

(Pub. L. 102-486, title VI, §626, Oct. 24, 1992, 106 Stat. 2905.)

#### SUBCHAPTER V—RENEWABLE ENERGY

##### § 13311. Purposes

The purposes of this subchapter are to promote—

- (1) increases in the production and utilization of energy from renewable energy resources;
- (2) further advances of renewable energy technologies; and
- (3) exports of United States renewable energy technologies and services.

(Pub. L. 102-486, title XII, §1201, Oct. 24, 1992, 106 Stat. 2956.)

#### REFERENCES IN TEXT

This subchapter, referred to in text, was in the original “this title” meaning title XII of Pub. L. 102-486, Oct. 24, 1992, 106 Stat. 2956, which enacted this subchapter and amended sections 6276, 12001 to 12003, 12005, and 12006 of this title.

##### § 13312. Renewable energy export technology training

###### (a) Establishment of program

The Secretary, through the Agency for International Development, shall establish a program for the training of individuals from developing countries in the operation and maintenance of renewable energy and energy efficiency technologies in accordance with this section. The Secretary and the Administrator of the Agency for International Development shall, within one year after October 24, 1992, enter into a written agreement to carry out this program.

###### (b) Purpose

The purpose of the program established under this section shall be to train appropriate persons in the system design, operation, and maintenance of renewable energy and energy efficiency equipment manufactured in the United States, including equipment for water pumping, heating and purification, and the production of electric power in remote areas.

###### (c) Authorization of appropriations

There are authorized to be appropriated to the Secretary \$6,000,000 for each of the fiscal years 1994, 1995, and 1996, to carry out this section.

(Pub. L. 102-486, title XII, §1203, Oct. 24, 1992, 106 Stat. 2961.)

##### § 13313. Renewable Energy Advancement Awards

###### (a) Authority

The Secretary shall make Renewable Energy Advancement Awards in recognition of developments that advance the practical application of biomass, geothermal, hydroelectric, photovoltaic, solar thermal, ocean thermal, and wind technologies to consumer, utility, or industrial uses, in accordance with this section. Except as provided in subsection (f) of this section, Renewable Energy Advancement Awards shall include a cash award.

###### (b) Selection criteria

The Secretary, in consultation with the Advisory Committee on Demonstration and Commer-

cial Application of Renewable Energy and Energy Efficiency Technologies (in this section referred to as the “Advisory Committee”), under section 12005 of this title, shall develop criteria to be applied in the selection of award recipients under this section. Such criteria shall include the following:

- (1) The degree to which the technological development increases the utilization of renewable energy.
- (2) The degree to which the development will have a significant impact, by benefitting a large number of people, by reducing the costs of an important industrial process or commercial product or service, or otherwise.
- (3) The ingenuity of the development.
- (4) Whether the application has significant export potential.
- (5) The environmental soundness of the development.

###### (c) Selection

Beginning in fiscal year 1994, and annually thereafter for a period of 10 years, the Secretary, in consultation with the Advisory Committee, shall select developments described in subsection (a) of this section that are worthy of receiving an award under this section, and shall make such awards.

###### (d) Eligibility

Awards may be made under this section only to individuals who are United States nationals or permanent resident aliens, or to non-Federal organizations that are organized under the laws of the United States or the laws of a State of the United States.

###### (e) Authorization of appropriations

There are authorized to be appropriated to the Secretary \$50,000 for each of the fiscal years 1994, 1995, and 1996 for carrying out this section.

###### (f) Awards made in absence of appropriations

The Secretary shall make honorary awards under this section if sufficient funds are not available for financial awards in any fiscal year.

(Pub. L. 102-486, title XII, §1204, Oct. 24, 1992, 106 Stat. 2961.)

##### § 13314. Study of tax and rate treatment of renewable energy projects

(a) The Secretary, in conjunction with State regulatory commissions, shall undertake a study to determine if conventional taxation and ratemaking procedures result in economic barriers to or incentives for renewable energy power plants compared to conventional power plants.

(b) Within 1 year after October 24, 1992, the Secretary shall submit a report to the Congress on the results of the study undertaken under subsection (a) of this section.

(Pub. L. 102-486, title XII, §1205, Oct. 24, 1992, 106 Stat. 2962.)

##### § 13315. Data system and energy technology evaluation

The Secretary of Commerce, in his or her role as a member of the interagency working group established under section 6276 of this title, shall—

(1) develop a comprehensive data base and information dissemination system, using the National Trade Data Bank and the Commercial Information Management System of the Department of Commerce, that will provide information on the specific energy technology needs of foreign countries, and the technical and economic competitiveness of various renewable energy and energy efficiency products and technologies;

(2) make such information available to industry, Federal and multilateral lending agencies, nongovernmental organizations, host-country and donor-agency officials, and such others as the Secretary of Commerce considers necessary; and

(3) prepare and transmit to the Congress not later than June 1, 1993, and biennially thereafter, a comprehensive report evaluating the full range of energy and environmental technologies necessary to meet the energy needs of foreign countries, including—

(A) information on the specific energy needs of foreign countries;

(B) an inventory of United States technologies and services to meet those needs;

(C) an update on the status of ongoing bilateral and multilateral programs which promote United States exports of renewable energy and energy efficiency products and technologies; and

(D) an evaluation of current programs (and recommendations for future programs) that develop and promote energy efficiency and sustainable use of indigenous renewable energy resources in foreign countries to reduce the generation of greenhouse gases.

