

(B) understanding the technical and economic characteristics of energy storage technology or microgrid projects;

(C) understanding financing alternatives;

(D) permitting and siting issues;

(E) obtaining case studies of similar and successful energy storage technology or microgrid projects;

(F) reviewing and obtaining computer software for assessment, design, and operation and maintenance of energy storage technology or microgrid systems; and

(G) understanding and utilizing the reliability and resiliency benefits of energy storage technology and microgrid projects.

**(2) External contracts**

In carrying out paragraph (1), the Secretary may enter into contracts with third-party experts, including engineering, finance, and insurance experts, to provide technical assistance to eligible entities relating to the activities described in such paragraph, or other relevant activities, as determined by the Secretary.

**(f) Authorization of appropriations**

**(1) In general**

There is authorized to be appropriated to carry out this section \$15,000,000 for each of fiscal years 2021 through 2025.

**(2) Administrative costs**

Not more than 5 percent of the amount appropriated under paragraph (1) for each fiscal year shall be used for administrative expenses.

(Pub. L. 116-260, div. Z, title III, §3202, Dec. 27, 2020, 134 Stat. 2525.)

**Editorial Notes**

**CODIFICATION**

Section was enacted as part of the Energy Act of 2020, and not as part of the Energy Independence and Security Act of 2007 which comprises this chapter.

**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.)

**Statutory Notes and Related Subsidiaries**

**EFFECTIVE DATE**

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

**§ 17242. Commercial insulation demonstration program**

**(a) Definitions**

In this section:

**(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.)

**Statutory Notes and Related Subsidiaries**

## EFFECTIVE DATE

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

**§ 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<sup>1</sup> 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

<sup>1</sup> So in original.