



Climate Change Statutes

UNITED STATES FEDERAL LAWS

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Current through the 2009 Legislative Session.

§ 13381. Report

Not later than 2 years after October 24, 1992, the Secretary shall submit a report to the Congress that includes an assessment of--

- (1)** the feasibility and economic, energy, social, environmental, and competitive implications, including implications for jobs, of stabilizing the generation of greenhouse gases in the United States by the year 2005;
- (2)** the recommendations made in chapter 9 of the 1991 National Academy of Sciences report entitled "Policy Implications of Greenhouse Warming", including an analysis of the benefits and costs of each recommendation;
- (3)** the extent to which the United States is responding, compared with other countries, to the recommendations made in chapter 9 of the 1991 National Academy of Sciences report;
- (4)** the feasibility of reducing the generation of greenhouse gases;
- (5)** the feasibility and economic, energy, social, environmental, and competitive implications, including implications for jobs, of achieving a 20 percent reduction from 1988 levels in the generation of carbon dioxide by the year 2005 as recommended by the 1988 Toronto Scientific World Conference on the Changing Atmosphere;
- (6)** the potential economic, energy, social, environmental, and competitive implications, including implications for jobs, of implementing the policies necessary to enable the United States to comply with any obligations under the United Nations Framework Convention on Climate Change or subsequent international agreements.

§ 13382. Least-cost energy strategy

(a) Strategy

The first National Energy Policy Plan (in this subchapter referred to as the "Plan") under section 7321 of this title prepared and required to be submitted by the President to Congress after February 1, 1993, and each subsequent such Plan, shall include a least-cost energy strategy prepared by the Secretary. In developing the least-cost energy strategy, the Secretary shall take into consideration the economic, energy, social, environmental, and competitive costs and benefits, including costs and benefits for jobs, of his choices. Such strategy shall also take into account the report required under

section 13381 of this title and relevant Federal, State, and local requirements. Such strategy shall be designed to achieve to the maximum extent practicable and at least-cost to the Nation--

- (1)** the energy production, utilization, and energy conservation priorities of subsection (d) of this section;
- (2)** the stabilization and eventual reduction in the generation of greenhouse gases;
- (3)** an increase in the efficiency of the Nation's total energy use by 30 percent over 1988 levels by the year 2010;
- (4)** an increase in the percentage of energy derived from renewable resources by 75 percent over 1988 levels by the year 2005; and
- (5)** a reduction in the Nation's oil consumption from the 1990 level of approximately 40 percent of total energy use to 35 percent by the year 2005.

(b) Additional contents

The least-cost energy strategy shall also include--

- (1)** a comprehensive inventory of available energy and energy efficiency resources and their projected costs, taking into account all costs of production, transportation, distribution, and utilization of such resources, including--
 - (A)** coal, clean coal technologies, coal seam methane, and underground coal gasification;
 - (B)** energy efficiency, including existing technologies for increased efficiency in production, transportation, distribution, and utilization of energy, and other technologies that are anticipated to be available through further research and development; and
 - (C)** other energy resources, such as renewable energy, solar energy, nuclear fission, fusion, geothermal, biomass, fuel cells, hydropower, and natural gas;
- (2)** a proposed two-year program for ensuring adequate supplies of the energy and energy efficiency resources and technologies described in paragraph (1), and an identification of administrative actions that can be undertaken within existing Federal authority to ensure their adequate supply;
- (3)** estimates of life-cycle costs for existing energy production facilities;
- (4)** basecase forecasts of short-term and long-term national energy needs under low and high case assumptions of economic growth; and
- (5)** an identification of all applicable Federal authorities needed to achieve the purposes of this section, and of any inadequacies in those authorities.

(c) Secretarial consideration

In developing the least-cost energy strategy, the Secretary shall give full consideration to--

- (1)** the relative costs of each energy and energy efficiency resource based upon a comparison of all direct and quantifiable net costs for the resource over its available life, including the cost of production, transportation, distribution, utilization, waste management, environmental compliance, and, in the case of imported energy resources, maintaining access to foreign sources of supply; and
- (2)** the economic, energy, social, environmental, and competitive consequences resulting from the establishment of any particular order of Federal priority as determined under subsection (d) of this section.

