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114TH CONGRESS
1ST SESSION

H. R. 2177

To promote energy savings in residential buildings and industry, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

APRIL 30, 2015

Mr. MCKINLEY (for himself and Mr. WELCH) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on the Budget, Transportation and Infrastructure, Oversight and Government Reform, Financial Services, and Science, Space, and Technology, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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A BILL

To promote energy savings in residential buildings and industry, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the "Energy Savings and Industrial Competitiveness Act of 2015".

(b) TABLE OF CONTENTS.—The table of contents of this Act is as follows:

Sec. 1. Short title; table of contents.
Sec. 2. Definition of Secretary.

TITLE I—BUILDINGS

Subtitle A—Building Energy Codes

Sec. 101. Greater energy efficiency in building codes.

Subtitle B—Worker Training and Capacity Building

Sec. 111. Building training and assessment centers.
Sec. 112. Career skills training.

Subtitle C—School Buildings

Sec. 121. Coordination of energy retrofitting assistance for schools.

Subtitle D—Better Buildings

Sec. 131. Energy efficiency in Federal and other buildings.
Sec. 132. Separate spaces with high-performance energy efficiency measures.
Sec. 133. Tenant star program.

Subtitle E—Energy Information for Commercial Buildings

Sec. 141. Energy information for commercial buildings.

TITLE II—INDUSTRIAL EFFICIENCY AND COMPETITIVENESS

Subtitle A—Manufacturing Energy Efficiency

Sec. 201. Purposes.
Sec. 202. Future of Industry program.
Sec. 203. Sustainable manufacturing initiative.
Sec. 204. Conforming amendments.

Subtitle B—Supply Star

Sec. 211. Supply Star.

Subtitle C—Extended Product System Rebate Program

Sec. 221. Extended product system rebate program.

Subtitle D—Transformer Rebate Program

Sec. 231. Energy efficient transformer rebate program.

TITLE III—FEDERAL AGENCY ENERGY EFFICIENCY

Sec. 301. Energy-efficient and energy-saving information technologies.
Sec. 302. Availability of funds for design updates.
Sec. 303. Energy efficient data centers.
Sec. 304. Budget-neutral demonstration program for energy and water conservation improvements at multifamily residential units.

TITLE IV—REGULATORY PROVISIONS

Subtitle A—Third-Party Certification Under Energy Star Program

Sec. 401. Third-Party Certification Under Energy Star Program.

Subtitle B—Federal Green Buildings

Sec. 411. High-performance green Federal buildings.

Subtitle C—Water Heaters

Sec. 421. Grid-enabled water heaters.

Subtitle D—Energy Performance Requirement for Federal Buildings

Sec. 431. Energy performance requirement for Federal buildings.
Sec. 432. Federal building energy efficiency performance standards; certification system and level for green buildings.
Sec. 433. Enhanced energy efficiency underwriting.

Subtitle E—Voluntary Verification Programs for Air Conditioning, Furnace, Boiler, Heat Pump, and Water Heater Products

Sec. 441. Voluntary verification programs for air conditioning, furnace, boiler, heat pump, and water heater products.

TITLE V—MISCELLANEOUS

Sec. 501. Budgetary effects.
Sec. 502. Advance appropriations required.

SEC. 2. DEFINITION OF SECRETARY.

In this Act, the term ''Secretary'' means the Secretary of Energy.

TITLE I—BUILDINGS

Subtitle A—Building Energy Codes

SEC. 101. GREATER ENERGY EFFICIENCY IN BUILDING CODES.

(a) DEFINITIONS.—Section 303 of the Energy Conservation and Production Act (42 U.S.C. 6832) is amended—

(1) by striking paragraph (14) and inserting the following:

''(14) MODEL BUILDING ENERGY CODE.—The term 'model building energy code' means a voluntary

building energy code and standards developed and updated through a consensus process among interested persons, such as the IECC or the code used by—

"(A) the Council of American Building Officials, or its legal successor, International Code Council, Inc.;

"(B) the American Society of Heating, Refrigerating, and Air-Conditioning Engineers; or

"(C) other appropriate organizations."; and

(2) by adding at the end the following:

"(17) IECC.—The term 'IECC' means the International Energy Conservation Code.

"(18) INDIAN TRIBE.—The term 'Indian tribe' has the meaning given the term in section 4 of the Native American Housing Assistance and Self-Determination Act of 1996 (25 U.S.C. 4103).".

(b) STATE BUILDING ENERGY EFFICIENCY CODES.—Section 304 of the Energy Conservation and Production Act (42 U.S.C. 6833) is amended to read as follows:

"SEC. 304. UPDATING STATE BUILDING ENERGY EFFICIENCY CODES.

"(a) IN GENERAL.—The Secretary shall—

"(1) encourage and support the adoption of building energy codes by States, Indian tribes, and, as appropriate, by local governments that meet or exceed the model building energy codes, or achieve equivalent or greater energy savings; and

"(2) support full compliance with the State and local codes.

"(b) STATE AND INDIAN TRIBE CERTIFICATION OF BUILDING ENERGY CODE UPDATES.—

"(1) REVIEW AND UPDATING OF CODES BY EACH STATE AND INDIAN TRIBE.—

"(A) IN GENERAL.—Not later than 2 years after the date on which a model building energy code is updated, each State or Indian tribe shall certify whether or not the State or Indian tribe, respectively, has reviewed and updated the energy provisions of the building code of the State or Indian tribe, respectively.

"(B) DEMONSTRATION.—The certification shall include a demonstration of whether or not the energy savings for the code provisions that are in effect throughout the State or Indian tribal territory meet or exceed—

"(i) the energy savings of the updated model building energy code; or

"(ii) the targets established under section 307(b)(2).

"(C) NO MODEL BUILDING ENERGY CODE UPDATE.—If a model building energy code is not updated by a target date established under section 307(b)(2)(D), each State or Indian tribe shall, not later than 2 years after the specified date, certify whether or not the State or Indian tribe, respectively, has reviewed and updated the energy provisions of the building code of the State or Indian tribe, respectively, to meet or exceed the target in section 307(b)(2).

"(2) VALIDATION BY SECRETARY.—Not later than 90 days after a State or Indian tribe certification under paragraph (1), the Secretary shall—

"(A) determine whether the code provisions of the State or Indian tribe, respectively, meet the criteria specified in paragraph (1); and

"(B) if the determination is positive, validate the certification.

"(c) IMPROVEMENTS IN COMPLIANCE WITH BUILDING ENERGY CODES.—

"(1) REQUIREMENT.—

"(A) IN GENERAL.—Not later than 3 years after the date of a certification under subsection (b), each State and Indian tribe shall certify whether or not the State and Indian tribe, respectively, has—

"(i) achieved full compliance under paragraph (3) with the applicable certified State and Indian tribe building energy code or with the associated model building energy code; or

"(ii) made significant progress under paragraph (4) toward achieving compliance with the applicable certified State and Indian tribe building energy code or with the associated model building energy code.

"(B) REPEAT CERTIFICATIONS.—If the State or Indian tribe certifies progress toward achieving compliance, the State or Indian tribe shall repeat the certification until the State or Indian tribe certifies that the State or Indian tribe has achieved full compliance, respectively.

"(2) MEASUREMENT OF COMPLIANCE.—A certification under paragraph (1) shall include documentation of the rate of compliance based on—

"(A) independent inspections of a random sample of the buildings covered by the code in the preceding year; or

"(B) an alternative method that yields an accurate measure of compliance.

"(3) ACHIEVEMENT OF COMPLIANCE.—A State or Indian tribe shall be considered to achieve full compliance under paragraph (1) if—

"(A) at least 90 percent of building space covered by the code in the preceding year substantially meets all the requirements of the applicable code specified in paragraph (1), or achieves equivalent or greater energy savings level; or

"(B) the estimated excess energy use of buildings that did not meet the applicable code specified in paragraph (1) in the preceding year, compared to a baseline of comparable buildings that meet this code, is not more than 5 percent of the estimated energy use of all buildings covered by this code during the preceding year.

"(4) SIGNIFICANT PROGRESS TOWARD ACHIEVEMENT OF COMPLIANCE.—A State or Indian tribe shall be considered to have made significant

progress toward achieving compliance for purposes of paragraph (1) if the State or Indian tribe—

"(A) has developed and is implementing a plan for achieving compliance during the 8-year-period beginning on the date of enactment of this paragraph, including annual targets for compliance and active training and enforcement programs; and

"(B) has met the most recent target under subparagraph (A).

"(5) VALIDATION BY SECRETARY.—Not later than 90 days after a State or Indian tribe certification under paragraph (1), the Secretary shall—

"(A) determine whether the State or Indian tribe has demonstrated meeting the criteria of this subsection, including accurate measurement of compliance; and

"(B) if the determination is positive, validate the certification.

"(d) STATES OR INDIAN TRIBES THAT DO NOT ACHIEVE COMPLIANCE.—

"(1) REPORTING.—A State or Indian tribe that has not made a certification required under subsection (b) or (c) by the applicable deadline shall submit to the Secretary a report on—

"(A) the status of the State or Indian tribe with respect to meeting the requirements and submitting the certification; and

"(B) a plan for meeting the requirements and submitting the certification.

"(2) FEDERAL SUPPORT.—For any State or Indian tribe for which the Secretary has not validated a certification by a deadline under subsection (b) or (c), the lack of the certification may be a consideration for Federal support authorized under this section for code adoption and compliance activities.

"(3) LOCAL GOVERNMENT.—In any State or Indian tribe for which the Secretary has not validated a certification under subsection (b) or (c), a local government may be eligible for Federal support by meeting the certification requirements of subsections (b) and (c).

"(4) ANNUAL REPORTS BY SECRETARY.—

"(A) IN GENERAL.—The Secretary shall annually submit to Congress, and publish in the Federal Register, a report on—

"(i) the status of model building energy codes;

"(ii) the status of code adoption and compliance in the States and Indian tribes;

"(iii) implementation of this section; and

"(iv) improvements in energy savings over time as result of the targets established under section 307(b)(2).

"(B) IMPACTS.—The report shall include estimates of impacts of past action under this section, and potential impacts of further action, on—

"(i) upfront financial and construction costs, cost benefits and returns (using investment analysis), and lifetime energy use for buildings;

"(ii) resulting energy costs to individuals and businesses; and

"(iii) resulting overall annual building ownership and operating costs.

"(e) TECHNICAL ASSISTANCE TO STATES AND INDIAN TRIBES.—The Secretary shall provide technical assistance to States and Indian tribes to implement the goals and requirements of this section, including procedures and technical analysis for States and Indian tribes—

"(1) to improve and implement State residential and commercial building energy codes;

"(2) to demonstrate that the code provisions of the States and Indian tribes achieve equivalent or greater energy savings than the model building energy codes and targets;

"(3) to document the rate of compliance with a building energy code; and

"(4) to otherwise promote the design and construction of energy efficient buildings.

"(f) AVAILABILITY OF INCENTIVE FUNDING.—

"(1) IN GENERAL.—The Secretary shall provide incentive funding to States and Indian tribes—

"(A) to implement the requirements of this section;

"(B) to improve and implement residential and commercial building energy codes, including increasing and verifying compliance with the codes and training of State, tribal, and local building code officials to implement and enforce the codes; and

"(C) to promote building energy efficiency through the use of the codes.

"(2) ADDITIONAL FUNDING.—Additional funding shall be provided under this subsection for implementation of a plan to achieve and document full

compliance with residential and commercial building energy codes under subsection (c)—

"(A) to a State or Indian tribe for which the Secretary has validated a certification under subsection (b) or (c); and

"(B) in a State or Indian tribe that is not eligible under subparagraph (A), to a local government that is eligible under this section.

"(3) TRAINING.—Of the amounts made available under this subsection, the State or Indian tribe may use amounts required, but not to exceed $750,000 for a State, to train State and local building code officials to implement and enforce codes described in paragraph (2).

"(4) LOCAL GOVERNMENTS.—States may share grants under this subsection with local governments that implement and enforce the codes.

"(g) STRETCH CODES AND ADVANCED STANDARDS.—

"(1) IN GENERAL.—The Secretary shall provide technical and financial support for the development of stretch codes and advanced standards for residential and commercial buildings for use as—

"(A) an option for adoption as a building energy code by local, tribal, or State governments; and

"(B) guidelines for energy-efficient building design.

"(2) TARGETS.—The stretch codes and advanced standards shall be designed—

"(A) to achieve substantial energy savings compared to the model building energy codes; and

"(B) to meet targets under section 307(b), if available, at least 3 to 6 years in advance of the target years.

"(h) STUDIES.—The Secretary, in consultation with building science experts from the National Laboratories and institutions of higher education, designers and builders of energy-efficient residential and commercial buildings, code officials, and other stakeholders, shall undertake a study of the feasibility, impact, economics, and merit of—

"(1) code improvements that would require that buildings be designed, sited, and constructed in a manner that makes the buildings more adaptable in the future to become zero-net-energy after initial

construction, as advances are achieved in energy-saving technologies;

"(2) code procedures to incorporate measured lifetimes, not just first-year energy use, in trade-offs and performance calculations; and

"(3) legislative options for increasing energy savings from building energy codes, including additional incentives for effective State and local action, and verification of compliance with and enforcement of a code other than by a State or local government.

"(i) EFFECT ON OTHER LAWS.—Nothing in this section or section 307 supersedes or modifies the application of sections 321 through 346 of the Energy Policy and Conservation Act (42 U.S.C. 6291 et seq.).

"(j) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section and section 307 $200,000,000, to remain available until expended.".

