

(5) Single-purpose research facility

The term “single-purpose research facility” means—

- (A) any of the primarily single-purpose entities owned by the Department; or
- (B) any other organization of the Department designated by the Secretary.

(6) University

The term “university” has the meaning given the term “institution of higher education” in section 1001 of title 20.

(Pub. L. 109–58, title IX, §903, Aug. 8, 2005, 119 Stat. 856.)

REFERENCES IN TEXT

This subchapter, referred to in text, was in the original “this title”, meaning title IX of Pub. L. 109–58, Aug. 8, 2005, 119 Stat. 856, which enacted this subchapter, amended sections 8101 and 8102 of Title 7, Agriculture, and section 5523 of Title 15, Commerce and Trade, enacted provisions set out as notes under section 15801 of this title, section 8102 of Title 7, and section 2001 of Title 30, Mineral Lands and Mining, and amended provisions set out as notes under section 8101 of Title 7 and section 1902 of Title 30. For complete classification of title IX to the Code, see Short Title note set out under section 15801 of this title and Tables.

The Department of Energy Organization Act, referred to in par. (1), is Pub. L. 95–91, Aug. 4, 1977, 91 Stat. 565, as amended, which is classified principally to chapter 84 (§7101 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 7101 of this title and Tables.

PART A—ENERGY EFFICIENCY

§ 16191. Energy efficiency**(a) In general****(1) Objectives**

The Secretary shall conduct programs of energy efficiency research, development, demonstration, and commercial application, including activities described in this part. Such programs shall take into consideration the following objectives:

- (A) Increasing the energy efficiency of vehicles, buildings, and industrial processes.
- (B) Reducing the demand of the United States for energy, especially energy from foreign sources.
- (C) Reducing the cost of energy and making the economy more efficient and competitive.
- (D) Improving the energy security of the United States.
- (E) Reducing the environmental impact of energy-related activities.

(2) Programs

Programs under this part shall include research, development, demonstration, and commercial application of—

- (A) advanced, cost-effective technologies to improve the energy efficiency and environmental performance of vehicles, including—
 - (i) hybrid and electric propulsion systems;
 - (ii) plug-in hybrid systems;
 - (iii) advanced combustion engines;
 - (iv) weight and drag reduction technologies;

- (v) whole-vehicle design optimization; and
- (vi) advanced drive trains;

(B) cost-effective technologies, for new construction and retrofit, to improve the energy efficiency and environmental performance of buildings, using a whole-buildings approach, including onsite renewable energy generation;

(C) advanced technologies to improve the energy efficiency, environmental performance, and process efficiency of energy-intensive and waste-intensive industries;

(D) advanced control devices to improve the energy efficiency of electric motors, including those used in industrial processes, heating, ventilation, and cooling; and

(E) technologies to improve the energy efficiency of appliances and mechanical systems for buildings in cold climates, including combined heat and power units and increased use of renewable resources, including fuel.

(b) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out energy efficiency and conservation research, development, demonstration, and commercial application activities, including activities authorized under this part—

- (1) \$783,000,000 for fiscal year 2007;
- (2) \$865,000,000 for fiscal year 2008; and
- (3) \$952,000,000 for fiscal year 2009.

(c) Allocations

From amounts authorized under subsection (b), the following sums are authorized:

- (1) For activities under section 16192 of this title, \$50,000,000 for each of fiscal years 2007 through 2009.
- (2) For activities under section 16195 of this title, \$7,000,000 for each of fiscal years 2007 through 2009.
- (3) For activities under subsection (a)(2)(A)—
 - (A) \$200,000,000 for fiscal year 2007;
 - (B) \$270,000,000 for fiscal year 2008; and
 - (C) \$310,000,000 for fiscal year 2009.
- (4) For activities under subsection (a)(2)(D), \$2,000,000 for each of fiscal years 2007 and 2008.

(d) Extended authorization

There are authorized to be appropriated to the Secretary to carry out section 16192 of this title \$50,000,000 for each of fiscal years 2010 through 2013.

(e) Limitations

None of the funds authorized to be appropriated under this section may be used for—

- (1) the issuance or implementation of energy efficiency regulations;
- (2) the weatherization program established under part A of title IV of the Energy Conservation and Production Act (42 U.S.C. 6861 et seq.);
- (3) a State energy conservation plan established under part D of title III of the Energy Policy and Conservation Act (42 U.S.C. 6321 et seq.); or
- (4) a Federal energy management measure carried out under part 3 of title V of the Na-

tional Energy Conservation Policy Act (42 U.S.C. 8251 et seq.).

