practices for the design and construction of separate spaces with high-performance energy efficiency measures.

(4) Publication

The Secretary shall publish the study on the website of the Department of Energy.

(Pub. L. 110–140, title IV, § 424, as added Pub. L. 114–11, title I, § 103(a), Apr. 30, 2015, 129 Stat. 183.)

§ 17085. Tenant Star program

(a) Definitions

In this section:

(1) High-performance energy efficiency measure

The term ''high-performance energy efficiency measure'' has the meaning given the term in section 17084 of this title.

(2) Separate spaces

The term ''separate spaces'' has the meaning given the term in section 17084 of this title.

(b) Tenant Star

The Administrator of the Environmental Protection Agency, in consultation with the Secretary of Energy, shall develop a voluntary program within the Energy Star program established by section 6294a of this title, which may be known as ''Tenant Star'', to promote energy efficiency in separate spaces leased by tenants or otherwise occupied within commercial buildings.

(c) Expanding survey data

The Secretary of Energy, acting through the Administrator of the Energy Information Administration, shall—

(1) collect, through each Commercial Buildings Energy Consumption Survey of the Energy Information Administration that is conducted after April 30, 2015, data on—

(A) categories of building occupancy that are known to consume significant quantities of energy, such as occupancy by data centers, trading floors, and restaurants; and

(B) other aspects of the property, building operation, or building occupancy determined by the Administrator of the Energy Information Administration, in consultation with the Administrator of the Environmental Protection Agency, to be relevant in lowering energy consumption;

(2) with respect to the first Commercial Buildings Energy Consumption Survey conducted after April 30, 2015, to the extent full compliance with the requirements of paragraph (1) is not feasible, conduct activities to develop the capability to collect such data and begin to collect such data; and

(3) make data collected under paragraphs (1) and (2) available to the public in aggregated form and provide such data, and any associated results, to the Administrator of the Environmental Protection Agency for use in accordance with subsection (d).

(d) Recognition of owners and tenants

(1) Occupancy-based recognition

Not later than 1 year after the date on which sufficient data is received pursuant to subsection (c), the Administrator of the Environmental Protection Agency shall, following an opportunity for public notice and comment—

(A) in a manner similar to the Energy Star rating system for commercial buildings, develop policies and procedures to recognize tenants in commercial buildings that voluntarily achieve high levels of energy efficiency in separate spaces;

(B) establish building occupancy categories eligible for Tenant Star recognition based on the data collected under subsection (c) and any other appropriate data sources; and

(C) consider other forms of recognition for commercial building tenants or other occupants that lower energy consumption in separate spaces.

(2) Design- and construction-based recognition

After the study required by section 17084(b) of this title is completed, the Administrator of the Environmental Protection Agency, in consultation with the Secretary and following an opportunity for public notice and comment, may develop a voluntary program to recognize commercial building owners and tenants that use high-performance energy efficiency measures in the design and construction of separate spaces.

(Pub. L. 110–140, title IV, § 425, as added Pub. L. 114–11, title I, § 104(a), Apr. 30, 2015, 129 Stat. 185.)

§ 17086. Advanced integration of buildings onto the electric grid

(a) In general

The Secretary shall establish a program of research, development, and demonstration to enable components of commercial and residential buildings to serve as dynamic energy loads on and resources for the electric grid. The program shall focus on—

(1) developing low-cost, low power, wireless sensors to—

(A) monitor building energy load;

(B) forecast building energy need; and

(C) enable building-level energy control;

(2) developing data management capabilities and standard communication protocols to further interoperability at the building and grid-level;

(3) developing advanced building-level energy management of components through integration of smart technologies, control systems, and data processing, to enable energy efficiency and savings;

(4) optimizing energy consumption at the building level to enable grid stability and resilience;

(5) improving visualization of behind the meter equipment and technologies to provide better insight into the energy needs and energy forecasts of individual buildings;

(6) reducing the cost of key components to accelerate the adoption of smart building technologies;

(7) protecting against cybersecurity threats and addressing security vulnerabilities of building systems or equipment; and

(8) other areas determined appropriate by the Secretary.