(c) FEDERAL BUILDING ENERGY EFFICIENCY STANDARDS.—Section 305 of the Energy Conservation and Production Act (42 U.S.C. 6834) is amended by striking "voluntary building energy code" each place it appears in subsections (a)(2)(B) and (b) and inserting "model building energy code".

(d) MODEL BUILDING ENERGY CODES.—Section 307 of the Energy Conservation and Production Act (42 U.S.C. 6836) is amended to read as follows:

"SEC. 307. SUPPORT FOR MODEL BUILDING ENERGY CODES.

"(a) IN GENERAL.—The Secretary shall support the updating of model building energy codes.

"(b) TARGETS.—

"(1) IN GENERAL.—The Secretary shall support the updating of the model building energy codes to enable the achievement of aggregate energy savings targets established under paragraph (2).

"(2) TARGETS.—

"(A) IN GENERAL.—The Secretary shall work with State, Indian tribes, local governments, nationally recognized code and standards developers, and other interested parties to support the updating of model building energy codes by establishing one or more aggregate energy savings targets to achieve the purposes of this section.

"(B) SEPARATE TARGETS.—The Secretary may establish separate targets for commercial and residential buildings.

"(C) BASELINES.—The baseline for updating model building energy codes shall be the 2009 IECC for residential buildings and ASHRAE Standard 90.1–2010 for commercial buildings.

"(D) SPECIFIC YEARS.—

"(i) IN GENERAL.—Targets for specific years shall be established and revised by the Secretary through rulemaking and coordinated with nationally recognized code and standards developers at a level that—

"(I) is at the maximum level of energy efficiency that is technologically feasible and life-cycle cost effective, while accounting for the economic considerations under paragraph (4);

"(II) is higher than the preceding target; and

"(III) promotes the achievement of commercial and residential high-performance buildings through high performance energy efficiency (within the meaning of section 401 of the En-

ergy Independence and Security Act of 2007 (42 U.S.C. 17061)).

"(ii) INITIAL TARGETS.—Not later than 1 year after the date of enactment of this clause, the Secretary shall establish initial targets under this subparagraph.

"(iii) DIFFERENT TARGET YEARS.—Subject to clause (i), prior to the applicable year, the Secretary may set a later target year for any of the model building energy codes described in subparagraph (A) if the Secretary determines that a target cannot be met.

"(iv) SMALL BUSINESS.—When establishing targets under this paragraph through rulemaking, the Secretary shall ensure compliance with the Small Business Regulatory Enforcement Fairness Act of 1996 (5 U.S.C. 601 note; Public Law 104–121).

"(3) APPLIANCE STANDARDS AND OTHER FACTORS AFFECTING BUILDING ENERGY USE.—In establishing building code targets under paragraph (2), the Secretary shall develop and adjust the tar-

gets in recognition of potential savings and costs relating to—

"(A) efficiency gains made in appliances, lighting, windows, insulation, and building envelope sealing;

"(B) advancement of distributed generation and on-site renewable power generation technologies;

"(C) equipment improvements for heating, cooling, and ventilation systems;

"(D) building management systems and SmartGrid technologies to reduce energy use; and

"(E) other technologies, practices, and building systems that the Secretary considers appropriate regarding building plug load and other energy uses.

"(4) ECONOMIC CONSIDERATIONS.—In establishing and revising building code targets under paragraph (2), the Secretary shall consider the economic feasibility of achieving the proposed targets established under this section and the potential costs and savings for consumers and building owners, including a return on investment analysis.

"(c) TECHNICAL ASSISTANCE TO MODEL BUILDING ENERGY CODE-SETTING AND STANDARD DEVELOPMENT ORGANIZATIONS.—

"(1) IN GENERAL.—The Secretary shall, on a timely basis, provide technical assistance to model building energy code-setting and standard development organizations consistent with the goals of this section.

"(2) ASSISTANCE.—The assistance shall include, as requested by the organizations, technical assistance in—

"(A) evaluating code or standards proposals or revisions;

"(B) building energy analysis and design tools;

"(C) building demonstrations;

"(D) developing definitions of energy use intensity and building types for use in model building energy codes to evaluate the efficiency impacts of the model building energy codes;

"(E) performance-based standards;

"(F) evaluating economic considerations under subsection (b)(4); and

"(G) developing model building energy codes by Indian tribes in accordance with tribal law.

"(3) AMENDMENT PROPOSALS.—The Secretary may submit timely model building energy code amendment proposals to the model building energy code-setting and standard development organizations, with supporting evidence, sufficient to enable the model building energy codes to meet the targets established under subsection (b)(2).

"(4) ANALYSIS METHODOLOGY.—The Secretary shall make publicly available the entire calculation methodology (including input assumptions and data) used by the Secretary to estimate the energy savings of code or standard proposals and revisions.

"(d) DETERMINATION.—

"(1) REVISION OF MODEL BUILDING ENERGY CODES.—If the provisions of the IECC or ASHRAE Standard 90.1 regarding building energy use are revised, the Secretary shall make a preliminary determination not later than 90 days after the date of the revision, and a final determination not later than 15 months after the date of the revision, on whether or not the revision will—

"(A) improve energy efficiency in buildings compared to the existing model building energy code; and

"(B) meet the applicable targets under subsection (b)(2).

"(2) CODES OR STANDARDS NOT MEETING TARGETS.—

"(A) IN GENERAL.—If the Secretary makes a preliminary determination under paragraph (1)(B) that a code or standard does not meet the targets established under subsection (b)(2), the Secretary may at the same time provide the model building energy code or standard developer with proposed changes that would result in a model building energy code that meets the targets and with supporting evidence, taking into consideration—

"(i) whether the modified code is technically feasible and life-cycle cost effective;

"(ii) available appliances, technologies, materials, and construction practices; and

"(iii) the economic considerations under subsection (b)(4).

"(B) INCORPORATION OF CHANGES.—

"(i) IN GENERAL.—On receipt of the proposed changes, the model building energy code or standard developer shall have an additional 270 days to accept or reject the proposed changes of the Secretary to the model building energy code or standard for the Secretary to make a final determination.

"(ii) FINAL DETERMINATION.—A final determination under paragraph (1) shall be on the modified model building energy code or standard.

"(e) ADMINISTRATION.—In carrying out this section, the Secretary shall—

"(1) publish notice of targets and supporting analysis and determinations under this section in the Federal Register to provide an explanation of and the basis for such actions, including any supporting modeling, data, assumptions, protocols, and cost-benefit analysis, including return on investment; and

"(2) provide an opportunity for public comment on targets and supporting analysis and determinations under this section.

"(f) VOLUNTARY CODES AND STANDARDS.—Notwithstanding any other provision of this section, any

model building code or standard established under section 304 shall not be binding on a State, local government, or Indian tribe as a matter of Federal law.''.

Subtitle B—Worker Training and Capacity Building

SEC. 111. BUILDING TRAINING AND ASSESSMENT CENTERS.

(a) IN GENERAL.—The Secretary shall provide grants to institutions of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)) and Tribal Colleges or Universities (as defined in section 316(b) of that Act (20 U.S.C. 1059c(b))) to establish building training and assessment centers—

(1) to identify opportunities for optimizing energy efficiency and environmental performance in buildings;

(2) to promote the application of emerging concepts and technologies in commercial and institutional buildings;

(3) to train engineers, architects, building scientists, building energy permitting and enforcement officials, and building technicians in energy-efficient design and operation;

(4) to assist institutions of higher education and Tribal Colleges or Universities in training building technicians;

(5) to promote research and development for the use of alternative energy sources and distributed generation to supply heat and power for buildings, particularly energy-intensive buildings; and

(6) to coordinate with and assist State-accredited technical training centers, community colleges, and Tribal Colleges or Universities and ensure appropriate services are provided under this section to each region of the United States.

(b) COORDINATION AND NONDUPLICATION.—

(1) IN GENERAL.—The Secretary shall coordinate the program with the industrial research and assessment centers program and with other Federal programs to avoid duplication of effort.

(2) COLLOCATION.—To the maximum extent practicable, building, training, and assessment centers established under this section shall be collocated with Industrial Assessment Centers.

(c) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $10,000,000, to remain available until expended.

SEC. 112. CAREER SKILLS TRAINING.

(a) IN GENERAL.—The Secretary shall pay grants to eligible entities described in subsection (b) to pay the Federal share of associated career skills training programs

under which students concurrently receive classroom instruction and on-the-job training for the purpose of obtaining an industry-related certification to install energy efficient buildings technologies, including technologies described in section 307(b)(3) of the Energy Conservation and Production Act (42 U.S.C. 6836(b)(3)).

(b) ELIGIBILITY.—To be eligible to obtain a grant under subsection (a), an entity shall be a nonprofit partnership described in section 171(e)(2)(B)(ii) of the Workforce Investment Act of 1998 (29 U.S.C. 2916(e)(2)(B)(ii)).

(c) FEDERAL SHARE.—The Federal share of the cost of carrying out a career skills training program described in subsection (a) shall be 50 percent.

(d) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $10,000,000, to remain available until expended.

Subtitle C—School Buildings

SEC. 121. COORDINATION OF ENERGY RETROFITTING ASSISTANCE FOR SCHOOLS.

(a) DEFINITION OF SCHOOL.—In this section, the term ''school'' means—

(1) an elementary school or secondary school (as defined in section 9101 of the Elementary and

Secondary Education Act of 1965 (20 U.S.C. 7801));

(2) an institution of higher education (as defined in section 102(a) of the Higher Education Act of 1965 (20 U.S.C. 1002(a));

(3) a school of the defense dependents' education system under the Defense Dependents' Education Act of 1978 (20 U.S.C. 921 et seq.) or established under section 2164 of title 10, United States Code;

(4) a school operated by the Bureau of Indian Affairs;

(5) a tribally controlled school (as defined in section 5212 of the Tribally Controlled Schools Act of 1988 (25 U.S.C. 2511)); and

(6) a Tribal College or University (as defined in section 316(b) of the Higher Education Act of 1965 (20 U.S.C. 1059c(b))).

(b) DESIGNATION OF LEAD AGENCY.—The Secretary, acting through the Office of Energy Efficiency and Renewable Energy, shall act as the lead Federal agency for coordinating and disseminating information on existing Federal programs and assistance that may be used to help initiate, develop, and finance energy efficiency, re-

1 newable energy, and energy retrofitting projects for
2 schools.

3 (c) REQUIREMENTS.—In carrying out coordination
4 and outreach under subsection (b), the Secretary shall—

5 (1) in consultation and coordination with the
6 appropriate Federal agencies, carry out a review of
7 existing programs and financing mechanisms (in-
8 cluding revolving loan funds and loan guarantees)
9 available in or from the Department of Agriculture,
10 the Department of Energy, the Department of Edu-
11 cation, the Department of the Treasury, the Internal
12 Revenue Service, the Environmental Protection
13 Agency, and other appropriate Federal agencies with
14 jurisdiction over energy financing and facilitation
15 that are currently used or may be used to help ini-
16 tiate, develop, and finance energy efficiency, renew-
17 able energy, and energy retrofitting projects for
18 schools;

19 (2) establish a Federal cross-departmental col-
20 laborative coordination, education, and outreach ef-
21 fort to streamline communication and promote avail-
22 able Federal opportunities and assistance described
23 in paragraph (1), for energy efficiency, renewable
24 energy, and energy retrofitting projects that enables
25 States, local educational agencies, and schools—

(A) to use existing Federal opportunities more effectively; and

(B) to form partnerships with Governors, State energy programs, local educational, financial, and energy officials, State and local government officials, nonprofit organizations, and other appropriate entities, to support the initiation of the projects;

(3) provide technical assistance for States, local educational agencies, and schools to help develop and finance energy efficiency, renewable energy, and energy retrofitting projects—

(A) to increase the energy efficiency of buildings or facilities;

(B) to install systems that individually generate energy from renewable energy resources;

(C) to establish partnerships to leverage economies of scale and additional financing mechanisms available to larger clean energy initiatives; or

(D) to promote—

(i) the maintenance of health, environmental quality, and safety in schools, including the ambient air quality, through

energy efficiency, renewable energy, and energy retrofit projects; and

(ii) the achievement of expected energy savings and renewable energy production through proper operations and maintenance practices;

(4) develop and maintain a single online resource website with contact information for relevant technical assistance and support staff in the Office of Energy Efficiency and Renewable Energy for States, local educational agencies, and schools to effectively access and use Federal opportunities and assistance described in paragraph (1) to develop energy efficiency, renewable energy, and energy retrofitting projects; and

(5) establish a process for recognition of schools that—

(A) have successfully implemented energy efficiency, renewable energy, and energy retrofitting projects; and

(B) are willing to serve as resources for other local educational agencies and schools to assist initiation of similar efforts.

(d) REPORT.—Not later than 180 days after the date of enactment of this Act, the Secretary shall submit to

Congress a report describing the implementation of this section.

Subtitle D—Better Buildings

SEC. 131. ENERGY EFFICIENCY IN FEDERAL AND OTHER BUILDINGS.

(a) DEFINITIONS.—In this section:

(1) ADMINISTRATOR.—The term ''Administrator'' means the Administrator of General Services.

(2) COST-EFFECTIVE ENERGY EFFICIENCY MEASURE.—The terms ''cost-effective energy efficiency measure'' and ''measure'' mean any building product, material, equipment, or service and the installing, implementing, or operating thereof, that provides energy savings in an amount that is not less than the cost of such installing, implementing, or operating.

(b) MODEL PROVISIONS, POLICIES, AND BEST PRACTICES.—

(1) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Administrator, in consultation with the Secretary and after providing the public with an opportunity for notice and comment, shall develop model leasing provisions

and best practices in accordance with this subsection.