(Pub. L. 109-58, title IX, §911, Aug. 8, 2005, 119 Stat. 857; Pub. L. 110-140, title III, §315(a), Dec. 19, 2007, 121 Stat. 1571.)

REFERENCES IN TEXT

The Energy Conservation and Production Act, referred to in subsec. (e)(2), is Pub. L. 94-385, Aug. 14, 1976, 90 Stat. 1125, as amended. Part A of title IV of the Act is classified generally to part A (§6861 et seq.) of subchapter III of chapter 81 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 6801 of this title and Tables.

The Energy Policy and Conservation Act, referred to in subsec. (e)(3), is Pub. L. 94-163, Dec. 22, 1975, 89 Stat. 871, as amended. Part D of title III of the Act is classified generally to part B (§6321 et seq.) of subchapter III of chapter 77 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 6201 of this title and Tables.

The National Energy Conservation Policy Act, referred to in subsec. (e)(4), is Pub. L. 95-619, Nov. 9, 1978, 92 Stat. 3206, as amended. Part 3 of title V of the Act is classified generally to part B (§8251 et seq.) of subchapter III of chapter 91 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 8201 of this title and Tables.

AMENDMENTS

2007—Subsec. (a)(2)(E). Pub. L. 110-140 added subpar. (E).

EFFECTIVE DATE OF 2007 AMENDMENT

Amendment by Pub. L. 110-140 effective on the date that is 1 day after Dec. 19, 2007, see section 1601 of Pub. L. 110-140, set out as an Effective Date note under section 1824 of Title 2, The Congress.

§ 16192. Next Generation Lighting Initiative

(a) Definitions

In this section:

(1) Advanced solid-state lighting

The term “advanced solid-state lighting” means a semiconducting device package and delivery system that produces white light using externally applied voltage.

(2) Industry Alliance

The term “Industry Alliance” means an entity selected by the Secretary under subsection (d).

(3) Initiative

The term “Initiative” means the Next Generation Lighting Initiative carried out under this section.

(4) Research

The term “research” includes research on the technologies, materials, and manufacturing processes required for white light emitting diodes.

(5) White light emitting diode

The term “white light emitting diode” means a semiconducting package, using either organic or inorganic materials, that produces white light using externally applied voltage.

(b) Initiative

The Secretary shall carry out a Next Generation Lighting Initiative in accordance with this section to support research, development, dem-

onstration, and commercial application activities related to advanced solid-state lighting technologies based on white light emitting diodes.

(c) Objectives

The objectives of the Initiative shall be to develop advanced solid-state organic and inorganic lighting technologies based on white light emitting diodes that, compared to incandescent and fluorescent lighting technologies, are longer lasting, are more energy-efficient and cost-competitive, and have less environmental impact.

(d) Industry Alliance

Not later than 90 days after August 8, 2005, the Secretary shall competitively select an Industry Alliance to represent participants who are private, for-profit firms, open to large and small businesses, that, as a group, are broadly representative of United States solid-state lighting research, development, infrastructure, and manufacturing expertise as a whole.

(e) Research

(1) Grants

The Secretary shall carry out the research activities of the Initiative through competitively awarded grants to—

- (A) researchers, including Industry Alliance participants;
- (B) small businesses;
- (C) National Laboratories; and
- (D) institutions of higher education.

(2) Industry alliance

The Secretary shall annually solicit from the Industry Alliance—

- (A) comments to identify solid-state lighting technology needs;
- (B) an assessment of the progress of the research activities of the Initiative; and
- (C) assistance in annually updating solid-state lighting technology roadmaps.

(3) Availability to public

The information and roadmaps under paragraph (2) shall be available to the public.

(f) Development, demonstration, and commercial application

(1) In general

The Secretary shall carry out a development, demonstration, and commercial application program for the Initiative through competitively selected awards.

(2) Preference

In making the awards, the Secretary may give preference to participants in the Industry Alliance.

(g) Cost sharing

In carrying out this section, the Secretary shall require cost sharing in accordance with section 16352 of this title.

(h) Intellectual property

The Secretary may require (in accordance with section 202(a)(ii) of title 35, section 2182 of this title, and section 5908 of this title) that for any new invention developed under subsection (e)—