(1) the basic research program under subsection (f) $50,000,000 for each of fiscal years 2009 through 2018;

(2) the applied research program under subsection (g) $80,000,000 for each of fiscal years 2009 through 2018; and;[2]

(3) the energy storage research center program under subsection (h) $100,000,000 for each of fiscal years 2009 through 2018;

(4) the energy storage systems demonstration program under subsection (i) $30,000,000 for each of fiscal years 2009 through 2018;

(5) the vehicle energy storage demonstration program under subsection (j) $30,000,000 for each of fiscal years 2009 through 2018; and

(6) the secondary applications and disposal of electric drive vehicle batteries program under subsection (k) $5,000,000 for each of fiscal years 2009 through 2018.

(Pub. L. 110–140, title VI, § 641, Dec. 19, 2007, 121 Stat. 1688.)

REFERENCES IN TEXT

The Federal Advisory Committee Act, referred to in subsec. (e)(3)(B), is Pub. L. 92–463, Oct. 6, 1972, 86 Stat. 770, which is set out in the Appendix to Title 5, Government Organization and Employees.

PART E—MISCELLANEOUS PROVISIONS

§ 17241. Lightweight materials research and development

(a) In general

As soon as practicable after December 19, 2007, the Secretary of Energy shall establish a program to determine ways in which the weight of motor vehicles could be reduced to improve fuel efficiency without compromising passenger safety by conducting research, development, and demonstration relating to—

(1) the development of new materials (including cast metal composite materials formed by autocombustion synthesis) and material processes that yield a higher strength-to-weight ratio or other properties that reduce vehicle weight; and

(2) reducing the cost of—

(A) lightweight materials (including high-strength steel alloys, aluminum, magnesium, metal composites, and carbon fiber reinforced polymer composites) with the properties required for construction of lighter-weight vehicles; and

(B) materials processing, automated manufacturing, joining, and recycling lightweight materials for high-volume applications.

(b) Authorization of appropriations

There is authorized to be appropriated to carry out this section $80,000,000 for the period of fiscal years 2008 through 2012.

(Pub. L. 110–140, title VI, § 651, Dec. 19, 2007, 121 Stat. 1694.)

§ 17242. Commercial insulation demonstration program

(a) Definitions

In this section:

[2] So in original.

(1) Advanced insulation

The term ''advanced insulation'' means insulation that has an R value of not less than R35 per inch.

(2) Covered refrigeration unit

The term ''covered refrigeration unit'' means any—

(A) commercial refrigerated truck;

(B) commercial refrigerated trailer; or

(C) commercial refrigerator, freezer, or refrigerator-freezer described in section 6313(c) of this title.

(b) Report

Not later than 90 days after December 19, 2007, the Secretary shall submit to Congress a report that includes an evaluation of—

(1) the state of technological advancement of advanced insulation; and

(2) the projected amount of cost savings that would be generated by implementing advanced insulation into covered refrigeration units.

(c) Demonstration program

(1) Establishment

If the Secretary determines in the report described in subsection (b) that the implementation of advanced insulation into covered refrigeration units would generate an economically justifiable amount of cost savings, the Secretary, in cooperation with manufacturers of covered refrigeration units, shall establish a demonstration program under which the Secretary shall demonstrate the cost-effectiveness of advanced insulation.

(2) Disclosure

The Secretary may, for a period of up to 5 years after an award is granted under the demonstration program, exempt from mandatory disclosure under section 552 of title 5 (popularly known as the Freedom of Information Act) information that the Secretary determines would be a privileged or confidential trade secret or commercial or financial information under subsection (b)(4) of such section if the information had been obtained from a non-Government party.

(3) Cost-sharing

Section 16352 of this title shall apply to any project carried out under this subsection.

(d) Authorization of appropriations

There is authorized to be appropriated to carry out this section $8,000,000 for the period of fiscal years 2009 through 2014.

(Pub. L. 110–140, title VI, § 652, Dec. 19, 2007, 121 Stat. 1694.)

§ 17243. Bright Tomorrow Lighting Prizes

(a) Establishment

Not later than 1 year after December 19, 2007, as part of the program carried out under section 16396 of this title, the Secretary shall establish and award Bright Tomorrow Lighting Prizes for solid state lighting in accordance with this section.

