (10) of section 45D of the Internal Revenue Code of 1986, as amended by title XV, are amended by striking "2009" each place it appears and inserting "2011".

SA 828. Mr. BINGAMAN (for Mr. DORGAN) submitted an amendment intended to be proposed by Mr. BINGAMAN to the bill H.R. 6, to ensure jobs for our future with secure, affordable, and reliable energy; which was ordered to lie on the table; as follows:

At the end appropriate place insert the following:

SEC. 6. EXPANSION OF CREDIT FOR RESIDENTIAL ENERGY EFFICIENT PROPERTY TO INCLUDE ELECTRIC THERMAL STORAGE UNIT.

(a) In General.—Section 25C(b) of the Internal Revenue Code of 1986 (relating to limitation, as added by title XV, is amended—

(1) by striking "and" at the end of paragraph (2),

(2) by striking the period at the end of clause (iii) and inserting ; and,

(3) by adding at the end the following new clause:

"(4) $250 for any electric thermal storage unit.";

(b) ELECTRIC THERMAL STORAGE UNIT.—

Section 25C(c)(2)(A) of such Code, as so added, is amended—

(1) by striking or "at the end of clause (1),

(2) by striking the period at the end of clause (iii) and inserting ; or,

(3) by adding at the end the following new clause:

"(iv) an electric thermal storage unit which converts low-cost, off-peak electricity to heat and stores it for later use in specially designed ceramic bricks."; and

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after December 31, 2005.

SA 829. Mr. BINGAMAN (for Mr. JEFFORDS) submitted an amendment intended to be proposed by Mr. BINGAMAN to the bill H.R. 6, to ensure jobs for our future with secure, affordable, and reliable energy; which was ordered to lie on the table; as follows:

On page 726, line 14, strike the following:

"SA 833. Mr. KOHL (for himself, Mr. DeWINE, Mr. LIEBERMAN, Mr. LEVIN, and Mr. REED) submitted an amendment intended to be proposed by him to the bill H.R. 6, to ensure jobs for our future with secure, affordable, and reliable energy; which was ordered to lie on the table; as follows:

On page 53, strike lines 4 through 8 and insert the following:

Small Business Administration shall make program information available directly to small businesses and through other Federal agencies, including the Federal Emergency Management Agency and the Department of Agriculture, and coordinate assistance with the Secretary of Commerce for manufacturing efforts, including the Manufacturing Extension Partnership Program.".

SA 834. Ms. SNOWE submitted an amendment intended to be proposed by her to the bill H.R. 6, to ensure jobs for our future with secure, affordable, and reliable energy; which was ordered to lie on the table; as follows:

On page 52, strike line 4 and insert the following:

"(C) understanding and accessing Federal procurement opportunities with regard to Energy Star technologies and products; and

(D) identifying financing options for energy efficiency upgrades."

The Secretary, the Administrator of the Environmental Protection Agency, and the Administrator of the Small Business Administration shall make program information available directly to small businesses and through other Federal agencies, including the Federal Emergency Management Agency and the Department of Agriculture.
"(3) The Secretary, on a cost shared basis in cooperation with the Administrator of the Environmental Protection Agency, shall provide to the Small Business Administration all advertising, marketing, and other written materials necessary for the dissemination of information under paragraph (2).

"(4) Thereafter, it shall be authorized to be appropriated in fiscal year 2006, such sums as may be necessary to carry out this subsection, which shall remain available until expended.

SA 835. Mrs. CLINTON (for herself and Mr. ALLARD) submitted an amendment intended to be proposed by her to the bill H.R. 6, to ensure jobs for our future with secure, affordable, and reliable energy; which was ordered to lie on the table; as follows:

On page 159, after line 23, add the following:

SEC. 2. NATIONAL PRIORITY PROJECT DESIGNATION.

(a) Designation of National Priority Projects—

(1) In general.—There is established the National Priority Project Designation referred to in this section as the Designation, that shall be evidenced by a medallion bearing the inscription “National Priority Project.”

(2) Design and materials.—The medallion shall be designed and materials and bear such additional inscriptions as the President may prescribe.

(b) Making and Presentation of Designation—

(1) In general.—The President, on the basis of recommendations made by the Secretary, shall annually designate organizations that have—

(A) advanced the field of renewable energy technology and contributed to North American energy independence; and

(B) been certified by the Secretary under subsection (e).

(2) Presentation.—The President shall designate projects with such ceremonies as the President may prescribe.

(c) Use of Designation.—An organization that receives a Designation under this section may publicize the Designation of the organization as a National Priority Project in advertising.

(4) Categories in which the designation may be made.—Separate Designations shall be made to qualifying projects in each of the following categories:

(A) Wind and biomass energy generation projects.

