## Public Law 101–218 101st Congress

### An Act

To provide Federal assistance and leadership to a program of research, development, and demonstration of renewable energy and energy efficiency technologies, and for other purposes.

Dec. 11, 1989 [S. 488]

Renewable Energy and Energy

Efficiency Technology

Act of 1989. Business and

Conservation.

Corporations. 42 USC 12001

42 USC 12001.

industry.

Competitiveness

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be referred to as the "Renewable Energy and Energy Efficiency Technology Competitiveness Act of 1989".

SEC. 2. FINDING, PURPOSE, AND GENERAL AUTHORITY.

(a) FINDING.—The Congress finds that it is in the national security and economic interest of the United States to foster greater efficiency in the use of available energy supplies and greater use of

renewable energy technologies.

(b) Purpose.—It is the purpose of this Act to authorize the Secretary of Energy, acting in accordance with authority contained in the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5901-5920) and other law applicable to the Secretary, to pursue an aggressive national program of research, development, and demonstration of renewable energy and energy efficiency technologies in order to ensure a stable and secure future energy supply

(1) achieving as soon as practicable cost competitive use of those technologies without need of Federal financial incentives;

(2) establishing long-term Federal research goals and multiyear funding levels;

(3) directing the Secretary to undertake initiatives to improve the ability of the private sector to commercialize in the near term renewable energy and energy efficiency technologies; and

(4) fostering collaborative research and development efforts involving the private sector through government support of a

program of joint ventures.

(c) GENERAL AUTHORITY.—The Secretary, acting in accordance with the authority contained in the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5901-5920) and other law applicable to the Secretary-

(1) is authorized and directed to-

(A) pursue a program of research, development, and demonstration, including the use of joint ventures with the private sector, to achieve the purpose of this Act, including the goals established under section 4; and

(B) undertake joint ventures as provided in section 6; and (2) is authorized to undertake, from time to time, joint ventures in technology areas other than those set forth in section

6(c), subject to the conditions set forth in section 6(b).

SEC. 3. DEFINITIONS.

As used in this Act—

42 USC 12002.

(1) the term "invention" means an invention or discovery that is patented or for which a patent may be obtained under title 35, United States Code, or any novel variety of plant that is protected or for which plant variety protection may be obtained under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.) and that is conceived or reduced to practice as a result of work under an agreement entered into under this Act;

(2) "joint venture" means any agreement entered into under this Act by the Secretary with more than one or a consortium of non-Federal persons (including a joint venture under the National Cooperative Research Act of 1984 (15 U.S.C. 4301 et seq.)) for cost-shared research, development, or demonstration of technologies, but does not include procurement contracts, grant

in sections 6303, 6304, and 6305 of title 31, United States Code; (3) the term "non-Federal person" means an entity located in the United States, the controlling interest (as defined by the Secretary) of which is held by persons of the United States,

agreements, or cooperative agreements as those terms are used

including-

(A) a for-profit business;(B) a private foundation:

(C) a nonprofit organization such as a university;

(D) a trade or professional society; and (E) a unit of State or local government;

(4) the term "Secretary" means the Secretary of Energy;

(5) the term "small business", with respect to a participant in any joint venture under this Act, means a private firm that does not exceed the numerical size standard promulgated by the Small Business Administration under section 3(a) of the Small Business Act (15 U.S.C. 632(a)) for the Standard Industrial Classification (SIC) code designated by the Secretary of Energy as the primary business activity to be undertaken in the venture; and

(6) the term "United States" means the several States, the District of Columbia, the Commonwealth of Puerto Rico, the United States Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and any other Commonwealth, territory, or possession of the United States.

42 USC 12003.

# SEC. 4. NATIONAL GOALS AND MULTI-YEAR FUNDING FOR FEDERAL WIND, PHOTOVOLTAICS, AND SOLAR THERMAL PROGRAMS.

(a) NATIONAL GOALS.—The following are declared to be the national goals for the wind, photovoltaics, and solar thermal energy programs being carried out by the Secretary:

(1) Wind.—(A) In general, the goals for the Wind Energy Research Program include improving design methodologies and developing more reliable and efficient wind turbines to increase the cost competitiveness of wind energy. Research efforts shall emphasize—

(i) activities that address near-term technical problems and assist private sector exploitation of market opportuni-

ties of the wind energy industry;

(ii) developing technologies such as advanced airfoils and variable speed generators to increase wind turbine output and reduce maintenance costs by decreasing structural stress and fatigue; (iii) increasing the basic knowledge of aerodynamics, structural dynamics, fatigue, and electrical systems interactions as applied to wind energy technology; and

(iv) improving the compatibility of electricity produced

from wind farms with conventional utility needs.

