duction of a product or the providing of a service; $^{\rm 1}$

(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.

(Pub. L. 101-218, §3, Dec. 11, 1989, 103 Stat. 1859; Pub. L. 102-486, title XII, §1202(d)(4), Oct. 24, 1992, 106 Stat. 2960.)

Editorial Notes

References in Text

This chapter, referred to in introductory provisions and pars. (1) and (4), was in the original "this Act", meaning Pub. L. 101-218, Dec. 11, 1989, 103 Stat. 1859, known as the Renewable Energy and Energy Efficiency Technology Competitiveness Act of 1989, which is classified principally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 12001 of this title and Tables.

The Plant Variety Protection Act, referred to in par. (1), is Pub. L. 91-577, Dec. 24, 1970, 84 Stat. 1542, as amended, which is classified principally to chapter 57 (§2321 et seq.) of Title 7, Agriculture. For complete classification of this Act to the Code, see Short Title note set out under section 2321 of Title 7 and Tables.

Amendments

1992-Pars. (2) to (5). Pub. L. 102-486 redesignated pars. (3) to (5) as (2) to (4), respectively, in par. (4) substituted "any demonstration and commercial application project" for "any joint venture" and "in the demonstration and commercial application project;" for "in the venture; and", added par. (5), and struck out former par. (2) which read as follows: "'joint venture' means any agreement entered into under this chapter 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 agreements, or cooperative agreements as those terms are used in sections 6303, 6304, and 6305 of title 31;".

§12003. National goals and multi-year funding for Federal alcohol from biomass and other technology programs

(a) National goals

The following are declared to be the national goals for the alcohol from biomass and other energy technology programs being carried out by the Secretary:

(1) Alcohol from biomass

(A) In general, the goal of the Alcohol From Biomass Program shall be to advance research and development to a point where alcohol from biomass technology is cost-competitive with conventional hydrocarbon transportation fuels, and to promote the integration of this technology into the transportation fuel sector of the economy.

(B)(i) Specific goals for producing ethanol from biomass shall be to—

(I) reduce the cost of alcohol to 70 cents per gallon;

(II) improve the overall biomass carbohydrate conversion efficiency to 91 percent; (III) reduce the capital cost component of

the cost of alcohol to 23 cents per gallon; and (IV) reduce the operating and maintenance

component of the cost of alcohol to 47 cents per gallon.

(ii) Specific goals for producing methanol from biomass shall be to—

 $\left(I\right)$ reduce the cost of alcohol to 47 cents per gallon; and

(II) reduce the capital component of the cost of alcohol to 16 cents per gallon.

(2) Other technologies

The Secretary shall submit to the Congress, as part of the first report submitted under section 12006 of this title, recommendations for specific cost goals and other pertinent goals for 1995 for Department of Energy research, development, and demonstration programs in Biofuels Energy Systems, Biodiesel Energy Systems, Hydrogen Energy Systems, Solar Buildings Energy Systems, Marine Energy Systems, Geothermal Energy Systems, Low-Head Hydro, and Energy Systems.

(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 12006 of this title, of the reason for the determination and provide an amended goal that is consistent with the purpose stated in section 12001(b) of this title.

(c) Authorizations

There are authorized to be appropriated to the Secretary for the following renewable energy research, development, and demonstration programs: the Biofuels Energy Systems Program, the Hydrogen Energy Systems Program, the Solar Buildings Energy Systems Program, the Marine 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 \$19,000,000 shall be available for the Geothermal Energy Systems Program; and

(B) not to exceed \$4,000,000 shall be available for the Hydrogen Energy Systems Program; and

(2) not to exceed \$121,000,000 for fiscal year 1992, of which—

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

(B) not to exceed \$5,000,000 shall be available for the Hydrogen Energy Systems Program.

Each of the President's annual budget requests submitted to Congress after December 11, 1989, shall include as separate line items each of the categories of renewable energy programs described in this subsection.

(Pub. L. 101–218, §4, Dec. 11, 1989, 103 Stat. 1860; Pub. L. 102–486, title XII, §1202(b), title XXI, §2125(1)–(3), Oct. 24, 1992, 106 Stat. 2958, 3085; Pub.

¹So in original. Probably should be ": and".