(2) COMMERCIAL LEASING.—

(A) IN GENERAL.—The model commercial leasing provisions developed under this subsection shall, at a minimum, align the interests of building owners and tenants with regard to investments in cost-effective energy efficiency measures to encourage building owners and tenants to collaborate to invest in such measures.

(B) USE OF MODEL PROVISIONS.—The Administrator may use the model provisions developed under this subsection in any standard leasing document that designates a Federal agency (or other client of the Administrator) as a landlord or tenant.

(C) PUBLICATION.—The Administrator shall periodically publish the model leasing provisions developed under this subsection, along with explanatory materials, to encourage building owners and tenants in the private sector to use such provisions and materials.

(3) REALTY SERVICES.—The Administrator shall develop policies and practices to implement cost-effective energy efficiency measures for the real-

ty services provided by the Administrator to Federal agencies (or other clients of the Administrator), including periodic training of appropriate Federal employees and contractors on how to identify and evaluate those measures.

(4) STATE AND LOCAL ASSISTANCE.—The Administrator, in consultation with the Secretary, shall make available model leasing provisions and best practices developed under this subsection to State, county, and municipal governments to manage owned and leased building space in accordance with the goal of encouraging investment in all cost-effective energy efficiency measures.

SEC. 132. SEPARATE SPACES WITH HIGH-PERFORMANCE ENERGY EFFICIENCY MEASURES.

Subtitle B of title IV of the Energy Independence and Security Act of 2007 (42 U.S.C. 17081 et seq.) is amended by adding at the end the following:

"SEC. 424. SEPARATE SPACES WITH HIGH-PERFORMANCE ENERGY EFFICIENCY MEASURES.

"(a) DEFINITIONS.—In this section:

"(1) HIGH-PERFORMANCE ENERGY EFFICIENCY MEASURE.—The term 'high-performance energy efficiency measure' means a technology, product, or practice that will result in substantial operational

cost savings by reducing energy consumption and utility costs.

"(2) SEPARATE SPACES.—The term 'separate spaces' means areas within a commercial building that are leased or otherwise occupied by a tenant or other occupant for a period of time pursuant to the terms of a written agreement.

"(b) STUDY.—

"(1) IN GENERAL.—Not later than 1 year after the date of enactment of this section, the Secretary, acting through the Assistant Secretary of Energy Efficiency and Renewable Energy, shall complete a study on the feasibility of—

"(A) significantly improving energy efficiency in commercial buildings through the design and construction, by owners and tenants, of separate spaces with high-performance energy efficiency measures; and

"(B) encouraging owners and tenants to implement high-performance energy efficiency measures in separate spaces.

"(2) SCOPE.—The study shall, at a minimum, include—

"(A) descriptions of—

"(i) high-performance energy efficiency measures that should be considered as part of the initial design and construction of separate spaces;

"(ii) processes that owners, tenants, architects, and engineers may replicate when designing and constructing separate spaces with high-performance energy efficiency measures;

"(iii) policies and best practices to achieve reductions in energy intensities for lighting, plug loads, heating, cooling, cooking, laundry, and other systems to satisfy the needs of the commercial building tenant;

"(iv) return on investment and payback analyses of the incremental cost and projected energy savings of the proposed set of high-performance energy efficiency measures, including consideration of available incentives;

"(v) models and simulation methods that predict the quantity of energy used by separate spaces with high-performance energy efficiency measures and that compare

that predicted quantity to the quantity of energy used by separate spaces without high-performance energy efficiency measures but that otherwise comply with applicable building code requirements;

''(vi) measurement and verification platforms demonstrating actual energy use of high-performance energy efficiency measures installed in separate spaces, and whether such measures generate the savings intended in the initial design and construction of the separate spaces;

''(vii) best practices that encourage an integrated approach to designing and constructing separate spaces to perform at optimum energy efficiency in conjunction with the central systems of a commercial building; and

''(viii) any impact on employment resulting from the design and construction of separate spaces with high-performance energy efficiency measures; and

''(B) case studies reporting economic and energy saving returns in the design and con-

struction of separate spaces with high-performance energy efficiency measures.

"(3) PUBLIC PARTICIPATION.—Not later than 90 days after the date of the enactment of this section, the Secretary shall publish a notice in the Federal Register requesting public comments regarding effective methods, measures, and 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.".

SEC. 133. TENANT STAR PROGRAM.

Subtitle B of title IV of the Energy Independence and Security Act of 2007 (42 U.S.C. 17081 et seq.) (as amended by section 132) is amended by adding at the end the following:

"SEC. 425. 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 424.

"(2) SEPARATE SPACES.—The term 'separate spaces' has the meaning given the term in section 424.

"(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 324A of the Energy Policy and Conservation Act (42 U.S.C. 6294a), 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 the date of enactment of this section, 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 the date of enactment of this section, 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 424(b) 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.".

Subtitle E—Energy Information for Commercial Buildings

SEC. 141. ENERGY INFORMATION FOR COMMERCIAL BUILDINGS.

(a) REQUIREMENT OF BENCHMARKING AND DISCLOSURE FOR LEASING BUILDINGS WITHOUT ENERGY STAR LABELS.—Section 435(b)(2) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17091(b)(2)) is amended—

(1) by striking ''paragraph (2)'' and inserting ''paragraph (1)''; and

(2) by striking ''signing the contract,'' and all that follows through the period at the end and inserting the following: ''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

"(II) for which tenants do not provide energy consumption information to the commercial building owner in response to a request from the building owner.

"(ii) A Federal agency that is a tenant of the space shall provide to the building owner, or authorize the owner to obtain from the utility, the energy consumption information of the space for the benchmarking and disclosure required by this subparagraph.".

(b) DEPARTMENT OF ENERGY STUDY.—

(1) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Secretary shall complete a study, with opportunity for public comment—

(A) on the impact of—

(i) State and local performance benchmarking and disclosure policies, and any associated building efficiency policies,

for commercial and multifamily buildings; and

(ii) programs and systems in which utilities provide aggregated information regarding whole building energy consumption and usage information to owners of multitenant commercial, residential, and mixed-use buildings;

(B) that identifies best practice policy approaches studied under subparagraph (A) that have resulted in the greatest improvements in building energy efficiency; and

(C) that considers—

(i) compliance rates and the benefits and costs of the policies and programs on building owners, utilities, tenants, and other parties;

(ii) utility practices, programs, and systems that provide aggregated energy consumption information to multitenant building owners, and the impact of public utility commissions and State privacy laws on those practices, programs, and systems;

(iii) exceptions to compliance in existing laws where building owners are not

able to gather or access whole building energy information from tenants or utilities;

(iv) the treatment of buildings with—

(I) multiple uses;

(II) uses for which baseline information is not available; and

(III) uses that require high levels of energy intensities, such as data centers, trading floors, and televisions studios;

(v) implementation practices, including disclosure methods and phase-in of compliance;

(vi) the safety and security of benchmarking tools offered by government agencies, and the resiliency of those tools against cyber attacks; and

(vii) international experiences with regard to building benchmarking and disclosure laws and data aggregation for multi-tenant buildings.

(2) SUBMISSION TO CONGRESS.—At the conclusion of the study, the Secretary shall submit to Congress a report on the results of the study.

(c) CREATION AND MAINTENANCE OF DATABASES.—

(1) IN GENERAL.—Not later than 18 months after the date of enactment of this Act and following opportunity for public notice and comment, the Secretary, in coordination with other relevant agencies shall, to carry out the purpose described in paragraph (2)—

(A) assess existing databases; and

(B) as necessary—

(i) modify and maintain existing databases; or

(ii) create and maintain a new database platform.

(2) PURPOSE.—The maintenance of existing databases or creation of a new database platform under paragraph (1) shall be for the purpose of storing and making available public energy-related information on commercial and multifamily buildings, including—

(A) data provided under Federal, State, local, and other laws or programs regarding building benchmarking and energy information disclosure;

(B) buildings that have received energy ratings and certifications; and

(C) energy-related information on buildings provided voluntarily by the owners of the buildings, in an anonymous form, unless the owner provides otherwise.

(d) COMPETITIVE AWARDS.—Based on the results of the research for the portion of the study described in subsection (b)(1)(A)(ii), and with criteria developed following public notice and comment, the Secretary may make competitive awards to utilities, utility regulators, and utility partners to develop and implement effective and promising programs to provide aggregated whole building energy consumption information to multitenant building owners.

(e) INPUT FROM STAKEHOLDERS.—The Secretary shall seek input from stakeholders to maximize the effectiveness of the actions taken under this section.

(f) REPORT.—Not later than 2 years after the date of enactment of this Act, and every 2 years thereafter, the Secretary shall submit to Congress a report on the progress made in complying with this section.

(g) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out subsection (b) $2,500,000 for each of fiscal years 2015 through 2019, to remain available until expended.

TITLE II—INDUSTRIAL EFFICIENCY AND COMPETITIVENESS

Subtitle A—Manufacturing Energy Efficiency

SEC. 201. PURPOSES.

The purposes of this subtitle are—

(1) to reform and reorient the industrial efficiency programs of the Department of Energy;

(2) to establish a clear and consistent authority for industrial efficiency programs of the Department;

(3) to accelerate the deployment of technologies and practices that will increase industrial energy efficiency and improve productivity;

(4) to accelerate the development and demonstration of technologies that will assist the deployment goals of the industrial efficiency programs of the Department and increase manufacturing efficiency;

(5) to stimulate domestic economic growth and improve industrial productivity and competitiveness; and

(6) to strengthen partnerships between Federal and State governmental agencies and the private and academic sectors.

SEC. 202. FUTURE OF INDUSTRY PROGRAM.

(a) IN GENERAL.—Section 452 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17111) is amended by striking the section heading and inserting the following: ''**FUTURE OF INDUSTRY PROGRAM**''.

(b) DEFINITION OF ENERGY SERVICE PROVIDER.—Section 452(a) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17111(a)) is amended—

(1) by redesignating paragraphs (3) through (5) as paragraphs (4) through (6), respectively; and

(2) by inserting after paragraph (2):

''(3) ENERGY SERVICE PROVIDER.—The term 'energy service provider' means any business providing technology or services to improve the energy efficiency, water efficiency, power factor, or load management of a manufacturing site or other industrial process in an energy-intensive industry, or any utility operating under a utility energy service project.''.

(c) INDUSTRIAL RESEARCH AND ASSESSMENT CENTERS.—Section 452(e) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17111(e)) is amended—

(1) by redesignating paragraphs (1) through (5) as subparagraphs (A) through (E), respectively, and indenting appropriately;

(2) by striking ''The Secretary'' and inserting the following:

''(1) IN GENERAL.—The Secretary'';

(3) in subparagraph (A) (as redesignated by paragraph (1)), by inserting before the semicolon at the end the following: '', including assessments of sustainable manufacturing goals and the implementation of information technology advancements for supply chain analysis, logistics, system monitoring, industrial and manufacturing processes, and other purposes''; and

(4) by adding at the end the following:

''(2) COORDINATION.—

''(A) IN GENERAL.—To increase the value and capabilities of the industrial research and assessment centers, the centers shall—

''(i) coordinate with Manufacturing Extension Partnership Centers of the National Institute of Standards and Technology;

''(ii) coordinate with the Building Technologies Office of the Department of

Energy to provide building assessment services to manufacturers;

"(iii) increase partnerships with the National Laboratories of the Department of Energy to leverage the expertise and technologies of the National Laboratories for national industrial and manufacturing needs;

"(iv) increase partnerships with energy service providers and technology providers to leverage private sector expertise and accelerate deployment of new and existing technologies and processes for energy efficiency, power factor, and load management;

"(v) identify opportunities for reducing greenhouse gas emissions; and

"(vi) promote sustainable manufacturing practices for small- and medium-sized manufacturers.

"(3) OUTREACH.—The Secretary shall provide funding for—

"(A) outreach activities by the industrial research and assessment centers to inform small- and medium-sized manufacturers of the

information, technologies, and services available; and

"(B) coordination activities by each industrial research and assessment center to leverage efforts with—

"(i) Federal and State efforts;

"(ii) the efforts of utilities and energy service providers;

"(iii) the efforts of regional energy efficiency organizations; and

"(iv) the efforts of other industrial research and assessment centers.

"(4) WORKFORCE TRAINING.—

"(A) IN GENERAL.—The Secretary shall pay the Federal share of associated internship programs under which students work with or for industries, manufacturers, and energy service providers to implement the recommendations of industrial research and assessment centers.

"(B) FEDERAL SHARE.—The Federal share of the cost of carrying out internship programs described in subparagraph (A) shall be 50 percent.

"(5) SMALL BUSINESS LOANS.—The Administrator of the Small Business Administration shall, to

the maximum extent practicable, expedite consideration of applications from eligible small business concerns for loans under the Small Business Act (15 U.S.C. 631 et seq.) to implement recommendations of industrial research and assessment centers established under paragraph (1).''.

SEC. 203. SUSTAINABLE MANUFACTURING INITIATIVE.

(a) IN GENERAL.—Part E of title III of the Energy Policy and Conservation Act (42 U.S.C. 6341) is amended by adding at the end the following:

''SEC. 376. SUSTAINABLE MANUFACTURING INITIATIVE.

''(a) IN GENERAL.—As part of the Office of Energy Efficiency and Renewable Energy, the Secretary, on the request of a manufacturer, shall conduct onsite technical assessments to identify opportunities for—

''(1) maximizing the energy efficiency of industrial processes and cross-cutting systems;

''(2) preventing pollution and minimizing waste;

''(3) improving efficient use of water in manufacturing processes;

''(4) conserving natural resources; and

''(5) achieving such other goals as the Secretary determines to be appropriate.