(B) Specific goals for the Wind Energy Research Program shall be to—

(i) reduce average wind energy costs to 3 to 5 cents per kilowatt hour by 1995;

(ii) reduce capital costs of new wind energy systems to \$500 to \$750 per kilowatt of installed capacity by 1995;

(iii) reduce operation and maintenance costs for wind energy systems to less than one cent per kilowatt hour by 1995; and

(iv) increase capacity factors for new wind energy systems

to 25 to 35 percent by 1995.

(2) Photovoltaics.—(A) In general, the goals of the Photovoltaic Energy Systems Program shall include improving the reliability and conversion efficiencies of and lowering the costs of photovoltaic conversion. Research efforts shall emphasize advancements in the performance, stability, and durability of photovoltaic materials.

(B) Specific goals of the Photovoltaic Energy Systems Pro-

gram shall be to—

 (i) improve operational reliability of photovoltaic modules to 30 years by 1995;

(ii) increase photovoltaic conversion efficiencies by 20 percent by 1995;

(iii) decrease new photovoltaic module direct manufacturing costs to \$800 per kilowatt by 1995; and

(iv) increase cost efficiency of photovoltaic power produc-

tion to 10 cents per kilowatt hour by 1995.

(3) Solar Thermal.—(A) In general, the goal of the Solar Thermal Energy Systems Program shall be to advance research and development to a point where solar thermal technology is cost-competitive with conventional energy sources, and to promote the integration of this technology into the production of industrial process heat and the conventional utility network. Research and development shall emphasize development of a thermal storage technology to provide capacity for shifting power to periods of demand when full insolation is not available; improvement in receivers, energy conversion devices, and innovative concentrators using stretch membranes, lenses, and other materials; and exploration of advanced manufacturing techniques.

(B) Specific goals of the Solar Thermal Energy Systems Pro-

gram shall be to—

(i) reduce solar thermal costs for industrial process heat

to \$9.00 per million Btu by 1995; and

(ii) reduce average solar thermal costs for electricity to 4

to 5 cents per kilowatt hour by 1995.

(4) OTHER TECHNOLOGIES.—The Secretary shall submit to the Congress, as part of the first report submitted under section 9, recommendations for specific cost goals and other pertinent goals for 1995 for Department of Energy research, development, and demonstration programs in Biofuels Energy Systems, Hydrogen Energy Systems, Solar Buildings Energy Systems,

Ocean Energy Systems, Geothermal Energy Systems, Low-Head Hydro, and Energy Storage Systems.

Reports.

(b) AMENDED GOALS.—Whenever the Secretary determines that any of the goals established under this section is no longer appropriate, the Secretary shall notify Congress, as part of a report submitted under section 9, of the reason for the determination and provide an amended goal that is consistent with the purpose stated in section 2(b).

(c) Authorizations.—There are authorized to be appropriated to the Secretary for the following renewable energy research, development, and demonstration programs: the Wind Energy Research Program, the Photovoltaic Energy Systems Program, the Solar Thermal Energy Systems Program, the Biofuels Energy Systems Program, the Hydrogen Energy Systems Program, the Solar Buildings Energy Systems Program, the Ocean Energy Systems Program, and the Geothermal Energy Systems Program-

(1) not to exceed \$113,000,000 for fiscal year 1991, of which-(A) not to exceed \$39,000,000 shall be available for the

Photovoltaic Energy Systems Program;

(B) not to exceed \$19,000,000 shall be available for the

Geothermal Energy Systems Program; and

(C) not to exceed \$4,000,000 shall be available for the Hydrogen Energy Systems Program; (2) not to exceed \$121,000,000 for fiscal year 1992, of which—

(A) not to exceed \$40,000,000 shall be available for the

Photovoltaic Energy Systems Program;
(B) not to exceed \$20,500,000 shall be available for the

Geothermal Energy Systems Program; and
(C) not to exceed \$5,000,000 shall be available for the

Hydrogen Energy Systems Program; and (3) not to exceed \$124,000,000 for fiscal year 1993, of which— (A) not to exceed \$40,000,000 shall be available for the

Photovoltaic Energy Systems Program;
(B) not to exceed \$23,000,000 shall be available for the

Geothermal Energy Systems Program; and (C) not to exceed \$6,000,000 shall be available for the

Hydrogen Energy Systems Program.