(b) Considerations

In carrying out the program under subsection (a), the Secretary shall—

(1) work with utility partners, building owners, technology vendors, and building developers to test and validate technologies and encourage the commercial application of these technologies by building owners; and

(2) consider the specific challenges of enabling greater interaction between components of—

(A) small- and medium-sized buildings and the electric grid; and

(B) residential and commercial buildings and the electric grid.

(c) Buildings-to-grid integration report

Not later than 1 year after December 27, 2020, the Secretary shall submit to the Committee on Science, Space, and Technology and the Committee on Energy and Commerce of the House of Representatives and the Committee on Energy and Natural Resources of the Senate a report on the results of a study that examines the research, development, and demonstration opportunities, challenges, and standards needed to enable components of commercial and residential buildings to serve as dynamic energy loads on and resources for the electric grid.

(1) Report requirements

The report shall include—

(A) an assessment of the technologies needed to enable building components as dynamic loads on and resources for the electric grid, including how such technologies can be—

(i) incorporated into new commercial and residential buildings; and

(ii) retrofitted in older buildings;

(B) guidelines for the design of new buildings and building components to enable modern grid interactivity and improve energy efficiency;

(C) an assessment of barriers to the adoption by building owners of advanced technologies enabling greater integration of building components onto the electric grid; and

(D) an assessment of the feasibility of adopting technologies developed under subsection (a) at Department facilities.

(2) Recommendations

As part of the report, the Secretary shall develop a 10-year roadmap to guide the research, development, and demonstration program to enable components of commercial and residential buildings to serve as dynamic energy loads on and resources for the electric grid.

(3) Updates

The Secretary shall update the report required under this section every 3 years for the duration of the program under subsection (a) and shall submit the updated report to the Committee on Science, Space, and Technology and the Committee on Energy and Commerce of the House of Representatives and the Committee on Energy and Natural Resources of the Senate.

(d) Program implementation

In carrying out this section, the Secretary shall—

(1) implement the recommendations from the report in subsection (c); and

(2) coordinate across all relevant program offices at the Department to achieve the goals established in this section, including the Office of Electricity.

(Pub. L. 110–140, title IV, §426, as added Pub. L. 116–260, div. Z, title I, §1007(e)(1), Dec. 27, 2020, 134 Stat. 2435.)

PART C—HIGH-PERFORMANCE FEDERAL BUILDINGS

§ 17091. Leasing

(a) In general

Except as provided in subsection (b), effective beginning on the date that is 3 years after December 19, 2007, no Federal agency shall enter into a contract to lease space in a building that has not earned the Energy Star label in the most recent year.

(b) Exception

(1) Application

This subsection applies if—

(A) no space is available in a building described in subsection (a) that meets the functional requirements of an agency, including locational needs;

(B) the agency proposes to remain in a building that the agency has occupied previously;

(C) the agency proposes to lease a building of historical, architectural, or cultural significance (as defined in section 3306(a)(4) of title 40) or space in such a building; or

(D) the lease is for not more than 10,000 gross square feet of space.

(2) Buildings without Energy Star label

If one of the conditions described in paragraph (1) is met, the agency may enter into a contract to lease space in a building that has not earned the Energy Star label in the most recent year if the lease contract includes provisions requiring that, prior to occupancy or, in the case of a contract described in paragraph (1)(B), not later than 1 year after signing the contract, the following requirements are met:

(A) The space is renovated for all energy efficiency and conservation improvements that would be cost effective over the life of the lease, including improvements in lighting, windows, and heating, ventilation, and air conditioning systems.

(B)(i) Subject to clause (ii), the space is benchmarked under a nationally recognized, online, free benchmarking program, with public disclosure, unless the space is a space for which owners cannot access whole building utility consumption data, including spaces—

(I) that are located in States with privacy laws that provide that utilities shall not provide such aggregated information to multitenant building owners; and