''(b) COORDINATION.—The Secretary shall carry out the initiative in coordination with the private sector and

appropriate agencies, including the National Institute of Standards and Technology, to accelerate adoption of new and existing technologies and processes that improve energy efficiency.

"(c) RESEARCH AND DEVELOPMENT PROGRAM FOR SUSTAINABLE MANUFACTURING AND INDUSTRIAL TECHNOLOGIES AND PROCESSES.—As part of the industrial efficiency programs of the Department of Energy, the Secretary shall carry out a joint industry-government partnership program to research, develop, and demonstrate new sustainable manufacturing and industrial technologies and processes that maximize the energy efficiency of industrial plants, reduce pollution, and conserve natural resources.".

(b) TABLE OF CONTENTS.—The table of contents of the Energy Policy and Conservation Act (42 U.S.C. prec. 6201) is amended by adding at the end of the items relating to part E of title III the following:

"Sec. 376. Sustainable manufacturing initiative.".

SEC. 204. CONFORMING AMENDMENTS.

(a) Section 106 of the Energy Policy Act of 2005 (42 U.S.C. 15811) is repealed.

(b) Sections 131, 132, 133, 2103, and 2107 of the Energy Policy Act of 1992 (42 U.S.C. 6348, 6349, 6350, 13453, 13456) are repealed.

(c) Section 2101(a) of the Energy Policy Act of 1992 (42 U.S.C. 13451(a)) is amended in the third sentence

by striking ''sections 2102, 2103, 2104, 2105, 2106, 2107, and 2108'' and inserting ''sections 2102, 2104, 2105, 2106, and 2108 of this Act and section 376 of the Energy Policy and Conservation Act,''.

Subtitle B—Supply Star

SEC. 211. SUPPLY STAR.

The Energy Policy and Conservation Act is amended by inserting after section 324A (42 U.S.C. 6294a) the following:

''SEC. 324B. SUPPLY STAR PROGRAM.

''(a) IN GENERAL.—There is established within the Department of Energy a Supply Star program to identify and promote practices, recognize companies, and, as appropriate, recognize products that use highly efficient supply chains in a manner that conserves energy, water, and other resources.

''(b) COORDINATION.—In carrying out the program described in subsection (a), the Secretary shall—

''(1) consult with other appropriate agencies; and

''(2) coordinate efforts with the Energy Star program established under section 324A.

''(c) DUTIES.—In carrying out the Supply Star program described in subsection (a), the Secretary shall—

"(1) promote practices, recognize companies, and, as appropriate, recognize products that comply with the Supply Star program as the preferred practices, companies, and products in the marketplace for maximizing supply chain efficiency;

"(2) work to enhance industry and public awareness of the Supply Star program;

"(3) collect and disseminate data on supply chain energy resource consumption;

"(4) develop and disseminate metrics, processes, and analytical tools (including software) for evaluating supply chain energy resource use;

"(5) develop guidance at the sector level for improving supply chain efficiency;

"(6) work with domestic and international organizations to harmonize approaches to analyzing supply chain efficiency, including the development of a consistent set of tools, templates, calculators, and databases; and

"(7) work with industry, including small businesses, to improve supply chain efficiency through activities that include—

"(A) developing and sharing best practices; and

"(B) providing opportunities to benchmark supply chain efficiency.

"(d) EVALUATION.—In any evaluation of supply chain efficiency carried out by the Secretary with respect to a specific product, the Secretary shall consider energy consumption and resource use throughout the entire lifecycle of a product, including production, transport, packaging, use, and disposal.

"(e) GRANTS AND INCENTIVES.—

"(1) IN GENERAL.—The Secretary may award grants or other forms of incentives on a competitive basis to eligible entities, as determined by the Secretary, for the purposes of—

"(A) studying supply chain energy resource efficiency; and

"(B) demonstrating and achieving reductions in the energy resource consumption of commercial products through changes and improvements to the production supply and distribution chain of the products.

"(2) USE OF INFORMATION.—Any information or data generated as a result of the grants or incentives described in paragraph (1) shall be used to inform the development of the Supply Star Program.

"(f) TRAINING.—The Secretary shall use funds to support professional training programs to develop and communicate methods, practices, and tools for improving supply chain efficiency.

"(g) EFFECT OF OUTSOURCING OF AMERICAN JOBS.—For purposes of this section, the outsourcing of American jobs in the production of a product shall not count as a positive factor in determining supply chain efficiency.

"(h) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $10,000,000 for the period of fiscal years 2015 through 2024.".

Subtitle C—Extended Product System Rebate Program

SEC. 221. EXTENDED PRODUCT SYSTEM REBATE PROGRAM.

(a) DEFINITIONS.—In this section:

(1) ELECTRIC MOTOR.—The term "electric motor" has the meaning given the term in section 431.12 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this Act).

(2) ELECTRONIC CONTROL.—The term "electronic control" means—

(A) a power converter; or

(B) a combination of a power circuit and control circuit included on 1 chassis.

(3) EXTENDED PRODUCT SYSTEM.—The term ''extended product system'' means an electric motor and any required associated electronic control and driven load that—

(A) offers variable speed or multispeed operation;

(B) offers partial load control that reduces input energy requirements (as measured in kilowatt-hours) as compared to identified base levels set by the Secretary; and

(C)(i) has greater than 1 horsepower; and

(ii) uses an extended product system technology, as determined by the Secretary.

(4) QUALIFIED EXTENDED PRODUCT SYSTEM.—

(A) IN GENERAL.—The term ''qualified extended product system'' means an extended product system that—

(i) includes an electric motor and an electronic control; and

(ii) reduces the input energy (as measured in kilowatt-hours) required to operate the extended product system by

not less than 5 percent, as compared to identified base levels set by the Secretary.

(B) INCLUSIONS.—The term ''qualified extended product system'' includes commercial or industrial machinery or equipment that—

(i)(I) did not previously make use of the extended product system prior to the redesign described in subclause (II); and

(II) incorporates an extended product system that has greater than 1 horsepower into redesigned machinery or equipment; and

(ii) was previously used prior to, and was placed back into service during, calendar year 2016 or 2017.

(b) ESTABLISHMENT.—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish a program to provide rebates for expenditures made by qualified entities for the purchase or installation of a qualified extended product system.

(c) QUALIFIED ENTITIES.—

(1) ELIGIBILITY REQUIREMENTS.—A qualified entity under this section shall be—

(A) in the case of a qualified extended product system described in subsection

(a)(4)(A), the purchaser of the qualified extended product that is installed; and

(B) in the case of a qualified extended product system described in subsection (a)(4)(B), the manufacturer of the commercial or industrial machinery or equipment that incorporated the extended product system into that machinery or equipment.

(2) APPLICATION.—To be eligible to receive a rebate under this section, a qualified entity shall submit to the Secretary—

(A) an application in such form, at such time, and containing such information as the Secretary may require; and

(B) a certification that includes demonstrated evidence—

(i) that the entity is a qualified entity; and

(ii)(I) in the case of a qualified entity described in paragraph (1)(A)—

(aa) that the qualified entity installed the qualified extended product system during the 2 fiscal years following the date of enactment of this Act;

(bb) that the qualified extended product system meets the requirements of subsection (a)(4)(A); and

(cc) showing the serial number, manufacturer, and model number from the nameplate of the installed motor of the qualified entity on which the qualified extended product system was installed; or

(II) in the case of a qualified entity described in paragraph (1)(B), demonstrated evidence—

(aa) that the qualified extended product system meets the requirements of subsection (a)(4)(B); and

(bb) showing the serial number, manufacturer, and model number from the nameplate of the installed motor of the qualified entity with which the extended product system is integrated.

(d) AUTHORIZED AMOUNT OF REBATE.—

(1) IN GENERAL.—The Secretary may provide to a qualified entity a rebate in an amount equal to the product obtained by multiplying—

(A) an amount equal to the sum of the nameplate rated horsepower of—

(i) the electric motor to which the qualified extended product system is attached; and

(ii) the electronic control; and

(B) $25.

(2) MAXIMUM AGGREGATE AMOUNT.—A qualified entity shall not be entitled to aggregate rebates under this section in excess of $25,000 per calendar year.

(e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $5,000,000 for each of the first 2 full fiscal years following the date of enactment of this Act, to remain available until expended.

Subtitle D—Transformer Rebate Program

SEC. 231. ENERGY EFFICIENT TRANSFORMER REBATE PROGRAM.

(a) DEFINITIONS.—In this section:

(1) QUALIFIED ENERGY EFFICIENT TRANSFORMER.—The term ''qualified energy efficient transformer'' means a transformer that meets or exceeds the applicable energy conservation standards

described in the tables in subsection (b)(2) and paragraphs (1) and (2) of subsection (c) of section 431.196 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this Act).

(2) QUALIFIED ENERGY INEFFICIENT TRANSFORMER.—The term ''qualified energy inefficient transformer'' means a transformer with an equal number of phases and capacity to a transformer described in any of the tables in subsection (b)(2) and paragraphs (1) and (2) of subsection (c) of section 431.196 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this Act) that—

(A) does not meet or exceed the applicable energy conservation standards described in paragraph (1); and

(B)(i) was manufactured between January 1, 1985, and December 31, 2006, for a transformer with an equal number of phases and capacity as a transformer described in the table in subsection (b)(2) of section 431.196 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this Act); or

(ii) was manufactured between January 1, 1990, and December 31, 2009, for a trans-

former with an equal number of phases and capacity as a transformer described in the table in paragraph (1) or (2) of subsection (c) of that section (as in effect on the date of enactment of this Act).

(3) QUALIFIED ENTITY.—The term ''qualified entity'' means an owner of industrial or manufacturing facilities, commercial buildings, or multifamily residential buildings, a utility, or an energy service company that fulfills the requirements of subsection (d).

(b) ESTABLISHMENT.—Not later than 90 days after the date of enactment of this Act, the Secretary shall establish a program to provide rebates to qualified entities for expenditures made by the qualified entity for the replacement of a qualified energy inefficient transformer with a qualified energy efficient transformer.

(c) REQUIREMENTS.—To be eligible to receive a rebate under this section, an entity shall submit to the Secretary an application in such form, at such time, and containing such information as the Secretary may require, including demonstrated evidence—

(1) that the entity purchased a qualified energy efficient transformer;

(2) of the core loss value of the qualified energy efficient transformer;

(3) of the age of the qualified energy inefficient transformer being replaced;

(4) of the core loss value of the qualified energy inefficient transformer being replaced—

(A) as measured by a qualified professional or verified by the equipment manufacturer, as applicable; or

(B) for transformers described in subsection (a)(2)(B)(i), as selected from a table of default values as determined by the Secretary in consultation with applicable industry; and

(5) that the qualified energy inefficient transformer has been permanently decommissioned and scrapped.

(d) AUTHORIZED AMOUNT OF REBATE.—The amount of a rebate provided under this section shall be—

(1) for a 3-phase or single-phase transformer with a capacity of not less than 10 and not greater than 2,500 kilovolt-amperes, twice the amount equal to the difference in Watts between the core loss value (as measured in accordance with paragraphs (2) and (4) of subsection (c)) of—

(A) the qualified energy inefficient transformer; and

(B) the qualified energy efficient transformer; or

(2) for a transformer described in subsection (a)(2)(B)(i), the amount determined using a table of default rebate values by rated transformer output, as measured in kilovolt-amperes, as determined by the Secretary in consultation with applicable industry.

(e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $5,000,000 for each of fiscal years 2016 and 2017, to remain available until expended.

(f) TERMINATION OF EFFECTIVENESS.—The authority provided by this section terminates on December 31, 2017.

TITLE III—FEDERAL AGENCY ENERGY EFFICIENCY

SEC. 301. ENERGY-EFFICIENT AND ENERGY-SAVING INFORMATION TECHNOLOGIES.

Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is amended—

(1) by redesignating the second subsection (f) (relating to large capital energy investments) as subsection (g); and

(2) by adding at the end the following:

"(h) FEDERAL IMPLEMENTATION STRATEGY FOR ENERGY-EFFICIENT AND ENERGY-SAVING INFORMATION TECHNOLOGIES.—

"(1) DEFINITIONS.—In this subsection:

"(A) DIRECTOR.—The term 'Director' means the Director of the Office of Management and Budget.

"(B) INFORMATION TECHNOLOGY.—The term 'information technology' has the meaning given the term in section 11101 of title 40, United States Code.

"(2) DEVELOPMENT OF IMPLEMENTATION STRATEGY.—Not later than 1 year after the date of enactment of this subsection, each Federal agency shall collaborate with the Director to develop an implementation strategy (including best-practices and measurement and verification techniques) for the maintenance, purchase, and use by the Federal agency of energy-efficient and energy-saving information technologies.

"(3) ADMINISTRATION.—In developing an implementation strategy, each Federal agency shall consider—

"(A) advanced metering infrastructure;

"(B) energy efficient data center strategies and methods of increasing asset and infrastructure utilization;

"(C) advanced power management tools;

"(D) building information modeling, including building energy management; and

"(E) secure telework and travel substitution tools.

"(4) PERFORMANCE GOALS.—

"(A) IN GENERAL.—Not later than September 30, 2015, the Director, in consultation with the Secretary, shall establish performance goals for evaluating the efforts of Federal agencies in improving the maintenance, purchase, and use of energy-efficient and energy-saving information technology systems.