(b) Prize specifications

(1) 60-Watt Incandescent Replacement Lamp Prize

The Secretary shall award a 60-Watt Incandescent Replacement Lamp Prize to an entrant that produces a solid-state-light package simultaneously capable of—

(A) producing a luminous flux greater than 900 lumens;

(B) consuming less than or equal to 10 watts;

(C) having an efficiency greater than 90 lumens per watt;

(D) having a color rendering index greater than 90;

(E) having a correlated color temperature of not less than 2,750, and not more than 3,000, degrees Kelvin;

(F) having 70 percent of the lumen value under subparagraph (A) exceeding 25,000 hours under typical conditions expected in residential use;

(G) having a light distribution pattern similar to a soft 60-watt incandescent A19 bulb;

(H) having a size and shape that fits within the maximum dimensions of an A19 bulb in accordance with American National Standards Institute standard C78.20–2003, figure C78.20–211;

(I) using a single contact medium screw socket; and

(J) mass production for a competitive sales commercial market satisfied by producing commercially accepted quality control lots of such units equal to or exceeding the criteria described in subparagraphs (A) through (I).

(2) PAR Type 38 Halogen Replacement Lamp Prize

The Secretary shall award a Parabolic Aluminized Reflector Type 38 Halogen Replacement Lamp Prize (referred to in this section as the ''PAR Type 38 Halogen Replacement Lamp Prize'') to an entrant that produces a solid-state-light package simultaneously capable of—

(A) producing a luminous flux greater than or equal to 1,350 lumens;

(B) consuming less than or equal to 11 watts;

(C) having an efficiency greater than 123 lumens per watt;

(D) having a color rendering index greater than or equal to 90;

(E) having a correlated color coordinate temperature of not less than 2,750, and not more than 3,000, degrees Kelvin;

(F) having 70 percent of the lumen value under subparagraph (A) exceeding 25,000 hours under typical conditions expected in residential use;

(G) having a light distribution pattern similar to a PAR 38 halogen lamp;

(H) having a size and shape that fits within the maximum dimensions of a PAR 38 halogen lamp in accordance with American National Standards Institute standard C78–21–2003, figure C78.21–238;

(I) using a single contact medium screw socket; and

(J) mass production for a competitive sales commercial market satisfied by producing commercially accepted quality control lots of such units equal to or exceeding the criteria described in subparagraphs (A) through (I).

(3) Twenty-First Century Lamp Prize

The Secretary shall award a Twenty-First Century Lamp Prize to an entrant that produces a solid-state-light-light[1] capable of—

(A) producing a light output greater than 1,200 lumens;

(B) having an efficiency greater than 150 lumens per watt;

(C) having a color rendering index greater than 90;

(D) having a color coordinate temperature between 2,800 and 3,000 degrees Kelvin; and

(E) having a lifetime exceeding 25,000 hours.

(c) Private funds

(1) In general

Subject to paragraph (2), and notwithstanding section 3302 of title 31, the Secretary may accept, retain, and use funds contributed by any person, government entity, or organization for purposes of carrying out this subsection—

(A) without further appropriation; and

(B) without fiscal year limitation.

(2) Prize competition

A private source of funding may not participate in the competition for prizes awarded under this section.

(d) Technical review

The Secretary shall establish a technical review committee composed of non-Federal officers to review entrant data submitted under this section to determine whether the data meets the prize specifications described in subsection (b).

(e) Third party administration

The Secretary may competitively select a third party to administer awards under this section.

(f) Eligibility for prizes

To be eligible to be awarded a prize under this section—

(1) in the case of a private entity, the entity shall be incorporated in and maintain a primary place of business in the United States; and

(2) in the case of an individual (whether participating as a single individual or in a group), the individual shall be a citizen or lawful permanent resident of the United States.

(g) Award amounts

Subject to the availability of funds to carry out this section, the amount of—

(1) the 60-Watt Incandescent Replacement Lamp Prize described in subsection (b)(1) shall be $10,000,000;

(2) the PAR Type 38 Halogen Replacement Lamp Prize described in subsection (b)(2) shall be $5,000,000; and

[1] So in original.