Each of the President's annual budget requests submitted to Congress after the date of enactment of this Act shall include as separate line items each of the categories of renewable energy programs described in this subsection.

#### 42 USC 12004.

#### SEC. 5. ENERGY EFFICIENCY AUTHORIZATIONS.

There are authorized to be appropriated to the Secretary for the following energy efficiency research, development, and demonstration programs: transportation, industrial, buildings and community systems, multi-sector, and policy and management-

(1) not to exceed \$201,100,000 for fiscal year 1991, of which— (A) not to exceed \$68,300,000 shall be available for the

transportation program; and

(B) not to exceed \$53,500,000 shall be available for the

industrial program;

(2) not to exceed \$210,600,000 for fiscal year 1992, of which— (A) not to exceed \$71,000,000 shall be available for the transportation program; and

(B) not to exceed \$54,700,000 shall be available for the

industrial program; and

(3) not to exceed \$225,000,000 for fiscal year 1993, of which— (A) not to exceed \$73,900,000 shall be available for the transportation program; and

(B) not to exceed \$56,900,000 shall be available for the industrial program.

#### SEC. 6. JOINT VENTURES.

42 USC 12005.

(a) FINDINGS AND PURPOSE.—

(1) FINDINGS.—For purposes of this section, Congress finds that joint ventures can—

(A) improve coordination in technology development among firms in industries attempting to commercialize renewable energy and energy efficiency technologies;

(B) facilitate transfer of renewable energy and energy efficiency technologies, including critical enabling tech-

nologies, to the private sector; and

(C) enhance the ability of domestic firms to compete with foreign enterprises in sales of renewable energy and energy

efficiency technologies.

(2) Purpose.—The purpose of this section is to direct the Secretary to make use of joint ventures to further commercialization of renewable energy and energy efficiency technologies.

(b) JOINT VENTURES.—

(1) ESTABLISHMENT.—The Secretary shall solicit proposals for joint ventures in each of the technology areas under subsection (c). The Secretary shall select at least one joint venture in each of those technology areas, unless no qualified proposals in that area are received. Each joint venture selected under this section shall include at least one for-profit business. Research and development activities supported under this section shall be performed in the United States. Each joint venture under this section shall require the manufacture and reproduction, substantially within the United States, for commercial sale of any invention that may result from the joint venture.

(2) Cost sharing.—

(A) The Secretary shall require at least 50 percent of the costs directly and specifically related to any joint venture under this section, including cash, personnel, services, equipment, and other resources, to be provided from non-Federal sources.

(B) The Secretary may reduce the amount of the costs required to be provided by any joint venture under subparagraph (A) upon application if the Secretary determines

that-

 (i) the joint venture is composed exclusively of small businesses or of small businesses and nonprofit entities;
 and

(ii) the reduction is appropriate and necessary for the successful operation of the proposed joint venture.

(C) The extent of cost sharing provided under proposals shall be a criterion for selection of proposals under this section.

(3) Advisory Committee.—(A) The Secretary shall establish an Advisory Committee on Renewable Energy and Energy Efficiency Joint Ventures (hereafter in this Act referred to as the "Advisory Committee") to advise the Secretary on the develop-

ment of the solicitation and evaluation criteria for joint ventures, and on otherwise carrying out his responsibilities under this section. The Secretary shall appoint members to the Advisory Committee, including at least one member representing—

(i) the Secretary of Commerce;

(ii) the National Laboratories of the Department of Energy:

(iii) the Solar Energy Research Institute; (iv) the Electric Power Research Institute;

(v) the Gas Research Institute;

(vi) the National Institute of Building Sciences;

 (vii) the National Institute of Standards and Technology;
 (viii) associations of firms in the major renewable energy manufacturing industries; and

(ix) associations of firms in the major energy efficiency

manufacturing industries.

The Advisory Committee may establish such subcommittees as

it considers necessary to carry out this Act.

(B) The Advisory Committee, within 120 days after its establishment, shall provide the Secretary with recommendations regarding the structure and selection criteria for a solicitation of proposals for joint ventures. The Advisory Committee shall also advise the Secretary from time to time on the implementation of the joint venture program. Recommendations of the Advisory Committee shall be available to the public.

(4) Draft solicitation and public comment.—The Secretary shall issue a draft solicitation for joint ventures by September 30, 1990. After such draft solicitation has been issued, the Secretary shall provide for a period of public comment before

the issuance of a final solicitation.