(B) Photovoltaic and fuel cell energy generation projects.

(C) Energy efficient building and renewable energy projects.

(D) First-in-Class projects.

(e) Certification.—

(1) Initial applications.—No later than 120 days after the date of enactment of this Act, and annually thereafter, the Secretary shall publish in the Federal Register an invitation and guidelines for submitting applications, consistent with this section.

(2) Contents.—The application shall describe the project, or planned project, and the plans to meet the criteria established under subsection (c).

(f) Certification.—

(1) In general.—Not later than 60 days after the application period described in subsection (d) and annually thereafter, the Secretary shall certify projects that are reasonably expected to meet the criteria established under subsection (c).

(2) Certified projects.—The Secretary shall designate personnel of the Department to work with persons carrying out each certified project and ensure that the personnel—

(A) provide each certified project with guidance in meeting the criteria established under subsection (c);

(B) identify programs of the Department, including National Laboratories and Technology Centers, that will assist each project in meeting the criteria established under subsection (c);

(C) ensure that knowledge and transfer of the most current technology between the applicable Federal Government laboratories; the Environmental Protection Agency; and the certified projects is being facilitated to accelerate commercialization of work developed through those resources.

(d) Authorization of appropriations.—There are authorized to be appropriated such sums as may be necessary to carry out this section, including direct and indirect costs, benefits, and other effects of the amendment made by this section, including direct and indirect costs of the Federal Energy Regulatory Commission and the Environmental Protection Agency.

SA 836. Mr. BAUCUS submitted an amendment intended to be proposed by him to the bill H.R. 6, to ensure jobs for our future with secure, affordable, and reliable energy; which was ordered to lie on the table; as follows:

On page 346, between lines 19 and 20, insert the following:

Subtitle C—Loan Guarantees

SEC. 421. LOAN GUARANTEES.

(a) In general.—Subject to the availability of appropriations, the Secretary may provide loan guarantees for a project to produce energy from coal, coal bed methane, coal to liquid or synthetic fuels from West Virginia subbituminous coal using appropriate coal liquefaction technology.

(b) Requirements.—The project described in subsection (a) shall use coal owned by a State government, in combination with private and Tribal coal resources.

SA 837. Mr. BAUCUS submitted an amendment intended to be proposed by him to the bill H.R. 6, to ensure jobs for our future with secure, affordable, and reliable energy; which was ordered to lie on the table; as follows:

On page 53, line 8, strike the quotation marks and insert the following:

The National Center for Appropriate Technology Small Business Energy Clearinghouse.—The Secretary and the Administrator of the Small Business Administration, as part of the outreach to support business concerns regarding the Energy Star Program required by this subsection, may enter into a cooperative agreement with the National Center for Appropriate Technology to establish, maintain, and promote a Small Business Energy Clearinghouse (in this section referred to as the ‘‘Clearinghouse’’). The Secretary and the Administrator shall ensure that the Clearinghouse provides a centralized resource that small business concerns may access, telephonically and electronically, with technical information and advice to help increase energy efficiency and reduce energy costs.

SA 838. Mr. MCCONNELL submitted an amendment intended to be proposed by him to the bill H.R. 6, to ensure jobs for our future with secure, affordable, and reliable energy; which was ordered to lie on the table; as follows:

On page 656, between lines 19 and 20, insert the following:

SEC. 1237. KENTUCKY PILOT PROGRAM.

(a) Equitability within Territory Restructured Electric Systems.—Section 212(j) of the Federal Power Act (16 U.S.C. 824k(j)) is amended—

(1) by striking “October 1, 1991” and inserting “April 1, 2009”;

(2) by striking the period at the end and inserting “Provided further, That this subsection shall not apply in the Commonwealth of Kentuck.”

(b) STUDY AND REPORT.—

(1) STUDY.—

(A) IN GENERAL.—The Comptroller General of the United States shall conduct a study of the costs, benefits, and other effects of the amendment made by this section, including direct and indirect costs to electric utility consumers in the Commonwealth of Kentucky.

(B) INCLUSION.—In conducting the study under subparagraph (A), the Comptroller General shall evaluate the potential costs and benefits of granting the Federal Energy Regulatory Commission jurisdiction over the entire Tennessee Valley Authority grid with respect to sales and purchases of electricity by the Tennessee Valley Authority.

(2) REPORT.—Not later than 1 year after the date of enactment of this Act, the Comptroller General shall submit to Congress a report describing the findings of the study under paragraph (1).
with secure, affordable, and reliable energy; as follows:

At the appropriate place, insert the following:

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SEC. 48. New diesel technology credit.

(2) in clause (ii), by adding

(i) the tentative minimum tax shall be treated as being zero, and

(ii) the limitation under paragraph (1) (as modified by subsection (a)) shall be reduced by the credit allowed under subsection (a) for the taxable year (other than the new diesel technology credit).