(d) Priorities

The least-cost energy strategy shall identify Federal priorities, including policies that--

- (1)** implement standards for more efficient use of fossil fuels;
- (2)** increase the energy efficiency of existing technologies;
- (3)** encourage technologies, including clean coal technologies, that generate lower levels of greenhouse gases;
- (4)** promote the use of renewable energy resources, including solar, geothermal, sustainable biomass, hydropower, and wind power;
- (5)** affect the development and consumption of energy and energy efficiency resources and electricity through tax policy;
- (6)** encourage investment in energy efficient equipment and technologies; and
- (7)** encourage the development of energy technologies, such as advanced nuclear fission and nuclear fusion, that produce energy without greenhouse gases as a byproduct, and encourage the deployment of nuclear electric generating capacity.

(e) Assumptions

The Secretary shall include in the least-cost energy strategy an identification of all of the assumptions used in developing the strategy and priorities thereunder, and the reasons for such assumptions.

(f) Preference

When comparing an energy efficiency resource to an energy resource, a higher priority shall be assigned to the energy efficiency resource whenever all direct and quantifiable net costs for the resource over its available life are equal to the estimated cost of the energy resource.

(g) Public review and comment

The Secretary shall provide for a period of public review and comment of the least-cost energy strategy, for a period of at least 30 days, to be completed at least 60 days before the issuance of such strategy. The Secretary shall also provide for public review and comment before the issuance of any update to the least-cost energy strategy required under this section.

§ 13383. Director of Climate Protection

Within 6 months after October 24, 1992, the Secretary shall establish, within the Department of Energy, a Director of Climate Protection (in this section referred to as the "Director"). The Director shall--

(1) in the absence of the Secretary, serve as the Secretary's representative for interagency and multilateral policy discussions of global climate change, including the activities of the Committee on Earth and Environmental Sciences as established by the Global Change Research Act of 1990 (Public Law 101-606) [15 U.S.C.A. § 2921 et seq.] and the Policy Coordinating Committee Working Group on Climate Change;

(2) monitor, in cooperation with other Federal agencies, domestic and international policies for their effects on the generation of greenhouse gases; and

(3) have the authority to participate in the planning activities of relevant Department of Energy programs.

§ 13384. Assessment of alternative policy mechanisms for addressing greenhouse gas emissions

Not later than 18 months after October 24, 1992, the Secretary shall transmit a report to Congress containing a comparative assessment of alternative policy mechanisms for reducing the generation of greenhouse gases. Such assessment shall include a short-run and long-run analysis of the social, economic, energy, environmental, competitive, and agricultural costs and benefits, including costs and benefits for jobs and competition, and the practicality of each of the following policy mechanisms:

(1) Various systems for controlling the generation of greenhouse gases, including caps for the generation of greenhouse gases from major sources and emissions trading programs.

(2) Federal standards for energy efficiency for major sources of greenhouse gases, including efficiency standards for power plants, industrial processes, automobile fuel economy, appliances, and buildings, and for emissions of methane.

(3) Various Federal and voluntary incentives programs.

§ 13385. National inventory and voluntary reporting of greenhouse gases

(a) National inventory

Not later than one year after October 24, 1992, the Secretary, through the Energy Information Administration, shall develop, based on data available to, and obtained by, the Energy Information Administration, an inventory of the national aggregate emissions of each greenhouse gas for each calendar year of the baseline period of 1987 through 1990. The Administrator of the Energy Information Administration shall annually update and analyze such inventory using available data. This subsection does not provide any new data collection authority.

(b) Voluntary reporting

(1) Issuance of guidelines

Not later than 18 months after October 24, 1992, the Secretary shall, after opportunity for public comment, issue guidelines for the voluntary collection and reporting of information on sources of greenhouse gases. Such guidelines shall establish procedures for the accurate voluntary reporting of information on--

(A) greenhouse gas emissions--

(i) for the baseline period of 1987 through 1990; and

(ii) for subsequent calendar years on an annual basis;

(B) annual reductions of greenhouse gas emissions and carbon fixation achieved through any measures, including fuel switching, forest management practices, tree planting, use of renewable energy, manufacture or use of vehicles with reduced greenhouse gas emissions, appliance efficiency, energy efficiency, methane recovery, cogeneration, chlorofluorocarbon capture and replacement, and power plant heat rate improvement;

(C) reductions in greenhouse gas emissions achieved as a result of--

(i) voluntary reductions;

(ii) plant or facility closings; and

(iii) State or Federal requirements; and

(D) an aggregate calculation of greenhouse gas emissions by each reporting entity.