(3) the Twenty-First Century Lamp Prize described in subsection (b)(3) shall be $5,000,000.

(h) Federal procurement of solid-state-lights

(1) 60-watt incandescent replacement

Subject to paragraph (3), as soon as practicable after the successful award of the 60-Watt Incandescent Replacement Lamp Prize under subsection (b)(1), the Secretary (in consultation with the Administrator of General Services) shall develop governmentwide Federal purchase guidelines with a goal of replacing the use of 60-watt incandescent lamps in Federal Government buildings with a solid-state-light package described in subsection (b)(1) by not later than the date that is 5 years after the date the award is made.

(2) PAR 38 halogen replacement lamp replacement [1]

Subject to paragraph (3), as soon as practicable after the successful award of the PAR Type 38 Halogen Replacement Lamp Prize under subsection (b)(2), the Secretary (in consultation with the Administrator of General Services) shall develop governmentwide Federal purchase guidelines with the goal of replacing the use of PAR 38 halogen lamps in Federal Government buildings with a solid-state-light package described in subsection (b)(2) by not later than the date that is 5 years after the date the award is made.

(3) Waivers

(A) In general

The Secretary or the Administrator of General Services may waive the application of paragraph (1) or (2) if the Secretary or Administrator determines that the return on investment from the purchase of a solid-state-light package described in paragraph (1) or (2) of subsection (b), respectively, is cost prohibitive.

(B) Report of waiver

If the Secretary or Administrator waives the application of paragraph (1) or (2), the Secretary or Administrator, respectively, shall submit to Congress an annual report that describes the waiver and provides a detailed justification for the waiver.

(i) Report

Not later than 2 years after December 19, 2007, and annually thereafter, the Administrator of General Services shall submit to the Energy Information Agency a report describing the quantity, type, and cost of each lighting product purchased by the Federal Government.

(j) Bright Tomorrow Lighting Award Fund

(1) Establishment

There is established in the United States Treasury a Bright Tomorrow Lighting permanent fund without fiscal year limitation to award prizes under paragraphs (1), (2), and (3) of subsection (b).

(2) Sources of funding

The fund established under paragraph (1) shall accept—

(A) fiscal year appropriations; and

(B) private contributions authorized under subsection (c).

(k) Authorization of appropriations

There are authorized to be appropriated such sums as are necessary to carry out this section.

(Pub. L. 110–140, title VI, § 655, Dec. 19, 2007, 121 Stat. 1700.)

§ 17244. Renewable Energy Innovation Manufacturing Partnership

(a) Establishment

The Secretary shall carry out a program, to be known as the Renewable Energy Innovation Manufacturing Partnership Program (referred to in this section as the ''Program''), to make assistance awards to eligible entities for use in carrying out research, development, and demonstration relating to the manufacturing of renewable energy technologies.

(b) Solicitation

To carry out the Program, the Secretary shall annually conduct a competitive solicitation for assistance awards for an eligible project described in subsection (e).

(c) Program purposes

The purposes of the Program are—

(1) to develop, or aid in the development of, advanced manufacturing processes, materials, and infrastructure;

(2) to increase the domestic production of renewable energy technology and components; and

(3) to better coordinate Federal, State, and private resources to meet regional and national renewable energy goals through advanced manufacturing partnerships.

(d) Eligible entities

An entity shall be eligible to receive an assistance award under the Program to carry out an eligible project described in subsection (e) if the entity is composed of—

(1) 1 or more public or private nonprofit institutions or national laboratories engaged in research, development, demonstration, or technology transfer, that would participate substantially in the project; and

(2) 1 or more private entities engaged in the manufacturing or development of renewable energy system components (including solar energy, wind energy, biomass, geothermal energy, energy storage, or fuel cells).

(e) Eligible projects

An eligible entity may use an assistance award provided under this section to carry out a project relating to—

(1) the conduct of studies of market opportunities for component manufacturing of renewable energy systems;

(2) the conduct of multiyear applied research, development, demonstration, and deployment projects for advanced manufacturing processes, materials, and infrastructure for renewable energy systems; and

(3) other similar ventures, as approved by the Secretary, that promote advanced manufacturing of renewable technologies.