(Pub. L. 102-486, title XII, §1209, Oct. 24, 1992, 106 Stat. 2964.)

**§ 13316. Innovative renewable energy technology transfer program**

**(a) Establishment of program**

The Secretary, through the Agency for International Development, and in consultation with the other members of 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 renewable energy 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 ef-

fect. 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 renewable 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 renewable energy technologies, including services related thereto, to those countries that have a need for developmentally sound facilities to provide energy derived from renewable resources;

(4) develop markets for United States renewable energy technologies to be utilized in meeting 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 that have been developed or demonstrated in the United States through publicly or privately funded demonstration programs;

(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 renewable energy technology projects in foreign countries;

(8) assist foreign countries in meeting their energy needs through the use of renewable energy in an environmentally acceptable manner, consistent with sustainable development policies; and

(9) 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, 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 utilizing United States renewable energy technologies,

and services related thereto, in developing 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-United States funding that is available to the project; and

(B) utilized to assist United States firms in the development of innovative financing packages for renewable energy technology projects that utilize other financial assistance programs available through the Federal Government.

(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 renewable energy technology. 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 renewable energy technology, including services related thereto, 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 working group, shall—

(1) establish eligibility criteria for host countries;

(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) 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 stated in section 13311(b)<sup>1</sup> of this title;

(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 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 coun-

<sup>1</sup> So in original. Probably should be section "13316(b)".

try, a selected project will meet 1 or more of the following criteria:

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

(B) It will make greater use of indigenous renewable energy resources.

(C) 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.

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

**(i) United States-Asia Environmental Partnership**

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

**(j) 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.

**(k) Reports 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 renewable energy technologies into foreign countries.

**(l) 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 renewable 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.

(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.

**(m) 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.

(Pub. L. 102-486, title XII, §1211, Oct. 24, 1992, 106 Stat. 2965.)

**§ 13317. Renewable energy production incentive**

**(a) Incentive payments**

(1) For electric energy generated and sold by a qualified renewable energy facility during the incentive period, the Secretary shall make, subject to the availability of appropriations, incentive payments to the owner or operator of such facility.

(2) The amount of such payment made to any such owner or operator shall be as determined under subsection (e) of this section.

(3) Payments under this section may only be made upon receipt by the Secretary of an incentive payment application which establishes that the applicant is eligible to receive such payment.

(4)(A) Subject to subparagraph (B), if there are insufficient appropriations to make full payments for electric production from all qualified renewable energy facilities for a fiscal year, the Secretary shall assign—

(i) 60 percent of appropriated funds for the fiscal year to facilities that use solar, wind, ocean (including tidal, wave, current, and thermal), geothermal, or closed-loop (dedicated energy crops) biomass technologies to generate electricity; and

(ii) 40 percent of appropriated funds for the fiscal year to other projects.

(B) After submitting to Congress an explanation of the reasons for the alteration, the Secretary may alter the percentage requirements of subparagraph (A).

**(b) Qualified renewable energy facility**

For purposes of this section, a qualified renewable energy facility is a facility which is owned by a not-for-profit electric cooperative, a public utility described in section 115 of title 26, a State, Commonwealth, territory, or possession of the United States, or the District of Columbia, or a political subdivision thereof, an Indian tribal government or subdivision thereof, or a Native Corporation (as defined in section 1602 of title 43), and which generates electric energy for sale in, or affecting, interstate commerce using solar, wind, biomass, landfill gas, livestock methane, ocean (including tidal, wave, current, and thermal), or geothermal energy, except that—

(1) the burning of municipal solid waste shall not be treated as using biomass energy; and

(2) geothermal energy shall not include energy produced from a dry steam geothermal reservoir which has—

(A) no mobile liquid in its natural state;

(B) steam quality of 95 percent water; and

(C) an enthalpy for the total produced fluid greater than or equal to 1200 Btu/lb (British thermal units per pound).

**(c) Eligibility window**

Payments may be made under this section only for electricity generated from a qualified

renewable energy facility first used before October 1, 2016.

**(d) Payment period**

A qualified renewable energy facility may receive payments under this section for a 10-fiscal year period. Such period shall begin with the fiscal year in which electricity generated from the facility is first eligible for such payments, or in which the Secretary determines that all necessary Federal and State authorizations have been obtained to begin construction of the facility.