Such guidelines shall also establish procedures for taking into account the differential radiative activity and atmospheric lifetimes of each greenhouse gas.

(2) Reporting procedures

The Administrator of the Energy Information Administration shall develop forms for voluntary reporting under the guidelines established under paragraph (1), and shall make such forms available to entities wishing to report such information. Persons reporting under this subsection shall certify the accuracy of the information reported.

(3) Confidentiality

Trade secret and commercial or financial information that is privileged or confidential shall be protected as provided in section 552(b)(4) of Title 5.

(4) Establishment of data base

Not later than 18 months after October 24, 1992, the Secretary, through the Administrator of the Energy Information Administration, shall establish a data base comprised of information voluntarily reported under this subsection. Such information may be used by the reporting entity to demonstrate achieved reductions of greenhouse gases.

(c) Consultation

In carrying out this section, the Secretary shall consult, as appropriate, with the Administrator of the Environmental Protection Agency.

§ 13386. Export of domestic energy resource technologies to developing countries

The Secretary, through the Trade Promotion Coordinating Council, shall develop policies and programs to encourage the export and promotion of domestic energy resource technologies, including renewable energy, energy efficiency, and clean coal technologies, to developing countries.

§ 13387. Innovative environmental technology transfer program

(a) Establishment of program

The Secretary, through the Agency for International Development, and in consultation with the interagency working group established under section 6276(d) of this title (in this section referred to as the "interagency working group", shall establish a technology transfer program to carry out the purposes described in subsection (b) of this section. Within 150 days after October 24, 1992, the Secretary and the Administrator of the Agency for International Development shall enter into a written agreement to carry out this section. The agreement shall establish a procedure for resolving any disputes between the Secretary and the Administrator regarding the implementation of specific projects. With respect to countries not assisted by the Agency for International Development, the Secretary may enter into agreements with other appropriate Federal agencies. If the Secretary and the Administrator, or the Secretary and an agency described in the previous sentence, are unable to reach an agreement, each shall send a memorandum to the President outlining an appropriate agreement. Within 90 days after receipt of either memorandum, the President shall determine which version of the agreement shall be in effect. Any agreement entered into under this subsection shall be provided to the appropriate committees of the Congress and made available to the public.

(b) Purposes of program

The purposes of the technology transfer program under this section are to--

(1) reduce the United States balance of trade deficit through the export of United States energy technologies and technological expertise;

(2) retain and create manufacturing and related service jobs in the United States;

(3) encourage the export of United States technologies, including services related thereto, to those countries that have a need for developmentally sound facilities to provide energy derived from technologies that substantially reduce environmental pollutants, including greenhouse gases;

(4) develop markets for United States technologies, including services related thereto, that substantially reduce environmental pollutants, including greenhouse gases, that meet the energy and environmental requirements of foreign countries;

(5) better ensure that United States participation in energy-related projects in foreign countries includes participation by United States firms as well as utilization of United States technologies;

(6) ensure the introduction of United States firms and expertise in foreign countries;

(7) provide financial assistance by the Federal Government to foster greater participation by United States firms in the financing, ownership, design, construction, or operation of technologies or services that substantially reduce environmental pollutants, including greenhouse gases; and

(8) assist United States firms, especially firms that are in competition with firms in foreign countries, to obtain opportunities to transfer technologies to, or undertake projects in, foreign countries.

(c) Identification

Pursuant to the agreements required by subsection (a) of this section, the Secretary, through the Agency for International Development, and after consultation with the interagency working group, United States firms, and representatives from foreign countries, shall develop mechanisms to identify potential energy projects in host countries that substantially reduce environmental pollutants, including greenhouse gases, and shall identify a list of such projects within 240 days after October 24, 1992, and periodically thereafter.

(d) Financial mechanisms

(1) Pursuant to the agreements under subsection (a) of this section, the Secretary, through the Agency for International Development, shall--

(A) establish appropriate financial mechanisms to increase the participation of United States firms in energy projects, and services related thereto, that substantially reduce environmental pollutants, including greenhouse gases in foreign countries;

(B) utilize available financial assistance authorized by this section to counterbalance assistance provided by foreign governments to non-United States firms; and

(C) provide financial assistance to support projects.