NEW DIESEL TECHNOLOGY CREDIT.—For purposes of this subsection, the term ‘new diesel technology credit’ means the portion of the investment credit under section 46 determined under section 46(c).

CONFORMING AMENDMENTS.—(2) Section 39 of such Code is amended by redesignating paragraph (5) as paragraph (6) and inserting after paragraph (4) the following new paragraph:

"(B) SPECIAL RULES FOR NEW DIESEL TECHNOLOGY CREDIT.—"(A) in general.—In the case of the new diesel technology credit—

(i) this section and section 39 shall be applied separately with respect to such credit, and

(ii) in applying paragraph (1) to such credit—

(i) the tentative minimum tax shall be treated as being zero, and

(ii) the limitation under paragraph (1) (as modified by subclause (i)) shall be reduced by the credit allowed under subsection (a) for the taxable year (other than the new diesel technology credit).

NEW DIESEL TECHNOLOGY CREDIT.—For purposes of this subsection, the term ‘new diesel technology credit’ means the portion of the investment credit under section 46 determined under section 46(c).

CONFORMING AMENDMENTS.—Paragraphs (2)(A)(i)(I), (3)(A)(i)(II), and (4)(A)(i)(II) of section 38c of such Code are each amended by inserting ‘or the new diesel technology credit’ after ‘the specified credits’.

SEC. 179. ELECTIOm To EXPenSE NEW DIESEL TECHNOLOGY TRUCKS.

(1) in general.—Part VI of chapter 1 of the Internal Revenue Code of 1986, as amended by this Act, is amended by inserting after section 179B the following new section:

"(2) TREATMENT AS EXPENSE.—A taxpayer may elect to treat the cost of any qualified truck (as defined in section 48e) as an expense which is not chargeable to a capital account so as to be allowed as a deduction for the taxable year in which the qualified truck is placed in service.
“(b) ELECTION.—

“(1) IN GENERAL.—An election under this section for any taxable year shall be made on the taxpayer’s return of the tax imposed by this chapter for the taxable year. Such election shall be made in such manner as the Secretary may by regulations prescribe.

“(2) ELECTION IRREVOCABLE.—Any election made under this section may not be revoked except with the consent of the Secretary.

“(c) TERMINATION.—This section shall not apply to property placed in service after December 31, 2007.

“(2) CONFORMING AMENDMENT.—The table of sections for part VI of subchapter B of chapter 1 of such Code, as amended by this Act, is amended by inserting after the item relating to section 179D the following new item:

“Sec. 179E. Election to expense new diesel technology trucks.”.

(3) EFFECTIVE DATE.—The amendments made by this subsection shall apply to property placed in service on or after January 1, 2007.

NOTICES OF HEARINGS/MEETINGS

SUBCOMMITTEE ON WATER AND POWER

Ms. MURKOWSKI. Mr. President, I would like to announce for the information of the Senate and the public that the hearing previously scheduled for the Subcommittee on Water and Power of the Committee on Energy and Natural Resources for Tuesday, June 28, 2005 at 3 p.m. has been cancelled.

The purpose of the hearing was to receive testimony on the water supply status in the Pacific Northwest and its impact on power production, as well as to receive testimony on S. 648, to amend the Reclamation States Emergency Drought Relief Act of 1991 to extend the authority for drought assistance.

For further information, please contact Kellie Donnelly 202-224-9360 or Steve Wasklewicz at 202-224-9313.

AUTHORITY FOR COMMITTEES TO MEET

COMMITTEE ON ARMED SERVICES

Mr. DOMENICI. Mr. President, I ask unanimous consent that the Committee on Armed Services be authorized to meet during the session of the Senate on June 21, 2005, at 9:30 a.m., to receive a classified briefing regarding improvised explosive devices (IEDs).

The PRESIDING OFFICER. The PRESIDING OFFICER. Without objection, it is so ordered.

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS

Mr. DOMENICI. Mr. President, I ask unanimous consent that the Committee on Banking, Housing, and Urban Affairs be authorized to meet during the session of the Senate on June 21, 2005, at 10 a.m., to conduct a hearing on “The Consideration of Regulatory Relief Proposals.”

The PRESIDING OFFICER. Without objection, it is so ordered.

COMMITTEE ON FOREIGN RELATIONS

Mr. DOMENICI. Mr. President, I ask unanimous consent that the Committee on Foreign Relations be authorized to meet during the session of the Senate on Tuesday, June 21, 2005 at 9:30 a.m. to hold a hearing on Russia.

The PRESIDING OFFICER. Without objection, it is so ordered.

