

this section, \$50,000,000 for fiscal year 1994 and such sums as may be necessary for fiscal years 1995 and 1996.

(Pub. L. 102-486, title XVI, §1609, Oct. 24, 1992, 106 Stat. 3007.)

§ 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).

(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).

(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)¹ 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).

(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), 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 inven-

¹ See References in Text note below.

tory 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), the technology inventory conducted under subsection (e)(1), the greenhouse

gas intensity reducing technology study report submitted under subsection (e)(2), and reports under subsection (f)(3), 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), 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,² the Secretary may enter into cooperative research and development agreements under section 3710a of title 15.

(Pub. L. 102-486, title XVI, §1610, as added Pub. L. 109-58, title XVI, §1601, Aug. 8, 2005, 119 Stat. 1109.)

Editorial Notes

REFERENCES IN TEXT

Section 15801(3) of this title, referred to in subsec. (a)(7), was in the original "section 3(3) of the Energy Policy Act of 2005" and was translated as meaning section 2(3) of that Act to reflect the probable intent of Congress, because the Energy Policy Act of 2005 does not contain a section 3 and section 2(3) defines "National Laboratory".

This subtitle, referred to in subsec. (j), appearing in the original, is unidentifiable because title XVI of Pub. L. 102-486, of which this section is a part, does not contain subtitles.

SUBCHAPTER VIII—REDUCTION OF OIL VULNERABILITY

§ 13401. Goals

It is the goal of the United States in carrying out energy supply and energy conservation research and development—

(1) to strengthen national energy security by reducing dependence on imported oil;

(2) to increase the efficiency of the economy by meeting future needs for energy services at the lowest total cost to the Nation, including environmental costs, giving comparable consideration to technologies that enhance energy supply and technologies that improve the efficiency of energy end uses;

(3) to reduce the air, water, and other environmental impacts (including emissions of greenhouse gases) of energy production, distribution, transportation, and utilization, through the development of an environmentally sustainable energy system;

(4) to maintain the technological competitiveness of the United States and stimulate economic growth through the development of advanced materials and technologies;

(5) to foster international cooperation by developing international markets for domestically produced sustainable energy technologies, and by transferring environmentally sound, advanced energy systems and technologies to developing countries to promote sustainable development;

(6) to consider the comparative environmental and public health impacts of the energy to be produced or saved by the specific activities;

(7) to consider the obstacles inherent in private industry's development of new energy technologies and steps necessary for establishing or maintaining technological leadership in the area of energy and energy efficiency resource technologies; and

(8) to consider the contribution of a given activity to fundamental scientific knowledge.

(Pub. L. 102-486, title XX, §2001, Oct. 24, 1992, 106 Stat. 3057.)

PART A—OIL AND GAS SUPPLY ENHANCEMENT

§ 13411. Enhanced oil recovery**(a) Program direction**

The Secretary shall conduct a 5-year program, in accordance with sections 13541 and 13542 of this title, on technologies to increase the recoverability of domestic oil resources to—

(1) improve reservoir characterization;

(2) improve analysis and field verification;

(3) field test and demonstrate enhanced oil recovery processes, including advanced processes, in reservoirs the Secretary considers to be of high priority, ranked primarily on the basis of oil recovery potential and risk of abandonment;

(4) transfer proven recovery technologies to producers and operators of wells, including stripper wells, that would otherwise be likely to be abandoned in the near term due to declining production;

(5) improve enhanced oil recovery process technology for more economic and efficient oil production;

(6) identify and develop new recovery technologies;

(7) study reservoir properties and how they affect oil recovery from porous media;

(8) improve techniques for meeting environmental requirements;

(9) improve data bases of reservoir and environmental conditions; and

(10) lower lifting costs on stripper wells by utilizing advanced renewable energy technologies such as small wind turbines and others.

(b) Program goals**(1) Near-term priorities**

The near-term priorities of the program include preserving access to high potential reservoirs, identifying available technologies that can extend the lifetime of wells and of stripper well property, and developing environmental field operations for waste disposal and injection practices.

(2) Mid-term priorities

The mid-term priorities of the program include developing and testing identified but unproven technologies, and transferring those technologies for widespread use.

(3) Long-term priorities

The long-term priorities of the program include developing advanced techniques to recover oil not recoverable by other techniques.

² So in original. See References in Text note below.