(2) The financial assistance authorized by this section may be--

(A) provided in combination with other forms of financial assistance, including non-Federal funding that may be available for the project; and

(B) utilized in conjunction with financial assistance programs available through other Federal agencies.

(3) United States obligations under the Arrangement on Guidelines for Officially Supported Export Credits established through the Organization for Economic Cooperation and Development shall be applicable to this section.

(e) Solicitations for project proposals

(1) Pursuant to the agreements under subsection (a) of this section, the Secretary, through the Agency for International Development, within one year after October 24, 1992, and subsequently as appropriate thereafter, shall solicit proposals from United States firms for the design, construction, testing, and operation of the project or projects identified under subsection (c) of this section which propose to utilize a United States technology or service. Each solicitation under this section shall establish a closing date for receipt of proposals.

(2) The solicitation under this subsection shall, to the extent appropriate, be modeled after the RFP No. DE-PS01-90FE62271 Clean Coal Technology IV, as administered by the Department of Energy.

(3) Any solicitation made under this subsection shall include the following requirements:

(A) The United States firm that submits a proposal in response to the solicitation shall have an equity interest in the proposed project.

(B) The project shall utilize a United States technology, including services related thereto, that substantially reduce environmental pollutants, including greenhouse gases, in meeting the applicable energy and environmental requirements of the host country.

(C) Proposals for projects shall be submitted by and undertaken with a United States firm, although a joint venture or other teaming arrangement with a non-United States manufacturer or other non-United States entity is permissible.

(f) Assistance to United States firms

Pursuant to the agreements under subsection (a) of this section, the Secretary, through the Agency for International Development, and in consultation with the interagency working group, shall establish a procedure to provide financial assistance to United States firms under this section for a project identified under subsection (c) of this section where solicitations for the project are being conducted by the host country or by a multilateral lending institution.

(g) Other program requirements

Pursuant to the agreements under subsection (a) of this section, the Secretary, through the Agency for International Development, and in consultation with the interagency working group, shall--

(1) establish eligibility criteria for countries that will host projects;

(2) periodically review the energy needs of such countries and export opportunities for United States firms for the development of projects in such countries;

(3) consult with government officials in host countries and, as appropriate, with representatives of utilities or other entities in host countries, to determine interest in and support for potential projects; and

(4) determine whether each project selected under this section is developmentally sound, as determined under the criteria developed by the Development Assistance Committee of the Organization for Economic Cooperation and Development.

(h) Eligible technologies

Not later than 6 months after October 24, 1992, the Secretary shall prepare a list of eligible technologies and services under this section. In preparing such a list, the Secretary shall consider fuel cell powerplants, aeroderivative gas turbines and catalytic combustion technologies for aeroderivative gas turbines, ocean thermal energy conversion technology, anaerobic digester and storage tanks, and other renewable energy and energy efficiency technologies.

(i) Selection of projects

(1) Pursuant to the agreements under subsection (a) of this section, the Secretary, through the Agency for International Development, shall, not later than 120 days after receipt of proposals in response to a solicitation under subsection (e) of this section, select one or more proposals under this section.

(2) In selecting a proposal under this section, the Secretary, through the Agency for International Development, shall consider--

(A) the ability of the United States firm, in cooperation with the host country, to undertake and complete the project;

(B) the degree to which the equipment to be included in the project is designed and manufactured in the United States;

(C) the long-term technical and competitive viability of the United States technology, and services related thereto, and the ability of the United States firm to compete in the development of additional energy projects using such technology in the host country and in other foreign countries;

(D) the extent of technical and financial involvement of the host country in the project;

(E) the extent to which the proposed project meets the purposes of this section;

(F) the extent of technical, financial, management, and marketing capabilities of the participants in the project, and the commitment of the participants to completion of a successful project in a manner that will facilitate acceptance of the United States technology or service for future application; and

(G) such other criteria as may be appropriate.

(3) In selecting among proposed projects, the Secretary shall seek to ensure that, relative to otherwise comparable projects in the host country, a selected project will meet the following criteria:

(A) It will reduce environmental emissions, including greenhouse gases, to an extent greater than required by applicable provisions of law.

(B) It will be a more cost-effective technological alternative, based on life cycle capital and operating costs per unit of energy produced and, where applicable, costs per unit of product produced.

(C) It will increase the overall efficiency of energy use.

Priority in selection shall be given to those projects which, in the judgment of the Secretary, best meet these criteria.