L. 116–260, div. Z, title III, 3006(a)(1), Dec. 27, 2020, 134 Stat. 2511.)

Editorial Notes

Amendments

2020—Pub. L. 116–260, \$3006(a)(1)(A), substituted "alcohol from biomass and other technology" for "wind, photovoltaics, and solar thermal" in section catchline.

Subsec. (a). Pub. L. 116–260, 3006(a)(1)(B)(ii)-(iv), redesignated pars. (4) and (5) as (1) and (2), respectively, in par. (2), as redesignated, substituted "Marine" for "Ocean", and struck out former pars. (1) to (3) which related to national goals for wind energy, photovoltaic energy, and solar thermal energy programs, respectively.

Pub. L. 116-260, §3006(a)(1)(B)(i), substituted "alcohol from biomass and other energy technology" for "wind, photovoltaics, and solar thermal energy" in introductory provisions.

Subsec. (c). Pub. L. 116-260, §3006(a)(1)(C)(i), in introductory provisions, struck out "the Wind Energy Research Program, the Photovoltaic Energy Systems Program, the Solar Thermal Energy Systems Program," after "demonstration programs:" and substituted "Marine" for "Ocean".

Subsec. (c)(1). Pub. L. 116–260, 3006(a)(1)(C)(ii), redesignated subpars. (B) and (C) as (A) and (B), respectively, and struck out former subpar. (A) which read as follows: "not to exceed 339,000,000 shall be available for the Photovoltaic Energy Systems Program;".

Subsec. (c)(2). Pub. L. 116-260, §3006(a)(1)(C)(iii), redesignated subpars. (B) and (C) as (A) and (B), respectively, and struck out form subpar. (A) which read as follows: "not to exceed \$40,000,000 shall be available for the Photovoltaic Energy Systems Program;".

1992—Subsec. (a)(4), (5). Pub. L. 102–486, §1202(b)(1), added par. (4), redesignated former par. (4) as (5), and inserted "Biodiesel Energy Systems," after "Biofuels Energy Systems,".

Subsec. (c)(3). Pub. L. 102-486, §2125(1)-(3), struck out par. (3) which read as follows: "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."

§12004. 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; and

(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.

(Pub. L. 101-218, §5, Dec. 11, 1989, 103 Stat. 1862; Pub. L. 102-486, title XXI, §2125(4)-(6), Oct. 24, 1992, 106 Stat. 3085.)

Editorial Notes

AMENDMENTS

1992—Par. (3). Pub. L. 102–486 struck out par. (3) which read as follows: "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.''

§ 12005. Demonstration and commercial application projects

(a) Purpose

The purpose of this section is to direct the Secretary to further the commercialization of renewable energy and energy efficiency technologies through a five-year program.

(b) Demonstration and commercial application projects

(1) Establishment

(A) The Secretary shall solicit proposals for demonstration and commercial application projects for renewable energy and energy efficiency technologies pursuant to subsection (c). Such projects may include projects for—

(i) the production and sale of electricity, thermal energy, or other forms of energy using a renewable energy technology;

(ii) increasing the efficiency of energy use; and

(iii) improvements in, or expansion of, facilities for the manufacture of renewable energy or energy efficiency technologies.

(B) REQUIREMENTS.—Each project selected under this section shall include at least one for-profit business. Activities supported under this section shall be performed in the United States. Each project under this section shall require the manufacture and reproduction substantially within the United States for commercial sale of any invention or product that may result from the project.

(2) Forms of financial assistance

(A) In supporting projects selected under subsection (c), the Secretary may choose from among the forms of agreements described in section 13541 of this title.

(B) In supporting projects selected under subsection (c), the Secretary may also enter into agreements with private lenders to pay a portion of the interest on loans made for such projects.

(3) Cost sharing

Cost sharing for projects under this section shall be conducted according to the procedures described in section 13542(b) and (c) of this title.

(4) Advisory Committee

(A) The Secretary shall establish an Advisory Committee on Demonstration and Commercial Application of Renewable Energy and Energy Efficiency Technologies (in this chapter referred to as the "Advisory Committee") to advise the Secretary on the development of the solicitation and evaluation criteria for projects under this section, and on otherwise carrying out his responsibilities under this