(5) PROTECTION OF PROPRIETARY RIGHTS.—Joint ventures, participants in joint ventures, and inventions developed as a result of joint ventures under this section shall be subject to section 5 of the Steel and Aluminum Energy Conservation and Technology Competitiveness Act of 1988 (15 U.S.C. 5104).

(c) Technologies.—

(1) Photovoltaics technology.—(A) The Secretary shall solicit proposals for and provide financial assistance to at least one joint venture for the demonstration of photovoltaic conversion of solar energy in accordance with the provisions of this

paragraph

(B) The purpose of joint ventures supported under this paragraph shall be to design, test, and demonstrate critical enabling technologies for photovoltaic conversion of solar energy so as to achieve, to the maximum extent practicable, the goals of the Photovoltaic Energy Systems Program set forth in section 4(a)(2), as those goals may be amended under section 4(b).

(C) There are authorized to be appropriated to the Secretary not to exceed \$2,700,000 for each of the fiscal years 1991, 1992,

and 1993 to carry out this paragraph.

(2) Wind energy technology.—(A) The Secretary shall solicit proposals for and provide financial assistance to at least one joint venture for the demonstration of the conversion of wind energy in accordance with the provisions of this paragraph.

(B) The purpose of joint ventures supported under this paragraph shall be to design, test, and demonstrate critical enabling

Public information.

Appropriation authorization.

technologies for the conversion of wind energy so as to achieve, to the maximum extent practicable, the goals of the Wind Energy Research Program set forth in section 4(a)(1), as those goals may be amended under section 4(b).

(C) There are authorized to be appropriated to the Secretary not to exceed \$2,700,000 for each of the fiscal years 1991, 1992,

and 1993 to carry out this paragraph.

(3) Solar thermal technology.—(A) The Secretary shall solicit proposals for and provide financial assistance to at least one joint venture for the demonstration of the use of solar thermal energy in accordance with the provisions of this

(B) The purpose of joint ventures supported under this paragraph shall be to design, test, and demonstrate critical enabling technologies for the use of solar thermal energy so as to achieve. to the maximum extent practicable, the goals of the Solar Thermal Energy Systems Program set forth in section 4(a)(3), as those goals may be amended under section 4(b).

(C) There are authorized to be appropriated to the Secretary not to exceed \$2,400,000 for each of the fiscal years 1991, 1992,

and 1993 to carry out this paragraph.

(4) Factory-made housing.—(A) The Secretary shall solicit proposals for and provide financial assistance to at least one joint venture in order to establish regional projects to develop or demonstrate techniques to improve the energy performance of factory-made housing offered by United States firms. In locating projects under this paragraph, the Secretary shall consider regional differences in housing needs, housing design, construction technique, marketing practices, and construction materials.

(B) Projects supported pursuant to this paragraph shall be designed to demonstrate state-of-the-art product quality, energy efficiency, and adaptability to renewable forms of energy of factory-made housing offered for sale in the United States. Such

projects shall-

(i) be structured to demonstrate improvements in housing design, fabrication, delivery systems, construction processes, and marketing;

(ii) develop a detailed characterization of the needs of the

home building industry;

(iii) establish a close working relationship with all sectors of the home building industry; and

(iv) be coordinated to pool and conserve resources.

(C) There are authorized to be appropriated to the Secretary not to exceed \$5,000,000 for each of the fiscal years 1991, 1992,

and 1993 to carry out this paragraph.

(5) ADVANCED DISTRICT COOLING TECHNOLOGY.—(A) The Secretary shall solicit proposals for and provide financial assistance to at least one joint venture for the demonstration of advanced district cooling technologies that are applicable in cities with high cooling loads, in accordance with the provisions of this paragraph.

(B) The purpose of joint ventures supported under this paragraph shall be to develop technical strategies for decreasing the governments. capital cost and increasing the energy efficiency of major district heating and cooling system components and to assist in

making district cooling available to local governments.

Appropriation authorization.

Appropriation authorization.

Appropriation authorization.

Urban areas.

State and local

Appropriation authorization.

(C) The Secretary shall select a city or cities for application of advanced district cooling technologies developed by joint ventures supported under this paragraph. The activities to be carried out in such application shall include district cooling assessment, feasibility, and engineering design studies.

(D) There are authorized to be appropriated to the Secretary not to exceed \$1,000,000 for each of the fiscal years 1991, 1992,

and 1993 to carry out this paragraph.