(j) United States-Asia Environmental Partnership

Activities carried out under this section shall be coordinated with the United States-Asia Environmental Partnership.

(k) Buy America

In carrying out this section, the Secretary, through the Agency for International Development, and pursuant to the agreements under subsection (a) of this section, shall ensure--

(1) the maximum percentage, but in no case less than 50 percent, of the cost of any equipment furnished in connection with a project authorized under this section shall be attributable to the manufactured United States components of such equipment; and

(2) the maximum participation of United States firms.

In determining whether the cost of United States components equals or exceeds 50 percent, the cost of assembly of such United States components in the host country shall not be considered a part of the cost of such United States component.

(l) Report to Congress

The Secretary and the Administrator of the Agency for International Development shall report annually to the Committee on Energy and Natural Resources of the Senate and the appropriate committees of the House of Representatives on the progress being made to introduce innovative energy technologies, and services related thereto, that substantially reduce environmental pollutants, including greenhouse gases, into foreign countries.

(m) Definitions

For purposes of this section--

(1) the term "host country" means a foreign country which is--

(A) the participant in or the site of the proposed innovative energy technology project; and

(B) either--

(i) classified as a country eligible to participate in development assistance programs of the Agency for International Development pursuant to applicable law or regulation; or

(ii) a developing country; and

(2) the term "developing country" includes, but is not limited to, countries in Central and Eastern Europe or in the independent states of the former Soviet Union.

(n) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out the program required by this section, \$100,000,000 for each of the fiscal years 1993, 1994, 1995, 1996, 1997, and 1998.

§ 13388. Global Climate Change Response Fund

(a) Establishment of the Fund

The Secretary of the Treasury, in consultation with the Secretary of State, shall establish a Global Climate Change Response Fund to act as a mechanism for United States contributions to assist global efforts in mitigating and adapting to global climate change.

(b) Restrictions on deposits

No deposits shall be made to the Global Climate Change Response Fund until the United States has ratified the United Nations Framework Convention on Climate Change.

(c) Use of Fund

Moneys deposited into the Fund shall be used by the President, to the extent authorized and appropriated under section 2222 of Title 22, solely for contributions to a financial mechanism negotiated pursuant to the United Nations Framework Convention on Climate Change, including all protocols or agreements related thereto.

(d) Authorization of appropriations

There are authorized to be appropriated for deposit in the Fund to carry out the purposes of this section, \$50,000,000 for fiscal year 1994 and such sums as may be necessary for fiscal years 1995 and 1996.

§ 13389. Greenhouse gas intensity reducing strategies

(a) Definitions

In this section:

(1) Advisory Committee

The term "Advisory Committee" means the Climate Change Technology Advisory Committee established under subsection (f)(1) of this section.

(2) Carbon sequestration

The term "carbon sequestration" means the capture of carbon dioxide through terrestrial, geological, biological, or other means, which prevents the release of carbon dioxide into the atmosphere.

(3) Committee

The term "Committee" means the Committee on Climate Change Technology established under subsection (b)(1) of this section.

(4) Developing country

The term "developing country" has the meaning given the term in section 13387(m) of this title.

(5) Greenhouse gas

The term "greenhouse gas" means--

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

(6) Greenhouse gas intensity

The term "greenhouse gas intensity" means the ratio of greenhouse gas emissions to economic output.

(7) National Laboratory

The term "National Laboratory" has the meaning given the term in section 15801(3) of this title.

(b) Committee on Climate Change Technology

(1) In general

Not later than 180 days after August 8, 2005, the President shall establish a Committee on Climate Change Technology to--

- (A) integrate current Federal climate reports; and
- (B) coordinate Federal climate change technology activities and programs carried out in furtherance of the strategy developed under subsection (c)(1) of this section.

(2) Membership

The Committee shall be composed of at least 7 members, including--

- (A) the Secretary, who shall chair the Committee;
- (B) the Secretary of Commerce;
- (C) the Chairman of the Council on Environmental Quality;
- (D) the Secretary of Agriculture;
- (E) the Administrator of the Environmental Protection Agency;
- (F) the Secretary of Transportation;
- (G) the Director of the Office of Science and Technology Policy; and
- (H) other representatives as may be determined by the President.

(3) Staff

The members of the Committee shall provide such personnel as are necessary to enable the Committee to perform its duties.