"(B) BEST PRACTICES.—The Chief Information Officers Council established under section 3603 of title 44, United States Code, shall supplement the performance goals established under this paragraph with recommendations on

best practices for the attainment of the performance goals, to include a requirement for agencies to consider the use of—

"(i) energy savings performance contracting; and

"(ii) utility energy services contracting.

"(5) REPORTS.—

"(A) AGENCY REPORTS.—Each Federal agency subject to the requirements of this subsection shall include in the report of the agency under section 527 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17143) a description of the efforts and results of the agency under this subsection.

"(B) OMB GOVERNMENT EFFICIENCY REPORTS AND SCORECARDS.—Effective beginning not later than October 1, 2015, the Director shall include in the annual report and scorecard of the Director required under section 528 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17144) a description of the efforts and results of Federal agencies under this subsection.

"(C) USE OF EXISTING REPORTING STRUCTURES.—The Director may require Federal agencies to submit any information required to be submitted under this subsection though reporting structures in use as of the date of enactment of the Energy Savings and Industrial Competitiveness Act of 2015.".

SEC. 302. AVAILABILITY OF FUNDS FOR DESIGN UPDATES.

Section 3307 of title 40, United States Code, is amended—

(1) by redesignating subsections (d) through (h) as subsections (e) through (i), respectively; and

(2) by inserting after subsection (c) the following:

"(d) AVAILABILITY OF FUNDS FOR DESIGN UPDATES.—

"(1) IN GENERAL.—Subject to paragraph (2), for any project for which congressional approval is received under subsection (a) and for which the design has been substantially completed but construction has not begun, the Administrator of General Services may use appropriated funds to update the project design to meet applicable Federal building energy efficiency standards established under section 305 of the Energy Conservation and Production Act

(42 U.S.C. 6834) and other requirements established under section 3312.

"(2) LIMITATION.—The use of funds under paragraph (1) shall not exceed 125 percent of the estimated energy or other cost savings associated with the updates as determined by a life cycle cost analysis under section 544 of the National Energy Conservation Policy Act (42 U.S.C. 8254).".

SEC. 303. ENERGY EFFICIENT DATA CENTERS.

Section 453 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17112) is amended—

(1) in subsection (b)—

(A) in paragraph (2)(D)(iv), by striking "the organization" and inserting "an organization"; and

(B) by striking paragraph (3); and

(2) by striking subsections (c) through (g) and inserting the following:

"(c) STAKEHOLDER INVOLVEMENT.—

"(1) IN GENERAL.—The Secretary and the Administrator shall carry out subsection (b) in consultation with the information technology industry and other key stakeholders, with the goal of producing results that accurately reflect the best knowledge in the most pertinent domains.

"(2) CONSIDERATIONS.—In carrying out consultation described in paragraph (1), the Secretary and the Administrator shall pay particular attention to organizations that—

"(A) have members with expertise in energy efficiency and in the development, operation, and functionality of data centers, information technology equipment, and software, including representatives of hardware manufacturers, data center operators, and facility managers;

"(B) obtain and address input from the National Laboratories (as that term is defined in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801)) or any institution of higher education, research institution, industry association, company, or public interest group with applicable expertise;

"(C) follow—

"(i) commonly accepted procedures for the development of specifications; and

"(ii) accredited standards development processes; or

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

"(d) MEASUREMENTS AND SPECIFICATIONS.—The Secretary and the Administrator shall consider and assess the adequacy of 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 or the Environmental Protection Agency.

"(e) STUDY.—The Secretary, in consultation with the Administrator, not later than 18 months after the date of enactment of the Energy Savings and Industrial Competitiveness Act of 2015, shall make available to the public an update to the report submitted to Congress pursuant to section 1 of the Act of December 20, 2006 (Public Law 109–431; 120 Stat. 2920), entitled 'Report to Congress on Server and Data Center Energy Efficiency' and dated August 2, 2007, that provides—

"(1) a comparison and gap analysis of the estimates and projections contained in the original report with new data regarding the period from 2007 through 2014;

"(2) an analysis considering the impact of information technologies, including virtualization and cloud computing, in the public and private sectors;

"(3) an evaluation of the impact of the combination of cloud platforms, mobile devices, social media, and big data on data center energy usage; and

"(4) updated projections and recommendations for best practices through fiscal year 2020.

"(f) DATA CENTER ENERGY PRACTITIONER PROGRAM.—

"(1) IN GENERAL.—The Secretary, in consultation with key stakeholders and the Director of the Office of Management and Budget, shall maintain a data center energy practitioner program that provides for the certification of energy practitioners qualified to evaluate the energy usage and efficiency opportunities in Federal data centers.

"(2) EVALUATIONS.—Each Federal agency shall consider having the data centers of the agency evaluated once every 4 years by energy practitioners certified pursuant to the program, whenever practicable using certified practitioners employed by the agency.

"(g) OPEN DATA INITIATIVE.—

"(1) IN GENERAL.—The Secretary, in consultation with key stakeholders and the Director of the Office of Management and Budget, shall establish an open data initiative for Federal data center energy usage data, with the purpose of making the data available and accessible in a manner that encourages further data center innovation, optimization, and consolidation.

"(2) CONSIDERATION.—In establishing the initiative under paragraph (1), the Secretary shall consider using the online Data Center Maturity Model.

"(h) INTERNATIONAL SPECIFICATIONS AND METRICS.—The Secretary, in consultation with key stakeholders, shall actively participate in efforts to harmonize global specifications and metrics for data center energy efficiency.

"(i) DATA CENTER UTILIZATION METRIC.—The Secretary, in collaboration with key stakeholders, shall facilitate in the development of an efficiency metric that measures the energy efficiency of a data center (including equipment and facilities).

"(j) PROTECTION OF PROPRIETARY INFORMATION.—The Secretary and the Administrator 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 programs and initiatives established under this section.''.

SEC. 304. BUDGET-NEUTRAL DEMONSTRATION PROGRAM FOR ENERGY AND WATER CONSERVATION IMPROVEMENTS AT MULTIFAMILY RESIDENTIAL UNITS.

(a) ESTABLISHMENT.—The Secretary of Housing and Urban Development (referred to in this section as the ''Secretary'') shall establish a demonstration program under which, during the period beginning on the date of enactment of this Act, and ending on September 30, 2018, the Secretary may enter into budget-neutral, performance-based agreements that result in a reduction in energy or water costs with such entities as the Secretary determines to be appropriate under which the entities shall carry out projects for energy or water conservation improvements at not more than 20,000 residential units in multifamily buildings participating in—

(1) the project-based rental assistance program under section 8 of the United States Housing Act of 1937 (42 U.S.C. 1437f), other than assistance provided under section 8(o) of that Act;

(2) the supportive housing for the elderly program under section 202 of the Housing Act of 1959 (12 U.S.C. 1701q); or

(3) the supportive housing for persons with disabilities program under section 811(d)(2) of the Cranston-Gonzalez National Affordable Housing Act (42 U.S.C. 8013(d)(2)).

(b) REQUIREMENTS.—

(1) PAYMENTS CONTINGENT ON SAVINGS.—

(A) IN GENERAL.—The Secretary shall provide to an entity a payment under an agreement under this section only during applicable years for which an energy or water cost savings is achieved with respect to the applicable multifamily portfolio of properties, as determined by the Secretary, in accordance with subparagraph (B).

(B) PAYMENT METHODOLOGY.—

(i) IN GENERAL.—Each agreement under this section shall include a pay-for-success provision—

(I) that will serve as a payment threshold for the term of the agreement; and

(II) pursuant to which the Department of Housing and Urban Development shall share a percentage of the savings at a level determined by

the Secretary that is sufficient to cover the administrative costs of carrying out this section.

(ii) LIMITATIONS.—A payment made by the Secretary under an agreement under this section shall—

(I) be contingent on documented utility savings; and

(II) not exceed the utility savings achieved by the date of the payment, and not previously paid, as a result of the improvements made under the agreement.

(C) THIRD-PARTY VERIFICATION.—Savings payments made by the Secretary under this section shall be based on a measurement and verification protocol that includes at least—

(i) establishment of a weather-normalized and occupancy-normalized utility consumption baseline established preretrofit;

(ii) annual third-party confirmation of actual utility consumption and cost for owner-paid utilities;

(iii) annual third-party validation of the tenant utility allowances in effect dur-

ing the applicable year and vacancy rates for each unit type; and

(iv) annual third-party determination of savings to the Secretary.

(2) TERM.—The term of an agreement under this section shall be not longer than 12 years.

(3) ENTITY ELIGIBILITY.—The Secretary shall—

(A) establish a competitive process for entering into agreements under this section; and

(B) enter into such agreements only with entities that demonstrate significant experience relating to—

(i) financing and operating properties receiving assistance under a program described in subsection (a);

(ii) oversight of energy and water conservation programs, including oversight of contractors; and

(iii) raising capital for energy and water conservation improvements from charitable organizations or private investors.

(4) GEOGRAPHICAL DIVERSITY.—Each agreement entered into under this section shall provide

for the inclusion of properties with the greatest feasible regional and State variance.

(c) PLAN AND REPORTS.—

(1) PLAN.—Not later than 90 days after the date of enactment of this Act, the Secretary shall submit to the Committees on Appropriations of the House of Representatives and the Senate a detailed plan for the implementation of this section.

(2) REPORTS.—Not later than 1 year after the date of enactment of this Act, and annually thereafter, the Secretary shall—

(A) conduct an evaluation of the program under this section; and

(B) submit to Congress a report describing each evaluation conducted under subparagraph (A).

(d) FUNDING.—For each fiscal year during which an agreement under this section is in effect, the Secretary may use to carry out this section any funds appropriated to the Secretary for the renewal of contracts under a program described in subsection (a).

TITLE IV—REGULATORY PROVISIONS

Subtitle A—Third-Party Certification Under Energy Star Program

SEC. 401. THIRD-PARTY CERTIFICATION UNDER ENERGY STAR PROGRAM.

Section 324A of the Energy Policy and Conservation Act (42 U.S.C. 6294a) is amended by adding at the end the following:

"(e) THIRD-PARTY CERTIFICATION.—

"(1) IN GENERAL.—Subject to paragraph (2), not later than 180 days after the date of enactment of this subsection, the Administrator shall revise the certification requirements for the labeling of consumer, home, and office electronic products for program partners that have complied with all requirements of the Energy Star program for a period of at least 18 months.

"(2) ADMINISTRATION.—In the case of a program partner described in paragraph (1), the new requirements under paragraph (1)—

"(A) shall not require third-party certification for a product to be listed; but

"(B) may require that test data and other product information be submitted to facilitate product listing and performance verification for a sample of products.

"(3) THIRD PARTIES.—Nothing in this subsection prevents the Administrator from using third parties in the course of the administration of the Energy Star program.

"(4) TERMINATION.—

"(A) IN GENERAL.—Subject to subparagraph (B), an exemption from third-party certification provided to a program partner under paragraph (1) shall terminate if the program partner is found to have violated program requirements with respect to at least 2 separate models during a 2-year period.

"(B) RESUMPTION.—A termination for a program partner under subparagraph (A) shall cease if the program partner complies with all Energy Star program requirements for a period of at least 3 years.".

Subtitle B—Federal Green Buildings

SEC. 411. HIGH-PERFORMANCE GREEN FEDERAL BUILDINGS.

Section 436(h) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17092(h)) is amended—

(1) in the subsection heading, by striking ''SYSTEM'' and inserting ''SYSTEMS'';

(2) by striking paragraph (1) and inserting the following:

''(1) IN GENERAL.—Based on an ongoing review, the Federal Director shall identify and shall provide to the Secretary pursuant to section 305(a)(3)(D) of the Energy Conservation and Production Act (42 U.S.C. 6834(a)(3)(D)), a list of those certification systems that the Director identifies as the most likely to encourage a comprehensive and environmentally sound approach to certification of green buildings.''; and

(3) in paragraph (2)—

(A) in the matter preceding subparagraph (A), by striking ''system'' and inserting ''systems'';

(B) by striking subparagraph (A) and inserting the following:

"(A) an ongoing review provided to the Secretary pursuant to section 305(a)(3)(D) of the Energy Conservation and Production Act (42 U.S.C. 6834(a)(3)(D)), which shall—

"(i) be carried out by the Federal Director to compare and evaluate standards; and

"(ii) allow any developer or administrator of a rating system or certification system to be included in the review;";

(C) in subparagraph (E)(v), by striking "and" after the semicolon at the end;

(D) in subparagraph (F), by striking the period at the end and inserting a semicolon; and

(E) by adding at the end the following:

"(G) a finding that, for all credits addressing grown, harvested, or mined materials, the system does not discriminate against the use of domestic products that have obtained certifications of responsible sourcing; and

"(H) a finding that the system incorporates life-cycle assessment as a credit pathway.".

Subtitle C—Water Heaters

SEC. 421. GRID-ENABLED WATER HEATERS.

Part B of title III of the Energy Policy and Conservation Act is amended—

(1) in section 325(e) (42 U.S.C. 6295(e)), by adding at the end the following:

"(6) ADDITIONAL STANDARDS FOR GRID-ENABLED WATER HEATERS.—

"(A) DEFINITIONS.—In this paragraph:

"(i) ACTIVATION LOCK.—The term 'activation lock' means a control mechanism (either a physical device directly on the water heater or a control system integrated into the water heater) that is locked by default and contains a physical, software, or digital communication that must be activated with an activation key to enable the product to operate at its designed specifications and capabilities and without which activation the product will provide not greater than 50 percent of the rated first hour delivery of hot water certified by the manufacturer.

