

cifically for the purposes of subsection (b), shall—

(A) consist of interested parties that have expertise in energy efficiency and in the development, operation, and functionality of computer data centers, information technology equipment, and software, as well as representatives of hardware manufacturers, data center operators, and facility managers;

(B) obtain and address input from Department of Energy National Laboratories or any college, university, research institution, industry association, company, or public interest group with applicable expertise in any of the areas listed in paragraph (1);

(C) follow commonly accepted procedures for the development of specifications and accredited standards development processes;

(D) have a mission to develop and promote energy efficiency for data centers and information technology; and

(E) have the primary responsibility to consult in the development and publishing of the information, measurements, and benchmarks described in subsection (b) and transmission of the information to the Secretary and the Administrator for consideration under subsection (d).

**(d) Measurements and specifications**

**(1) In general**

The Secretary and the Administrator shall consider the specifications, measurements, and benchmarks described in subsection (b) for use by the Federal Energy Management Program, the Energy Star Program, and other efficiency programs of the Department of Energy and Environmental Protection Agency, respectively.

**(2) Rejections**

If the Secretary or the Administrator rejects 1 or more specifications, measurements, or benchmarks described in subsection (b), the rejection shall be made consistent with section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note; Public Law 104-113).

**(3) Determination of impracticability**

A determination that a specification, measurement, or benchmark described in subsection (b) is impractical may include consideration of the maximum efficiency that is technologically feasible and economically justified.

**(e) Monitoring**

The Secretary and the Administrator shall—

(1) monitor and evaluate the efforts to develop the program described in subsection (b); and

(2) not later than 3 years after December 19, 2007, make a determination as to whether the program is consistent with the objectives of subsection (b).

**(f) Alternative system**

If the Secretary and the Administrator make a determination under subsection (e) that a voluntary national information program for data

centers consistent with the objectives of subsection (b) has not been developed, the Secretary and the Administrator shall, after consultation with the National Institute of Standards and Technology and not later than 2 years after the determination, develop and implement the program under subsection (b).

**(g) Protection of proprietary information**

The Secretary, the Administrator, or the data center efficiency organization shall not disclose any proprietary information or trade secrets provided by any individual or company for the purposes of carrying out this section or the program established under this section.

(Pub. L. 110-140, title IV, § 453, Dec. 19, 2007, 121 Stat. 1637.)

REFERENCES IN TEXT

The Energy Policy and Conservation Act, referred to in subsec. (b)(2)(D)(ii), is Pub. L. 94-163, Dec. 22, 1975, 89 Stat. 871, which is classified principally to chapter 77 (§6201 et seq.) 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.

PART E—GENERAL PROVISIONS

**§ 17121. Demonstration project**

**(a) In general**

The Federal Director and the Commercial Director shall establish guidelines to implement a demonstration project to contribute to the research goals of the Office of Commercial High-Performance Green Buildings and the Office of Federal High-Performance Green Buildings.

**(b) Projects**

In accordance with guidelines established by the Federal Director and the Commercial Director under subsection (a) and the duties of the Federal Director and the Commercial Director described in this title,<sup>1</sup> the Federal Director or the Commercial Director shall carry out—

(1) for each of fiscal years 2009 through 2014, 1 demonstration project per year of green features in a Federal building selected by the Federal Director in accordance with relevant agencies and described in subsection (c)(1), that—

(A) provides for instrumentation, monitoring, and data collection related to the green features, for study of the impact of the features on overall energy use and operational costs, and for the evaluation of the information obtained through the conduct of projects and activities under this title;<sup>1</sup> and

(B) achieves the highest rating offered by the high performance green building system identified pursuant to section 17092(h) of this title;

(2) no fewer than 4 demonstration projects at 4 universities, that, as competitively selected by the Commercial Director in accordance with subsection (c)(2), have—

(A) appropriate research resources and relevant projects to meet the goals of the demonstration project established by the Office of Commercial High-Performance Green Buildings; and