(d) Secretarial Discretion.—(1) If the Secretary, based on the recommendations of the Advisory Committee under subsection (b)(3)(B), with respect to a technology described in paragraph (1), (2), (3), (4), or (5) of subsection (c), determines, that—

(A) there is insufficient private sector interest in joint ventures for the demonstration of such technology to satisfy the

requirement of subsection (b)(2); or

(B) such joint ventures will substantially substitute for research, development, and demonstration activities already fi-

nanced by the private sector,

then the Secretary shall not be subject to the requirements of this section with respect to the technology described in such paragraph, and the Secretary shall notify Congress and provide a written

explanation of the reasons for the determination.

(2) Promptly after notifying the Congress under paragraph (1), the Secretary shall consult with the Advisory Committee, and, based on the recommendations of such Committee, shall promptly transmit to Congress a plan for the selection of a substitute field or technology in which to solicit joint ventures that develop or demonstrate, consistent with this section, an alternative renewable energy or energy efficiency technology so as to accomplish the purpose of this Act. Any unexpended funds authorized to be appropriated under subsection (c) for joint ventures with respect to which a determination is made under paragraph (1) may be used for a substitute joint venture selected under this paragraph.

(3) When 30 calendar days have elapsed after transmittal of a plan under paragraph (2), the Secretary shall proceed with solicitations for joint ventures appropriate to that plan as if such joint ventures

were required under subsection (c).

(e) Additional Joint Ventures.—(1) The Secretary shall recommend to the Congress three additional joint ventures in the fields of renewable energy or energy efficiency technologies for fiscal year 1993. Each proposed project shall be described in sufficient detail to

support congressional authorization.

(2) In selecting proposed projects under this subsection, the Secretary shall consider the recommendations of the Advisory Committee, and shall take into account the extent to which such projects will contribute to earlier commercialization of key technologies than might not occur without Federal support under this subsection, and the extent to which such projects will contribute to the competitiveness of United States firms engaged in international trade in renewable energy or energy efficiency technologies.

(3) Joint ventures supported pursuant to a recommendation under this subsection shall be carried out as if they were required under

subsection (c).

#### SEC. 7. RENEWABLE ENERGY EXPORTS.

(a) DISSEMINATION OF INFORMATION; ACCESS TO FOREIGN MAR-KETS.—Section 256(c)(2)(D) of the Energy Policy and Conservation Act (42 U.S.C. 6276(c)(2)(D)) is amended-

(1) in clause (i), by inserting after "commerce," the following: Health and "and to potential end users, including other industry sectors in foreign countries such as health care, rural development,

communications, and refrigeration, and others,"; and
(2) in clause (ii), by striking "export opportunities" and inserting in lieu thereof "export and export financing opportunities". (b) Authorization and Program.—Section 256(d) of the Energy Policy and Conservation Act (42 U.S.C. 6276(d)) is amended—

(1) by inserting "(1)" after "(d)"; and

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

"(2) The interagency group shall establish a program to inform other countries of the benefits of policies that would allow small facilities which produce renewable energy to compete effectively with producers of energy from nonrenewable sources.

(c) REPORT, FUNCTIONS, AND AUTHORIZATIONS.—Section 256 of the Energy Policy and Conservation Act (42 U.S.C. 6276) is amended by

adding at the end the following new subsections:

"(e) The interagency working group established under subsection (d) shall annually report to Congress, describing the actions of each agency represented by a member of the working group taken during the previous fiscal year to achieve the purposes of such working group and of this section. Such report shall describe the exports of renewable energy technology that have occurred as a result of such agency actions.

"(f)(1) The interagency working group shall—

"(A) establish, in consultation with representatives of affected industries, a plan to increase United States exports of renewable energy technologies, and include in such plan recommended guidelines for agencies that are represented on the working group with respect to the financing of, or other actions they can take within their programs to promote, exports of such renewable energy technologies;

"(B) develop, in consultation with representatives of affected industries, recommended administrative guidelines for Federal export loan programs to simplify application by firms seeking export assistance for renewable energy technologies from agen-

cies implementing such programs; and

"(C) recommend specific renewable energy technology markets for primary emphasis by Federal export loan programs, development programs, and private sector assistance programs.

"(2) The interagency working group shall include a description of the plan established under paragraph (1)(A) in no later than the second report submitted under subsection (e), and shall include in subsequent reports a description of any modifications to such plan and of the progress in implementing the plan.

"(g) For purposes of this section, the term 'renewable energy' includes energy efficiency to the extent it is a part of a renewable

energy system or technology.