"(ii) GRID-ENABLED WATER HEATER.—The term 'grid-enabled water heater'

means an electric resistance water heater that—

"(I) has a rated storage tank volume of more than 75 gallons;

"(II) is manufactured on or after April 16, 2015;

"(III) has—

"(aa) an energy factor of not less than 1.061 minus the product obtained by multiplying—

"(AA) the rated storage volume of the tank, expressed in gallons; and

"(BB) 0.00168; or

"(bb) an equivalent alternative standard prescribed by the Secretary and developed pursuant to paragraph (5)(E);

"(IV) is equipped at the point of manufacture with an activation lock; and

"(V) bears a permanent label applied by the manufacturer that—

"(aa) is made of material not adversely affected by water;

"(bb) is attached by means of non-water-soluble adhesive; and

"(cc) advises purchasers and end-users of the intended and appropriate use of the product with the following notice printed in 16.5 point Arial Narrow Bold font:

"'IMPORTANT INFORMATION: This water heater is intended only for use as part of an electric thermal storage or demand response program. It will not provide adequate hot water unless enrolled in such a program and activated by your utility company or another program operator. Confirm the availability of a program in your local area before purchasing or installing this product.'.

"(B) REQUIREMENT.—The manufacturer or private labeler shall provide the activation key for a grid-enabled water heater only to a utility or other company that operates an electric thermal storage or demand response program that uses such a grid-enabled water heater.

"(C) REPORTS.—

"(i) MANUFACTURERS.—The Secretary shall require each manufacturer of grid-enabled water heaters to report to the Secretary annually the quantity of grid-enabled water heaters that the manufacturer ships each year.

"(ii) OPERATORS.—The Secretary shall require utilities and other demand response and thermal storage program operators to report annually the quantity of grid-enabled water heaters activated for their programs using forms of the Energy Information Agency or using such other mechanism that the Secretary determines appropriate after an opportunity for notice and comment.

"(iii) CONFIDENTIALITY REQUIREMENTS.—The Secretary shall treat shipment data reported by manufacturers as confidential business information.

"(D) PUBLICATION OF INFORMATION.—

"(i) IN GENERAL.—In 2017 and 2019, the Secretary shall publish an analysis of the data collected under subpara-

graph (C) to assess the extent to which shipped products are put into use in demand response and thermal storage programs.

"(ii) PREVENTION OF PRODUCT DIVERSION.—If the Secretary determines that sales of grid-enabled water heaters exceed by 15 percent or greater the quantity of such products activated for use in demand response and thermal storage programs annually, the Secretary shall, after opportunity for notice and comment, establish procedures to prevent product diversion for non-program purposes.

"(E) COMPLIANCE.—

"(i) IN GENERAL.—Subparagraphs (A) through (D) shall remain in effect until the Secretary determines under this section that—

"(I) grid-enabled water heaters do not require a separate efficiency requirement; or

"(II) sales of grid-enabled water heaters exceed by 15 percent or greater the quantity of such products acti-

vated for use in demand response and thermal storage programs annually and procedures to prevent product diversion for non-program purposes would not be adequate to prevent such product diversion.

"(ii) EFFECTIVE DATE.—If the Secretary exercises the authority described in clause (i) or amends the efficiency requirement for grid-enabled water heaters, that action will take effect on the date described in subsection (m)(4)(A)(ii).

"(iii) CONSIDERATION.—In carrying out this section with respect to electric water heaters, the Secretary shall consider the impact on thermal storage and demand response programs, including any impact on energy savings, electric bills, peak load reduction, electric reliability, integration of renewable resources, and the environment.

"(iv) REQUIREMENTS.—In carrying out this paragraph, the Secretary shall require that grid-enabled water heaters be equipped with communication capability to enable the grid-enabled water heaters to

participate in ancillary services programs if the Secretary determines that the technology is available, practical, and cost-effective.''; (2) in section 332(a) (42 U.S.C. 6302(a))—

(A) in paragraph (5), by striking ''or'' at the end;

(B) in the first paragraph (6), by striking the period at the end and inserting a semicolon;

(C) by redesignating the second paragraph (6) as paragraph (7);

(D) in subparagraph (B) of paragraph (7) (as so redesignated), by striking the period at the end and inserting ''; or''; and

(E) by adding at the end the following:

''(8) for any person—

''(A) to activate an activation lock for a grid-enabled water heater with knowledge that such water heater is not used as part of an electric thermal storage or demand response program;

''(B) to distribute an activation key for a grid-enabled water heater with knowledge that such activation key will be used to activate a grid-enabled water heater that is not used as

part of an electric thermal storage or demand response program;

"(C) to otherwise enable a grid-enabled water heater to operate at its designed specification and capabilities with knowledge that such water heater is not used as part of an electric thermal storage or demand response program; or

"(D) to knowingly remove or render illegible the label of a grid-enabled water heater described in section 325(e)(6)(A)(ii)(V).";

(3) in section 333(a) (42 U.S.C. 6303(a))—

(A) by striking "section 332(a)(5)" and inserting "paragraph (5), (6), (7), or (8) of section 332(a)"; and

(B) by striking "paragraph (1), (2), or (5) of section 332(a)" and inserting "paragraph (1), (2), (5), (6), (7), or (8) of section 332(a)"; and

(4) in section 334 (42 U.S.C. 6304)—

(A) by striking "section 332(a)(5)" and inserting "paragraph (5), (6), (7), or (8) of section 332(a)"; and

(B) by striking "section 332(a)(6)" and inserting "section 332(a)(7)".

Subtitle D—Energy Performance Requirement for Federal Buildings

SEC. 431. ENERGY PERFORMANCE REQUIREMENT FOR FEDERAL BUILDINGS.

Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is amended—

(1) by striking subsection (a) and inserting the following:

"(a) ENERGY PERFORMANCE REQUIREMENT FOR FEDERAL BUILDINGS.—

"(1) REQUIREMENT.—Subject to paragraph (2), each agency shall apply energy conservation measures to, and shall improve the design for the construction of, the Federal buildings of the agency (including each industrial or laboratory facility) so that the energy consumption per gross square foot of the Federal buildings of the agency in fiscal years 2006 through 2017 is reduced, as compared with the energy consumption per gross square foot of the Federal buildings of the agency in fiscal year 2003, by the percentage specified in the following table:

"Fiscal Year	Percentage Reduction
2006	2
2007	4
2008	9
2009	12
2010	15
2011	18
2012	21

"Fiscal Year	Percentage Reduction
2013	24
2014	27
2015	30
2016	33
2017	36.

"(2) EXCLUSION FOR BUILDINGS WITH ENERGY INTENSIVE ACTIVITIES.—

"(A) IN GENERAL.—An agency may exclude from the requirements of paragraph (1) any building (including the associated energy consumption and gross square footage) in which energy intensive activities are carried out.

"(B) REPORTS.—Each agency shall identify and list in each report made under section 548(a) the buildings designated by the agency for exclusion under subparagraph (A).

"(3) REVIEW.—Not later than December 31, 2017, the Secretary shall—

"(A) review the results of the implementation of the energy performance requirements established under paragraph (1); and

"(B) based on the review conducted under subparagraph (A), submit to Congress a report that addresses the feasibility of requiring each agency to apply energy conservation measures to, and improve the design for the construction of, the Federal buildings of the agency (includ-

ing each industrial or laboratory facility) so that the energy consumption per gross square foot of the Federal buildings of the agency in each of fiscal years 2018 through 2030 is reduced, as compared with the energy consumption per gross square foot of the Federal buildings of the agency in the prior fiscal year, by 3 percent.''; and

(2) in subsection (f)—

(A) in paragraph (1)—

(i) by redesignating subparagraphs (E), (F), and (G) as subparagraphs (F), (G), and (H), respectively; and

(ii) by inserting after subparagraph (D) the following:

''(E) ONGOING COMMISSIONING.—The term 'ongoing commissioning' means an ongoing process of commissioning using monitored data, the primary goal of which is to ensure continuous optimum performance of a facility, in accordance with design or operating needs, over the useful life of the facility, while meeting facility occupancy requirements.'';

(B) in paragraph (2), by adding at the end the following:

"(C) ENERGY MANAGEMENT SYSTEM.—An energy manager designated under subparagraph (A) shall consider use of a system to manage energy use at the facility and certification of the facility in accordance with the International Organization for Standardization standard numbered 50001 and entitled 'Energy Management Systems'.";

(C) by striking paragraphs (3) and (4) and inserting the following:

"(3) ENERGY AND WATER EVALUATIONS AND COMMISSIONING.—

"(A) EVALUATIONS.—Except as provided in subparagraph (B), effective beginning on the date that is 180 days after the date of enactment of the Energy Savings and Industrial Competitiveness Act of 2015, and annually thereafter, each energy manager shall complete, for each calendar year, a comprehensive energy and water evaluation and recommissioning or retrocommissioning for approximately 25 percent of the facilities of each agency that meet the criteria under paragraph (2)(B) in a manner that ensures that an evaluation of each facility is completed at least once every 4 years.

"(B) EXCEPTIONS.—An evaluation and recommissioning shall not be required under subparagraph (A) with respect to a facility that—

"(i) has had a comprehensive energy and water evaluation during the 8-year period preceding the date of the evaluation;

"(ii)(I) has been commissioned, recommissioned, or retrocommissioned during the 10-year period preceding the date of the evaluation; or

"(II) is under ongoing commissioning;

"(iii) has not had a major change in function or use since the previous evaluation and commissioning;

"(iv) has been benchmarked with public disclosure under paragraph (8) within the year preceding the evaluation; and

"(v)(I) based on the benchmarking, has achieved at a facility level the most recent cumulative energy savings target under subsection (a) compared to the earlier of—

"(aa) the date of the most recent evaluation; or

"(bb) the date—

"(AA) of the most recent commissioning, recommissioning, or retrocommissioning; or

"(BB) on which ongoing commissioning began; or

"(II) has a long-term contract in place guaranteeing energy savings at least as great as the energy savings target under subclause (I).

"(4) IMPLEMENTATION OF IDENTIFIED ENERGY AND WATER EFFICIENCY MEASURES.—

"(A) IN GENERAL.—Not later than 2 years after the date of completion of each evaluation under paragraph (3), each energy manager may—

"(i) implement any energy- or water-saving measure that the Federal agency identified in the evaluation conducted under paragraph (3) that is life-cycle cost effective; and

"(ii) bundle individual measures of varying paybacks together into combined projects.

"(B) MEASURES NOT IMPLEMENTED.—The energy manager shall, as part of the cer-

tification system under paragraph (7), explain the reasons why any life-cycle cost effective measures were not implemented under subparagraph (A) using guidelines developed by the Secretary.''; and

(D) in paragraph (7)(C), by adding at the end the following:

''(iii) SUMMARY REPORT.—The Secretary shall make available a report that summarizes the information tracked under subparagraph (B)(i) by each agency and, as applicable, by each type of measure.''.

SEC. 432. FEDERAL BUILDING ENERGY EFFICIENCY PERFORMANCE STANDARDS; CERTIFICATION SYSTEM AND LEVEL FOR GREEN BUILDINGS.

(a) DEFINITIONS.—Section 303 of the Energy Conservation and Production Act (42 U.S.C. 6832) (as amended by section 101(a)) is amended—

(1) in paragraph (6), by striking ''to be constructed'' and inserting ''constructed or altered''; and

(2) by adding at the end the following:

''(19) MAJOR RENOVATION.—The term 'major renovation' means a modification of building energy systems sufficiently extensive that the whole building

can meet energy standards for new buildings, based on criteria to be established by the Secretary through notice and comment rulemaking.''.

(b) FEDERAL BUILDING EFFICIENCY STANDARDS.—Section 305 of the Energy Conservation and Production Act (42 U.S.C. 6834) is amended—

(1) in subsection (a)(3)—

(A) by striking ''(3)(A) Not later than'' and all that follows through subparagraph (B) and inserting the following:

''(3) REVISED FEDERAL BUILDING ENERGY EFFICIENCY PERFORMANCE STANDARDS; CERTIFICATION FOR GREEN BUILDINGS.—

''(A) REVISED FEDERAL BUILDING ENERGY EFFICIENCY PERFORMANCE STANDARDS.—

''(i) IN GENERAL.—Not later than 1 year after the date of enactment of the Energy Savings and Industrial Competitiveness Act of 2015, the Secretary shall establish, by rule, revised Federal building energy efficiency performance standards that require that—

"(I) new Federal buildings and alterations and additions to existing Federal buildings—

"(aa) meet or exceed the most recent revision of the International Energy Conservation Code (in the case of residential buildings) or ASHRAE Standard 90.1 (in the case of commercial buildings) as of the date of enactment of the Energy Savings and Industrial Competitiveness Act of 2015; and

"(bb) meet or exceed the energy provisions of State and local building codes applicable to the building, if the codes are more stringent than the International Energy Conservation Code or ASHRAE Standard 90.1, as applicable;

"(II) unless demonstrated not to be life-cycle cost effective for new Federal buildings and Federal buildings with major renovations—

"(aa) the buildings be designed to achieve energy consumption levels that are at least 30 percent below the levels established in the version of the ASHRAE Standard or the International Energy Conservation Code, as appropriate, that is applied under subclause (I)(aa), including updates under subparagraph (B); and

"(bb) sustainable design principles are applied to the location, siting, design, and construction of all new Federal buildings and replacement Federal buildings;

"(III) if water is used to achieve energy efficiency, water conservation technologies shall be applied to the extent that the technologies are life-cycle cost effective; and

"(IV) if life-cycle cost effective, as compared to other reasonably available technologies, not less than 30

percent of the hot water demand for each new Federal building or Federal building undergoing a major renovation be met through the installation and use of solar hot water heaters.