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

(B) the ability—

(i) to serve as a model for high-performance green building initiatives, including research and education<sup>2</sup> by achieving the highest rating offered by the high performance green building system identified pursuant to section 17092(h) of this title;

(ii) to identify the most effective ways to use high-performance green building and landscape technologies to engage and educate undergraduate and graduate students;

(iii) to effectively implement a high-performance green building education program for students and occupants;

(iv) to demonstrate the effectiveness of various high-performance technologies, including their impacts on energy use and operational costs, in each of the 4 climatic regions of the United States described in subsection (c)(2)(B); and

(v) to explore quantifiable and nonquantifiable beneficial impacts on public health and employee and student performance;

(3) demonstration projects to evaluate replicable approaches of achieving high performance in actual building operation in various types of commercial buildings in various climates; and

(4) deployment activities to disseminate information on and encourage widespread adoption of technologies, practices, and policies to achieve zero-net-energy commercial buildings or low energy use and effective monitoring of energy use in commercial buildings.

**(c) Criteria**

**(1) Federal facilities**

With respect to the existing or proposed Federal facility at which a demonstration project under this section is conducted, the Federal facility shall—

(A) be an appropriate model for a project relating to—

(i) the effectiveness of high-performance technologies;

(ii) analysis of materials, components, systems, and emergency operations in the building, and the impact of those materials, components, and systems, including the impact on the health of building occupants;

(iii) life-cycle costing and life-cycle assessment of building materials and systems; and

(iv) location and design that promote access to the Federal facility through walking, biking, and mass transit; and

(B) possess sufficient technological and organizational adaptability.

**(2) Universities**

With respect to the 4 universities at which a demonstration project under this section is conducted—

(A) the universities should be selected, after careful review of all applications received containing the required information, as determined by the Commercial Director, based on—

(i) successful and established public-private research and development partnerships;

(ii) demonstrated capabilities to construct or renovate buildings that meet high indoor environmental quality standards;

(iii) organizational flexibility;

(iv) technological adaptability;

(v) the demonstrated capacity of at least 1 university to replicate lessons learned among nearby or sister universities, preferably by participation in groups or consortia that promote sustainability;

(vi) the demonstrated capacity of at least 1 university to have officially-adopted, institution-wide “high-performance green building” guidelines for all campus building projects; and

(vii) the demonstrated capacity of at least 1 university to have been recognized by similar institutions as a national leader in sustainability education and curriculum for students of the university; and

(B) each university shall be located in a different climatic region of the United States, each of which regions shall have, as determined by the Office of Commercial High-Performance Green Buildings—

(i) a hot, dry climate;

(ii) a hot, humid climate;

(iii) a cold climate; or

(iv) a temperate climate (including a climate with cold winters and humid summers).

**(d) Applications**

To receive a grant under subsection (b), an eligible applicant shall submit to the Federal Director or the Commercial Director an application at such time, in such manner, and containing such information as the Director may require, including a written assurance that all laborers and mechanics employed by contractors or subcontractors during construction, alteration, or repair that is financed, in whole or in part, by a grant under this section shall be paid wages at rates not less than those prevailing on similar construction in the locality, as determined by the Secretary of Labor in accordance with sections 3141 through 3144, 3146, and 3147 of title 40. The Secretary of Labor shall, with respect to the labor standards described in this subsection, have the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (5 U.S.C. App.) and section 3145 of title 40.

**(e) Report**

Not later than 1 year after December 19, 2007, and annually thereafter through September 30, 2014—

(1) the Federal Director and the Commercial Director shall submit to the Secretary a report that describes the status of the demonstration projects; and

(2) each University at which a demonstration project under this section is conducted shall submit to the Secretary a report that describes the status of the demonstration projects under this section.

**(f) Authorization of appropriations**

There is authorized to be appropriated to carry out the demonstration project described in

<sup>2</sup> So in original. A comma probably should appear.

section<sup>3</sup> (b)(1), \$10,000,000 for the period of fiscal years 2008 through 2012, and to carry out the demonstration project described in section<sup>3</sup> (b)(2), \$10,000,000 for the period of fiscal years 2008 through 2012, to remain available until expended.