COMMITTEE ON FOREIGN RELATIONS

Mr. DOMENICI. Mr. President, I ask unanimous consent that the Committee on Foreign Relations be authorized to meet during the session of the Senate on Tuesday, June 21, 2005 at 2:30 p.m., to hold a hearing on nominations.

The PRESIDING OFFICER. Without objection, it is so ordered.

COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS

Mr. DOMENICI. Mr. President, I ask unanimous consent that the Committee on Homeland Security and Governmental Affairs be authorized to meet on Tuesday, June 21, 2005, at 9:15 a.m., for a hearing titled, “Juvenile Diabetes: Examining the Personal Toll on Families, Financial Costs to the Federal Health Care System, and Research Progress Toward a Cure.”

The PRESIDING OFFICER. Without objection, it is so ordered.

COMMITTEE ON RULES AND ADMINISTRATION

Mr. DOMENICI. Mr. President, I ask unanimous consent that the Committee on Rules and Administration be authorized to meet during the session of the Senate on Tuesday, June 21, 2005, at 10 a.m., to conduct a hearing to examine the issue of voter verification in the Federal elections process.

The PRESIDING OFFICER. Without objection, it is so ordered.

SUBCOMMITTEE ON FISHERIES AND COAST GUARD

Mr. DOMENICI. Mr. President, I ask unanimous consent that the Subcommittee on Fisheries and Coast Guard be authorized to meet on Tuesday, June 21, 2005, on Coast Guard’s Revised Deepwater Implementation Plan at 10 a.m., in SR-253.

The PRESIDING OFFICER. Without objection, it is so ordered.

PRIVILEGE OF THE FLOOR

Mr. HAGEL. Mr. President, I further ask consent that Eric Loewen of my staff be granted floor privileges during consideration of the Energy bill.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. DAYTON. Mr. President, I ask unanimous consent that Max Frances Moran of my office be granted floor privileges during the debate on the Energy bill.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. DEWINE. Mr. President, I ask unanimous consent that Douglas Rathbun be granted the privilege of the floor for the duration of debate on H.R. 6.

The PRESIDING OFFICER. Without objection, it is so ordered.

AMENDING COMMUNICATIONS SATELLITE ACT OF 1962

Mr. DOMENICI. I ask unanimous consent that the Senate proceed to the immediate consideration of S. 1282 that was introduced earlier today.

The PRESIDING OFFICER. The clerk will report the bill by title.

The bill clerk read as follows:

A bill (S. 1282) to amend the Communications Satellite Act of 1962 (47 U.S.C. 763 et seq.) to provide for the privatization criteria for INTELSAT separated entities, remove certain restrictions on separated and successor entities to INTELSAT, and for other purposes.

There being no objection, the Senate proceeded to consider the bill.

Mr. DOMENICI. I ask unanimous consent that the bill be read a third time and passed, the motion to reconsider be laid upon the table, and any statements relating to the bill be printed in the RECORD.

The PRESIDING OFFICER. Without objection, it is so ordered.

The bill (S. 1282) was read the third time and passed, as follows:

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

SECTION 1. FINANCIAL INTERESTS OF OFFICERS, MANAGERS, OR DIRECTORS.

Section 621(5)(D) of the Communications Satellite Act of 1962 (47 U.S.C. 763(5)(D)) is amended—

(1) by striking “(I)” in clause (ii);

(2) by striking “signatories, or (II)” in clause (ii) and all that follows through “mechanism;” and inserting “signatories; and”;

(3) by striking “organization;” and in clause (iii) and inserting “organization;”;

and

(4) by striking clause (iv).

SEC. 2. CRITERIA FOR INTELSAT SEPARATED ENTITIES.


SEC. 3. PRESERVATION OF SPACE SEGMENT CAPACITY OF THE GMDSS.

Section 624 of the Communications Satellite Act of 1962 (47 U.S.C. 763c) is amended to read as follows:

“SEC. 624. SPACE SEGMENT CAPACITY OF THE GMDSS.

“The United States shall preserve the space segment capacity of the GMDSS. This section is not intended to alter the status that GMDSS would otherwise have under United States laws and regulations of the International Telecommunication Union with respect to spectrum, orbital locations, or other operational parameters, or to be a barrier to competition for the provision of GMDSS services.”.

SEC. 4. SATELLITE SERVICE REPORT.

(a) ANNUAL REPORT.—The Federal Communications Commission shall review competitive market conditions with respect to domestic and international satellite communications services and shall include in an annual report an analysis of those conditions. The Commission shall transmit a copy of the report to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Energy and Commerce.

(b) CONTENT.—The Commission shall include in the report—

(1) an identification of the number and market share of competitors in domestic and international satellite markets;

an analysis of what action is effective competition in the market for domestic and international satellite services; and