"(ii) LIMITATION.—Clause (i)(I) shall not apply to unaltered portions of existing Federal buildings and systems that have been added to or altered.

"(B) UPDATES.—Not later than 1 year after the date of approval of each subsequent revision of the ASHRAE Standard or the International Energy Conservation Code, as appropriate, the Secretary shall determine whether the revised standards established under subparagraph (A) should be updated to reflect the revisions, based on the energy savings and life-cycle cost-effectiveness of the revisions.";

(B) in subparagraph (C), by striking "(C) In the budget request" and inserting the following:

"(C) BUDGET REQUEST.—In the budget request"; and

(C) by striking subparagraph (D) and inserting the following:

"(D) CERTIFICATION FOR GREEN BUILDINGS.—

"(i) SUSTAINABLE DESIGN PRINCIPLES.—Sustainable design principles shall be applied to the siting, design, and construction of buildings covered by this subparagraph.

"(ii) SELECTION OF CERTIFICATION SYSTEMS.—The Secretary, after reviewing the findings of the Federal Director under section 436(h) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17092(h)), in consultation with the Administrator of General Services, and in consultation with the Secretary of Defense relating to those facilities under the custody and control of the Department of Defense, shall determine those certification systems for green commercial and residential buildings that the Secretary determines to be the most likely to encourage a comprehensive and environmentally sound approach to certification of green buildings.

"(iii) BASIS FOR SELECTION.—The determination of the certification systems

1 under clause (ii) shall be based on ongoing
2 review of the findings of the Federal Direc-
3 tor under section 436(h) of the Energy
4 Independence and Security Act of 2007
5 (42 U.S.C. 17092(h)) and the criteria de-
6 scribed in clause (v).
7 ''(iv) ADMINISTRATION.—In deter-
8 mining certification systems under this
9 subparagraph, the Secretary shall—
10 ''(I) make a separate determina-
11 tion for all or part of each system;
12 ''(II) confirm that the criteria
13 used to support the selection of build-
14 ing products, materials, brands, and
15 technologies are fair and neutral
16 (meaning that such criteria are based
17 on an objective assessment of relevant
18 technical data), do not prohibit, dis-
19 favor, or discriminate against selec-
20 tion based on technically inadequate
21 information to inform human or envi-
22 ronmental risk, and are expressed to
23 prefer performance measures when-
24 ever performance measures may rea-

sonably be used in lieu of prescriptive measures; and

"(III) use environmental and health criteria that are based on risk assessment methodology that is generally accepted by the applicable scientific disciplines.

"(v) CONSIDERATIONS.—In determining the green building certification systems under this subparagraph, the Secretary shall take into consideration—

"(I) the ability and availability of assessors and auditors to independently verify the criteria and measurement of metrics at the scale necessary to implement this subparagraph;

"(II) the ability of the applicable certification organization to collect and reflect public comment;

"(III) the ability of the standard to be developed and revised through a consensus-based process;

"(IV) an evaluation of the robustness of the criteria for a high-

1 performance green building, which
2 shall give credit for promoting—
3 "(aa) efficient and sustain-
4 able use of water, energy, and
5 other natural resources;
6 "(bb) use of renewable en-
7 ergy sources;
8 "(cc) improved indoor envi-
9 ronmental quality through en-
10 hanced indoor air quality, ther-
11 mal comfort, acoustics, day light-
12 ing, pollutant source control, and
13 use of low-emission materials and
14 building system controls; and
15 "(dd) such other criteria as
16 the Secretary determines to be
17 appropriate; and
18 "(V) national recognition within
19 the building industry.
20 "(vi) REVIEW.—The Secretary, in
21 consultation with the Administrator of
22 General Services and the Secretary of De-
23 fense, shall conduct an ongoing review to
24 evaluate and compare private sector green

building certification systems, taking into account—

"(I) the criteria described in clause (v); and

"(II) the identification made by the Federal Director under section 436(h) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17092(h)).

"(vii) EXCLUSIONS.—

"(I) IN GENERAL.—Subject to subclause (II), if a certification system fails to meet the review requirements of clause (v), the Secretary shall—

"(aa) identify the portions of the system, whether prerequisites, credits, points, or otherwise, that meet the review criteria of clause (v);

"(bb) determine the portions of the system that are suitable for use; and

"(cc) exclude all other portions of the system from identification and use.

"(II) ENTIRE SYSTEMS.—The Secretary shall exclude an entire system from use if an exclusion under subclause (I)—

"(aa) impedes the integrated use of the system;

"(bb) creates disparate review criteria or unequal point access for competing materials; or

"(cc) increases agency costs of the use.

"(viii) INTERNAL CERTIFICATION PROCESSES.—The Secretary may by rule allow Federal agencies to develop internal certification processes, using certified professionals, in lieu of certification by certification entities identified under clause (ii).

"(ix) PRIVATIZED MILITARY HOUSING.—With respect to privatized military housing, the Secretary of Defense, after consultation with the Secretary may, through rulemaking, develop alternative

1 certification systems and levels than the
2 systems and levels identified under clause
3 (ii) that achieve an equivalent result in
4 terms of energy savings, sustainable de-
5 sign, and green building performance.

6 "(x) WATER CONSERVATION TECH-
7 NOLOGIES.—In addition to any use of
8 water conservation technologies otherwise
9 required by this section, water conservation
10 technologies shall be applied to the extent
11 that the technologies are life-cycle cost-ef-
12 fective.

13 "(xi) EFFECTIVE DATE.—

14 "(I) DETERMINATIONS MADE
15 AFTER DECEMBER 31, 2015.—The
16 amendments made by section
17 432(b)(1)(C) of Energy Savings and
18 Industrial Competitiveness Act of
19 2015 shall apply to any determination
20 made by a Federal agency after De-
21 cember 31, 2015.

22 "(II) DETERMINATIONS MADE ON
23 OR BEFORE DECEMBER 31, 2015.—
24 This subparagraph (as in effect on the
25 day before the date of enactment of

Energy Savings and Industrial Competitiveness Act of 2015) shall apply to any use of a certification system for green commercial and residential buildings by a Federal agency on or before December 31, 2015.''; and

(2) by striking subsections (c) and (d) and inserting the following:

''(c) PERIODIC REVIEW.—The Secretary shall—

''(1) once every 5 years, review the Federal building energy standards established under this section; and

''(2) on completion of a review under paragraph (1), if the Secretary determines that significant energy savings would result, upgrade the standards to include all new energy efficiency and renewable energy measures that are technologically feasible and economically justified.''.

SEC. 433. ENHANCED ENERGY EFFICIENCY UNDERWRITING.

(a) DEFINITIONS.—In this section:

(1) COVERED AGENCY.—The term ''covered agency''—

(A) means—

(i) an executive agency, as that term is defined in section 102 of title 31, United States Code; and

(ii) any other agency of the Federal Government; and

(B) includes any enterprise, as that term is defined under section 1303 of the Federal Housing Enterprises Financial Safety and Soundness Act of 1992 (12 U.S.C. 4502).

(2) COVERED LOAN.—The term ''covered loan'' means a loan secured by a home that is issued, insured, purchased, or securitized by a covered agency.

(3) HOMEOWNER.—The term ''homeowner'' means the mortgagor under a covered loan.

(4) MORTGAGEE.—The term ''mortgagee'' means—

(A) an original lender under a covered loan or the holder of a covered loan at the time at which that mortgage transaction is consummated;

(B) any affiliate, agent, subsidiary, successor, or assignee of an original lender under a covered loan or the holder of a covered loan at the time at which that mortgage transaction is consummated;

(C) any servicer of a covered loan; and

(D) any subsequent purchaser, trustee, or transferee of any covered loan issued by an original lender.

(5) SECRETARY.—The term ''Secretary'' means the Secretary of Housing and Urban Development.

(6) SERVICER.—The term ''servicer'' means the person or entity responsible for the servicing of a covered loan, including the person or entity who makes or holds a covered loan if that person or entity also services the covered loan.

(7) SERVICING.—The term ''servicing'' has the meaning given the term in section 6(i) of the Real Estate Settlement Procedures Act of 1974 (12 U.S.C. 2605(i)).

(b) FINDINGS AND PURPOSES.—

(1) FINDINGS.—Congress finds that—

(A) energy costs for homeowners are a significant and increasing portion of their household budgets;

(B) household energy use can vary substantially depending on the efficiency and characteristics of the house;

(C) expected energy cost savings are important to the value of the house;

(D) the current test for loan affordability used by most covered agencies, commonly known as the ''debt-to-income'' test, is inadequate because it does not take into account the expected energy cost savings for the homeowner of an energy efficient home; and

(E) another loan limitation, commonly known as the ''loan-to-value'' test, is tied to the appraisal, which often does not adjust for efficiency features of houses.

(2) PURPOSES.—The purposes of this section are to—

(A) improve the accuracy of mortgage underwriting by Federal mortgage agencies by ensuring that energy cost savings are included in the underwriting process as described below, and thus to reduce the amount of energy consumed by homes and to facilitate the creation of energy efficiency retrofit and construction jobs;

(B) require a covered agency to include the expected energy cost savings of a homeowner as a regular expense in the tests, such as the debt-to-income test, used to determine the ability of

the loan applicant to afford the cost of homeownership for all loan programs; and

(C) require a covered agency to include the value home buyers place on the energy efficiency of a house in tests used to compare the mortgage amount to home value, taking precautions to avoid double-counting and to support safe and sound lending.

(c) ENHANCED ENERGY EFFICIENCY UNDERWRITING CRITERIA.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary shall, in consultation with the advisory group established in subsection (f)(2), develop and issue guidelines for a covered agency to implement enhanced loan eligibility requirements, for use when testing the ability of a loan applicant to repay a covered loan, that account for the expected energy cost savings for a loan applicant at a subject property, in the manner set forth in paragraphs (2) and (3).

(2) REQUIREMENTS TO ACCOUNT FOR ENERGY COST SAVINGS.—The enhanced loan eligibility requirements under paragraph (1) shall require that, for all covered loans for which an energy efficiency report is voluntarily provided to the mortgagee by

the mortgagor, the covered agency and the mortgagee shall take into consideration the estimated energy cost savings expected for the owner of the subject property in determining whether the loan applicant has sufficient income to service the mortgage debt plus other regular expenses. To the extent that a covered agency uses a test such as a debt-to-income test that includes certain regular expenses, such as hazard insurance and property taxes, the expected energy cost savings shall be included as an offset to these expenses. Energy costs to be assessed include the cost of electricity, natural gas, oil, and any other fuel regularly used to supply energy to the subject property.

(3) DETERMINATION OF ESTIMATED ENERGY COST SAVINGS.—

(A) IN GENERAL.—The guidelines to be issued under paragraph (1) shall include instructions for the covered agency to calculate estimated energy cost savings using—

(i) the energy efficiency report;

(ii) an estimate of baseline average energy costs; and

(iii) additional sources of information as determined by the Secretary.

(B) REPORT REQUIREMENTS.—For the purposes of subparagraph (A), an energy efficiency report shall—

(i) estimate the expected energy cost savings specific to the subject property, based on specific information about the property;

(ii) be prepared in accordance with the guidelines to be issued under paragraph (1); and

(iii) be prepared—

(I) in accordance with the Residential Energy Service Network's Home Energy Rating System (commonly known as ''HERS'') by an individual certified by the Residential Energy Service Network, unless the Secretary finds that the use of HERS does not further the purposes of this section; or

(II) by other methods approved by the Secretary, in consultation with the Secretary of Energy and the advisory group established in subsection (f)(2), for use under this section,

which shall include a third-party quality assurance procedure.

(C) USE BY APPRAISER.—If an energy efficiency report is used under paragraph (2), the energy efficiency report shall be provided to the appraiser to estimate the energy efficiency of the subject property and for potential adjustments for energy efficiency.

(4) REQUIRED DISCLOSURE TO CONSUMER FOR A HOME WITH AN ENERGY EFFICIENCY REPORT.—If an energy efficiency report is used under paragraph (2), the guidelines to be issued under paragraph (1) shall require the mortgagee to—

(A) inform the loan applicant of the expected energy costs as estimated in the energy efficiency report, in a manner and at a time as prescribed by the Secretary, and if practicable, in the documents delivered at the time of loan application; and

(B) include the energy efficiency report in the documentation for the loan provided to the borrower.

(5) REQUIRED DISCLOSURE TO CONSUMER FOR A HOME WITHOUT AN ENERGY EFFICIENCY REPORT.—If an energy efficiency report is not used

under paragraph (2), the guidelines to be issued under paragraph (1) shall require the mortgagee to inform the loan applicant in a manner and at a time as prescribed by the Secretary, and if practicable, in the documents delivered at the time of loan application of—

(A) typical energy cost savings that would be possible from a cost-effective energy upgrade of a home of the size and in the region of the subject property;

(B) the impact the typical energy cost savings would have on monthly ownership costs of a typical home;

(C) the impact on the size of a mortgage that could be obtained if the typical energy cost savings were reflected in an energy efficiency report; and

(D) resources for improving the energy efficiency of a home.

(6) PRICING OF LOANS.—

(A) IN GENERAL.—A covered agency may price covered loans originated under the enhanced loan eligibility requirements required under this section in accordance with the estimated risk of the loans.

(B) IMPOSITION OF CERTAIN MATERIAL COSTS, IMPEDIMENTS, OR PENALTIES.—In the absence of a publicly disclosed analysis that demonstrates significant additional default risk or prepayment risk associated with the loans, a covered agency shall not impose material costs, impediments, or penalties on covered loans merely because the loan uses an energy efficiency report or the enhanced loan eligibility requirements required under this section.