(c) National climate change technology policy

(1) In general

Not later than 18 months after August 8, 2005, the Committee shall, based on applicable Federal climate reports, submit to the Secretary and the President a national strategy to promote the deployment and commercialization of greenhouse gas intensity reducing technologies and practices developed through research and development programs conducted by the National Laboratories, other Federal research facilities, institutions of higher education, and the private sector.

(2) Updates

The Committee shall--

(A) at the time of submission of the strategy to the President under paragraph (1), also make the strategy available to the public; and

(B) update the strategy every 5 years, or more frequently as the Committee determines to be necessary.

(d) Climate change technology program

Not later than 180 days after the date on which the Committee is established under subsection (b)(1) of this section, the Secretary, in consultation with the Committee, shall establish within the Department of Energy the Climate Change Technology Program to--

(1) assist the Committee in the interagency coordination of climate change technology research, development, demonstration, and deployment to reduce greenhouse gas intensity; and

(2) carry out the programs authorized under this section.

(e) Technology inventory

(1) In general

The Secretary shall conduct and make public an inventory and evaluation of greenhouse gas intensity reducing technologies that have been developed, or are under development, by the National Laboratories, other Federal research facilities, institutions of higher education, 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 Congress a report that includes the results of the completed inventory and any recommendations of the Secretary.

(3) Use

The Secretary 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), including when determined necessary by the Committee; and

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

(f) Climate Change Technology Advisory Committee

(1) In general

The Secretary, in consultation with the Committee, may establish under section 7234 of this title a Climate Change Technology Advisory Committee 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) Composition

The Advisory Committee shall be composed of the following members, to be appointed by the Secretary, in consultation with the Committee:

(A) 1 representative shall be appointed from each National Laboratory.

(B) 3 members shall be representatives of energy-producing 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 institutions of higher education with expertise in energy technology development that are recommended by the National Academy of Engineering.

(3) Report

Not later than 1 year after August 8, 2005, and annually thereafter, the Advisory Committee shall submit to the Committee a report that describes--

(A) the findings of the Advisory Committee; and

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

(g) Greenhouse gas intensity reducing technology deployment

(1) In general

Based on the strategy developed under subsection (c)(1) of this section, the technology inventory conducted under subsection (e)(1) of this section, the greenhouse gas intensity reducing technology study report submitted under subsection (e)(2) of this section, and reports under subsection (f)(3) of this section, if any, the Committee shall develop recommendations 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 recommendations under paragraph (1), the Committee shall consider in 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) Demonstration projects

In developing recommendations under paragraph (1), the Committee may identify the need for climate change technology demonstration projects.

(4) Report

Not later than 18 months after August 8, 2005, the Committee shall submit to the President and Congress a report that--

- (A)** identifies, based on the report submitted under subsection (f)(3) of this section, any barriers to, and commercial risks associated with, the deployment of greenhouse gas intensity reducing technologies; and
- (B)** includes a plan for carrying out demonstration projects.

(5) Updates

The Committee shall--

- (A)** at the time of submission of the report to Congress under paragraph (4), also make the report available to the public; and
- (B)** update the report every 5 years, or more frequently as the Committee determines to be necessary.

(h) Procedures for calculating, monitoring, and analyzing greenhouse gas intensity

The Secretary, in collaboration with the Committee and the National Institute of Standards and Technology, and after public notice and opportunity for comment, shall develop standards and best practices for calculating, monitoring, and analyzing greenhouse gas intensity.

(i) Demonstration projects

(1) In general

The Secretary shall, subject to the availability of appropriations, support demonstration projects that--

(A) increase the reduction of the greenhouse gas intensity to levels below that which would be achieved by technologies being used in the United States as of August 8, 2005;

(B) maximize the potential return on Federal investment;

(C) demonstrate distinct roles in public-private partnerships;

(D) produce a large-scale reduction of greenhouse gas intensity if commercialization occurred; and

(E) support a diversified portfolio to mitigate the uncertainty associated with a single technology.

(2) Cost sharing

In supporting a demonstration project under this subsection, the Secretary shall require cost-sharing in accordance with section 16352 of this title.

(3) Authorization of appropriations

There are authorized to be appropriated such sums as are necessary to carry out this subsection.

(j) Cooperative research and development agreements

In carrying out greenhouse gas intensity reduction research and technology deployment activities under this subtitle, the Secretary may enter into cooperative research and development agreements under section 3710a of Title 15.