"(h) There are authorized to be appropriated to the Secretary for activities of the interagency working group established under subsection (d) not to exceed-

"(1) \$3,000,000 for fiscal year 1991;

medical care. Rural areas. Communications

Appropriation authorization. "(2) \$3,300,000 for fiscal year 1992; and "(3) \$3,600,000 for fiscal year 1993.".

#### SEC. 8. RENEWABLE ENERGY AND ENERGY EFFICIENCY.

(a) DISSEMINATION OF INFORMATION.—Section 523 of the National Energy Conservation Policy Act (42 U.S.C. 8243) is amended by

adding a new subsection (d) as follows:

"(d) In order to more widely disseminate information about the program under this part and under part 3 and the benefits of renewable energy and energy efficiency technology, the Secretary shall establish a program which includes site visits and technical briefings, to disseminate such information to Federal procurement officers and Federal loan officers. The Secretary shall utilize available funds for the program under this subsection."

(b) Department of Defense Housing.—Section 2857(b)(1) of title 10, United States Code, is amended by striking "significant savings of fossil-fuel-derived energy" and inserting in lieu thereof "reduced

energy costs".

(c) Overseas Private Investment Corporation Loans.—Section

234(e) of the Foreign Assistance Act of 1961 is amended—

(1) in the first sentence, by inserting after "cooperatives" the following: "and including the initiation of incentives, grants, and studies for renewable energy and other small business activities"; and

(2) by adding at the end thereof the following new sentence: "Administrative funds may not be made available for incentives, grants, and studies for renewable energy and other small

business activities.".

42 USC 12006.

22 USC 2194.

Small business.

Grants.

#### SEC. 9. REPORTS.

(a) Report by the Secretary.—One year after the date of the enactment of this Act and annually thereafter, the Secretary shall report to Congress on the programs, projects, and joint ventures supported under this Act and the progress being made toward accomplishing the goals and purposes set forth in this Act.

(b) NATIONAL RENEWABLE ENERGY AND ENERGY EFFICIENCY

Management Plan.—

(1) The Secretary, in consultation with the Advisory Committee, shall prepare a management plan to be administered and carried out by the Secretary in the conduct of activities under this Act.

(2) After opportunity for public comment and consideration, as appropriate, of such comment, the Secretary shall publish

the plan.

(3) In addition to describing the Secretary's intentions for administering this Act, the plan shall include a comprehensive strategy for assisting the private sector—

(A) in commercializing the renewable energy and energy

efficiency technologies developed under this Act; and

(B) in meeting competition from foreign suppliers of products derived from renewable energy and energy efficiency

technologies.

(4) The plan shall address the role of federally-assisted research, development, and demonstration in the achievement of applicable national policy goals of the National Energy Policy Plan required under section 801 of the Department of Energy Organization Act (42 U.S.C. 7321).

(5) The plan shall accompany the President's annual budget

submission to the Congress.

(c) Report on Options.—As part of the first report submitted under subsection (a), the Secretary shall submit to Congress a report analyzing options available to the Secretary under existing law to assist the private sector with the timely commercialization of wind, photovoltaic, solar thermal, biofuels, hydrogen, solar buildings, ocean, geothermal, low-head hydro, and energy storage renewable energy technologies and energy efficiency technologies through emphasis on development and demonstration assistance to specific technologies in the research, development, and demonstration programs of the Department of Energy that are near commercial application.

# SEC. 10. NO ANTITRUST IMMUNITY OR DEFENSES.

42 USC 12007.

Nothing in this Act shall be deemed to convey to any person, partnership, corporation, or other entity immunity from civil or criminal liability under any antitrust law or to create defenses to actions under any antitrust law. As used in this section, "antitrust laws" means those Acts set forth in section 1 of the Clayton Act (15 U.S.C. 12), as amended.

Approved December 11, 1989.

Dec. 11. Presidential statement.

LEGISLATIVE HISTORY-S. 488 (H.R. 1216):

HOUSE REPORTS: No. 101-308, Pt. 1 (Comm. on Science, Space, and Technology) and Pt. 2 (Comm. on Energy and Commerce), both accompanying H.R. 1216.

H.R. 1216.

SENATE REPORTS: No. 101-107 (Comm. on Energy and Natural Resources).

CONGRESSIONAL RECORD, Vol. 135 (1989):

Sept. 22, considered and passed Senate.

Nov. 17, H.R. 1216 considered and passed House; proceedings vacated and S. 488, amended, passed in lieu. Senate concurred in House amendment.

WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS, Vol. 25 (1989):