**(e) Amount of payment**

**(1) In general**

Incentive payments made by the Secretary under this section to the owner or operator of any qualified renewable energy facility shall be based on the number of kilowatt hours of electricity generated by the facility through the use of solar, wind, biomass, landfill gas, livestock methane, ocean (including tidal, wave, current, and thermal), or geothermal energy during the payment period referred to in subsection (d) of this section. For any facility, the amount of such payment shall be 1.5 cents per kilowatt hour, adjusted as provided in paragraph (2).

**(2) Adjustments**

The amount of the payment made to any person under this subsection as provided in paragraph (1) shall be adjusted for inflation for each fiscal year beginning after calendar year 1993 in the same manner as provided in the provisions of section 29(d)(2)(B) of title 26,<sup>1</sup> except that in applying such provisions the calendar year 1993 shall be substituted for calendar year 1979.

**(f) Sunset**

No payment may be made under this section to any facility after September 30, 2026, and no payment may be made under this section to any facility after a payment has been made with respect to such facility for a 10-fiscal year period.

**(g) 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 2026, to remain available until expended.

(Pub. L. 102-486, title XII, §1212, Oct. 24, 1992, 106 Stat. 2969; Pub. L. 109-58, title II, §202, Aug. 8, 2005, 119 Stat. 651.)

REFERENCES IN TEXT

Section 29 of title 26, referred to in subsec. (e)(2), was renumbered section 45K of title 26 by Pub. L. 109-58, title XIII, §1322(a)(1), Aug. 8, 2005, 119 Stat. 1011.

AMENDMENTS

2005—Subsec. (a). Pub. L. 109-58, §202(a), designated first, second, and third sentences as pars. (1) to (3), respectively, in par. (3) struck out “and which satisfies such other requirements as the Secretary deems necessary” after “receive such payment”, struck out at end “Such application shall be in such form, and shall be submitted at such time, as the Secretary shall establish.”, and added par. (4).

Subsec. (b). Pub. L. 109-58, §202(b), in introductory provisions, substituted “a not-for-profit electric cooperative, a public utility described in section 115 of title 26, a State, Commonwealth, territory, or possession of the United States, or the District of Columbia, or a political subdivision thereof, an Indian tribal government or subdivision thereof, or a Native Corporation (as defined in section 1602 of title 43),” for “a State or any political subdivision of a State (or an agency, authority, or instrumentality of a State or a political subdivision), by any corporation or association which is wholly owned, directly or indirectly, by one or more of the foregoing, or by a nonprofit electrical cooperative” and inserted “landfill gas, livestock methane, ocean (including tidal, wave, current, and thermal),” after “wind, biomass.”

Subsec. (c). Pub. L. 109-58, §202(c), substituted “before October 1, 2016” for “during the 10-fiscal year period beginning with the first full fiscal year occurring after October 24, 1992”.

Subsec. (d). Pub. L. 109-58, §202(d), inserted “, or in which the Secretary determines that all necessary Federal and State authorizations have been obtained to begin construction of the facility” after “eligible for such payments”.

Subsec. (e)(1). Pub. L. 109-58, §202(e), inserted “landfill gas, livestock methane, ocean (including tidal, wave, current, and thermal),” after “wind, biomass.”

Subsec. (f). Pub. L. 109-58, §202(f), substituted “September 30, 2026” for “the expiration of the 20-fiscal year period beginning with the first full fiscal year occurring after October 24, 1992”.

Subsec. (g). Pub. L. 109-58, §202(g), added subsec. (g) and struck out heading and text of former subsec. (g). Text read as follows: “There are authorized to be appropriated to the Secretary for fiscal years 1993, 1994, and 1995 such sums as may be necessary to carry out the purposes of this section.”

SUBCHAPTER VI—COAL

PART A—RESEARCH, DEVELOPMENT,  
DEMONSTRATION, AND COMMERCIAL APPLICATION

**§ 13331. Coal research, development, demonstration, and commercial application programs**

**(a) Establishment**

The Secretary shall, in accordance with section<sup>1</sup> 13541 and 13542 of this title, conduct programs for research, development, demonstration, and commercial application on coal-based technologies. Such research, development, demonstration, and commercial application programs shall include the programs established under this part, and shall have the goals and objectives of—

- (1) ensuring a reliable electricity supply;
- (2) complying with applicable environmental requirements;
- (3) achieving the control of sulfur oxides, oxides of nitrogen, air toxics, solid and liquid wastes, greenhouse gases, or other emissions resulting from coal use or conversion at levels of proficiency greater than or equal to applicable currently available commercial technology;
- (4) achieving the cost competitive conversion of coal into energy forms usable in the transportation sector;
- (5) demonstrating the conversion of coal to synthetic gaseous, liquid, and solid fuels;
- (6) demonstrating, in cooperation with other Federal and State agencies, the use of coal-de-

<sup>1</sup> See References in Text note below.

<sup>1</sup> So in original. Probably should be “sections”.