(Pub. L. 110-140, title IV, § 491, Dec. 19, 2007, 121 Stat. 1649.)

#### REFERENCES IN TEXT

This title, referred to in subsec. (b), is title IV of Pub. L. 110-140, Dec. 19, 2007, 121 Stat. 1596, which enacted this subchapter, part C (§6341 et seq.) of subchapter III of chapter 77 of this title, sections 6371h-1 and 7628 of this title, and subchapter V (§2695 et seq.) of chapter 53 of Title 15, Commerce and Trade, amended sections 6832, 6834, 6862, 6872, 8253, 8254, and 12709 of this title, and enacted provisions set out as notes under sections 6834 and 6872 of this title. For complete classification of title IV to the Code, see Tables.

Reorganization Plan Numbered 14 of 1950, referred to in subsec. (d), is set out in the Appendix to Title 5, Government Organization and Employees.

### § 17122. Research and development

#### (a) Establishment

The Federal Director and the Commercial Director, jointly and in coordination with the Advisory Committee, shall—

(1)(A) survey existing research and studies relating to high-performance green buildings; and

(B) coordinate activities of common interest;

(2) develop and recommend a high-performance green building research plan that—

(A) identifies information and research needs, including the relationships between human health, occupant productivity, safety, security, and accessibility and each of—

(i) emissions from materials and products in the building;

(ii) natural day lighting;

(iii) ventilation choices and technologies;

(iv) heating, cooling, and system control choices and technologies;

(v) moisture control and mold;

(vi) maintenance, cleaning, and pest control activities;

(vii) acoustics;

(viii) access to public transportation; and

(ix) other issues relating to the health, comfort, productivity, and performance of occupants of the building;

(B) promotes the development and dissemination of high-performance green building measurement tools that, at a minimum, may be used—

(i) to monitor and assess the life-cycle performance of facilities (including demonstration projects) built as high-performance green buildings; and

(ii) to perform life-cycle assessments; and

(C) identifies and tests new and emerging technologies for high-performance green buildings;

(3) assist the budget and life-cycle costing functions of the Directors' Offices under section 17092(d) of this title;

(4) study and identify potential benefits of green buildings relating to security, natural disaster, and emergency needs of the Federal Government; and

(5) support other research initiatives determined by the Directors' Offices.

#### (b) Indoor air quality

The Federal Director, in consultation with the Administrator of the Environmental Protection Agency and the Advisory Committee, shall develop and carry out a comprehensive indoor air quality program for all Federal facilities to ensure the safety of Federal workers and facility occupants—

(1) during new construction and renovation of facilities; and

(2) in existing facilities.

(Pub. L. 110-140, title IV, § 492, Dec. 19, 2007, 121 Stat. 1651.)

### § 17123. Green Building Advisory Committee

#### (a) Establishment

Not later than 180 days after December 19, 2007, the Federal Director, in coordination with the Commercial Director, shall establish an advisory committee, to be known as the "Green Building Advisory Committee".

#### (b) Membership

##### (1) In general

The Committee shall be composed of representatives of, at a minimum—

(A) each agency referred to in section 17081(e) of this title; and

(B) other relevant agencies and entities, as determined by the Federal Director, including at least 1 representative of each of—

(i) State and local governmental green building programs;

(ii) independent green building associations or councils;

(iii) building experts, including architects, material suppliers, and construction contractors;

(iv) security advisors focusing on national security needs, natural disasters, and other dire emergency situations;

(v) public transportation industry experts; and

(vi) environmental health experts, including those with experience in children's health.

##### (2) Non-Federal members

The total number of non-Federal members on the Committee at any time shall not exceed 15.

#### (c) Meetings

The Federal Director shall establish a regular schedule of meetings for the Committee.

#### (d) Duties

The Committee shall provide advice and expertise for use by the Federal Director in carrying out the duties under this part, including such recommendations relating to Federal ac-

<sup>3</sup>So in original. Probably should be "subsection".