(7) LIMITATIONS.—

(A) IN GENERAL.—A covered agency may price covered loans originated under the enhanced loan eligibility requirements required under this section in accordance with the estimated risk of those loans.

(B) PROHIBITED ACTIONS.—A covered agency shall not—

(i) modify existing underwriting criteria or adopt new underwriting criteria that intentionally negate or reduce the impact of the requirements or resulting benefits that are set forth or otherwise derived from the enhanced loan eligibility requirements required under this subsection; or

(ii) impose greater buy back requirements, credit overlays, or insurance requirements, including private mortgage insurance, on covered loans merely because the loan uses an energy efficiency report or the enhanced loan eligibility requirements required under this subsection.

(8) APPLICABILITY AND IMPLEMENTATION DATE.—Not later than 3 years after the date of enactment of this Act, and before December 31, 2017, the enhanced loan eligibility requirements required under this subsection shall be implemented by each covered agency to—

(A) apply to any covered loan for the sale, or refinancing of any loan for the sale, of any home;

(B) be available on any residential real property (including individual units of condominiums and cooperatives) that qualifies for a covered loan; and

(C) provide prospective mortgagees with sufficient guidance and applicable tools to implement the required underwriting methods.

(d) ENHANCED ENERGY EFFICIENCY UNDERWRITING VALUATION GUIDELINES.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary shall—

(A) in consultation with the Federal Financial Institutions Examination Council and the advisory group established in subsection (f)(2), develop and issue guidelines for a covered agency to determine the maximum permitted loan amount based on the value of the property for all covered loans made on properties with an energy efficiency report that meets the requirements of subsection (c)(3)(B); and

(B) in consultation with the Secretary of Energy, issue guidelines for a covered agency to determine the estimated energy savings under paragraph (3) for properties with an energy efficiency report.

(2) REQUIREMENTS.—The enhanced energy efficiency underwriting valuation guidelines required under paragraph (1) shall include—

(A) a requirement that if an energy efficiency report that meets the requirements of subsection (c)(3)(B) is voluntarily provided to the mortgagee, such report shall be used by the

mortgagee or covered agency to determine the estimated energy savings of the subject property; and

(B) a requirement that the estimated energy savings of the subject property be added to the appraised value of the subject property by a mortgagee or covered agency for the purpose of determining the loan-to-value ratio of the subject property, unless the appraisal includes the value of the overall energy efficiency of the subject property, using methods to be established under the guidelines issued under paragraph (1).

(3) DETERMINATION OF ESTIMATED ENERGY SAVINGS.—

(A) AMOUNT OF ENERGY SAVINGS.—The amount of estimated energy savings shall be determined by calculating the difference between the estimated energy costs for the average comparable houses, as determined in guidelines to be issued under paragraph (1), and the estimated energy costs for the subject property based upon the energy efficiency report.

(B) DURATION OF ENERGY SAVINGS.—The duration of the estimated energy savings shall

be based upon the estimated life of the applicable equipment, consistent with the rating system used to produce the energy efficiency report.

(C) PRESENT VALUE OF ENERGY SAVINGS.—The present value of the future savings shall be discounted using the average interest rate on conventional 30-year mortgages, in the manner directed by guidelines issued under paragraph (1).

(4) ENSURING CONSIDERATION OF ENERGY EFFICIENT FEATURES.—Section 1110 of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (12 U.S.C. 3339) is amended—

(A) in paragraph (2), by striking ''; and'' and inserting a semicolon; and

(B) in paragraph (3), by striking the period at the end and inserting ''; and'' and inserting after paragraph (3) the following:

''(4) that State certified and licensed appraisers have timely access, whenever practicable, to information from the property owner and the lender that may be relevant in developing an opinion of value regarding the energy- and water-saving improvements or features of a property, such as—

"(A) labels or ratings of buildings;

"(B) installed appliances, measures, systems or technologies;

"(C) blueprints;

"(D) construction costs;

"(E) financial or other incentives regarding energy- and water-efficient components and systems installed in a property;

"(F) utility bills;

"(G) energy consumption and benchmarking data; and

"(H) third-party verifications or representations of energy and water efficiency performance of a property, observing all financial privacy requirements adhered to by certified and licensed appraisers, including section 501 of the Gramm-Leach-Bliley Act (15 U.S.C. 6801).

Unless a property owner consents to a lender, an appraiser, in carrying out the requirements of paragraph (4), shall not have access to the commercial or financial information of the owner that is privileged or confidential.".

(5) TRANSACTIONS REQUIRING STATE CERTIFIED APPRAISERS.—Section 1113 of the Financial

Institutions Reform, Recovery, and Enforcement Act of 1989 (12 U.S.C. 3342) is amended—

(A) in paragraph (1), by inserting before the semicolon the following: ‘‘, or any real property on which the appraiser makes adjustments using an energy efficiency report’’; and

(B) in paragraph (2), by inserting after ‘‘atypical’’ the following: ‘‘, or an appraisal on which the appraiser makes adjustments using an energy efficiency report.’’.

(6) PROTECTIONS.—

(A) AUTHORITY TO IMPOSE LIMITATIONS.—The guidelines to be issued under paragraph (1) shall include such limitations and conditions as determined by the Secretary to be necessary to protect against meaningful under or over valuation of energy cost savings or duplicative counting of energy efficiency features or energy cost savings in the valuation of any subject property that is used to determine a loan amount.

(B) ADDITIONAL AUTHORITY.—At the end of the 7-year period following the implementation of enhanced eligibility and underwriting valuation requirements under this section, the

Secretary may modify or apply additional exceptions to the approach described in paragraph (2), where the Secretary finds that the unadjusted appraisal will reflect an accurate market value of the efficiency of the subject property or that a modified approach will better reflect an accurate market value.

(7) APPLICABILITY AND IMPLEMENTATION DATE.—Not later than 3 years after the date of enactment of this Act, and before December 31, 2017, each covered agency shall implement the guidelines required under this subsection, which shall—

(A) apply to any covered loan for the sale, or refinancing of any loan for the sale, of any home; and

(B) be available on any residential real property, including individual units of condominiums and cooperatives, that qualifies for a covered loan.

(e) MONITORING.—Not later than 1 year after the date on which the enhanced eligibility and underwriting valuation requirements are implemented under this section, and every year thereafter, each covered agency with relevant activity shall issue and make available to the public a report that—

(1) enumerates the number of covered loans of the agency for which there was an energy efficiency report, and that used energy efficiency appraisal guidelines and enhanced loan eligibility requirements;

(2) includes the default rates and rates of foreclosures for each category of loans; and

(3) describes the risk premium, if any, that the agency has priced into covered loans for which there was an energy efficiency report.

(f) RULEMAKING.—

(1) IN GENERAL.—The Secretary shall prescribe regulations to carry out this section, in consultation with the Secretary of Energy and the advisory group established in paragraph (2), which may contain such classifications, differentiations, or other provisions, and may provide for such proper implementation and appropriate treatment of different types of transactions, as the Secretary determines are necessary or proper to effectuate the purposes of this section, to prevent circumvention or evasion thereof, or to facilitate compliance therewith.

(2) ADVISORY GROUP.—To assist in carrying out this section, the Secretary shall establish an ad-

visory group, consisting of individuals representing the interests of—

(A) mortgage lenders;

(B) appraisers;

(C) energy raters and residential energy consumption experts;

(D) energy efficiency organizations;

(E) real estate agents;

(F) home builders and remodelers;

(G) State energy officials; and

(H) others as determined by the Secretary.

(g) ADDITIONAL STUDY.—

(1) IN GENERAL.—Not later than 18 months after the date of enactment of this Act, the Secretary shall reconvene the advisory group established in subsection (f)(2), in addition to water and locational efficiency experts, to advise the Secretary on the implementation of the enhanced energy efficiency underwriting criteria established in subsections (c) and (d).

(2) RECOMMENDATIONS.—The advisory group established in subsection (f)(2) shall provide recommendations to the Secretary on any revisions or additions to the enhanced energy efficiency underwriting criteria deemed necessary by the group,

which may include alternate methods to better account for home energy costs and additional factors to account for substantial and regular costs of homeownership such as location-based transportation costs and water costs. The Secretary shall forward any legislative recommendations from the advisory group to Congress for its consideration.

Subtitle E—Voluntary Verification Programs for Air Conditioning, Furnace, Boiler, Heat Pump, and Water Heater Products

SEC. 441. VOLUNTARY VERIFICATION PROGRAMS FOR AIR CONDITIONING, FURNACE, BOILER, HEAT PUMP, AND WATER HEATER PRODUCTS.

Section 326(b) of the Energy Policy and Conservation Act (42 U.S.C. 6296(b)) is amended by adding at the end the following:

"(6) VOLUNTARY VERIFICATION PROGRAMS FOR AIR CONDITIONING, FURNACE, BOILER, HEAT PUMP, AND WATER HEATER PRODUCTS.—

"(A) RELIANCE ON VOLUNTARY PROGRAMS.—For the purpose of verifying compliance with energy conservation standards and Energy Star specifications established under sections 324A, 325, and 342 for covered prod-

ucts described in paragraphs (3), (4), (5), (9), and (11) of section 322(a) and covered equipment described in subparagraphs (B), (C), (D), (F), (I), (J), and (K) of section 340(1), the Secretary and the Administrator of the Environmental Protection Agency shall rely on voluntary verification programs that are recognized by the Secretary in accordance with subparagraph (B).

"(B) RECOGNITION OF VOLUNTARY VERIFICATION PROGRAMS.—

"(i) IN GENERAL.—Not later than 180 days after the date of enactment of this paragraph, the Secretary and the Administrator of the Environmental Protection Agency shall initiate a negotiated rulemaking in accordance with subchapter III of chapter 5 of title 5, United States Code (commonly known as the 'Negotiated Rulemaking Act of 1990') to develop criteria that have consensus support for achieving recognition by the Secretary as an approved voluntary verification program.

"(ii) MINIMUM REQUIREMENTS.—The criteria developed under clause (i) shall, at

a minimum, ensure that the voluntary verification program—

"(I) is nationally recognized;

"(II) satisfies any applicable elements of—

"(aa) International Organization for Standardization standard numbered 17025; and

"(bb) any other relevant International Organization for Standardization standards identified and agreed to through the negotiated rulemaking under clause (i);

"(III) at least annually tests products following the test procedures established under this title to verify the certified rating of a representative sample of products and equipment within the scope of the program;

"(IV) maintains a publicly available list of all certified products and equipment and their certified ratings;

"(V) requires the changing of the performance rating or removal of the

product or equipment from the program if testing determines that the performance rating does not meet the levels the manufacturer has certified to the Secretary;

"(VI) requires the qualification of new participants in the program through testing and production of test reports;

"(VII) allows for challenge testing of products and equipment within the scope of the program;

"(VIII) requires program participants to certify the performance rating of all covered products and equipment within the scope of the program for the covered product or equipment;

"(IX) provides to the Secretary—

"(aa) an annual report of all test results, the contents of which shall be determined through the negotiated rulemaking process under clause (i);

"(bb) prompt notification when program testing results in—

"(AA) the rerating of the performance rating of a product or equipment; or

"(BB) the delisting of a product or equipment; and

"(cc) test reports, on the request of the Secretary or the Administrator of the Environmental Protection Agency, that note any instructions specified by the manufacturer or the representative of the manufacturer for the purpose of conducting the verification testing, to be exempted from disclosure under section 552(b)(4) of title 5, United States Code (commonly known as the 'Freedom of Information Act'); and

"(X) satisfies any additional requirements or standards that the Secretary and Administrator of the Environmental Protection Agency shall es-

tablish consistent with this subparagraph.

"(iii) REVISION OF CRITERIA.—

"(I) IN GENERAL.—The Secretary and the Administrator of the Environmental Protection Agency may revise the criteria established under clause (ii) by initiating—

"(aa) a notice of proposed rulemaking in accordance with section 553(b) of title 5, United States Code, on publication of a determination in the Federal Register that revisions to the criteria are necessary; or

"(bb) a direct final rule in accordance with section 553(b)(3)(B) of title 5, United States Code, on publication of a determination in the Federal Register that revisions to the criteria are necessary and that substantive opposition to the proposed revisions is not expected.

"(II) EFFECT OF DIRECT FINAL RULE.—

"(aa) FULL FORCE AND EFFECT.—If the Secretary does not receive adversarial comments during the 30-day period following publication of the determination in the Federal Register under subclause (I)(bb), the direct final rule shall have full force and effect.

"(bb) WITHDRAWAL.—If the Secretary receives adversarial comments during the 30-day period following publication of the determination in the Federal Register under subclause (I)(bb), the Secretary shall withdraw the direct final rule and publish a notice of proposed rulemaking in accordance with subclause (I)(aa).

"(C) ADMINISTRATION.—

"(i) IN GENERAL.—The Secretary and the Administrator of the Environmental Protection Agency shall not require—

"(I) manufacturers to participate in a voluntary verification program described in subparagraph (A); or

"(II) participating manufacturers to provide information that can be obtained through a voluntary verification program described in subparagraph (A).

"(ii) LIST OF COVERED PRODUCTS.—The Secretary or the Administrator of the Environmental Protection Agency may maintain a publicly available list of covered products and equipment certified under this section that distinguishes between—

"(I) covered products and equipment certified by a voluntary verification program described in subparagraph (A); and

"(II) products not certified by a voluntary verification program described in subparagraph (A).

"(iii) PERIODIC VERIFICATION TESTING.—The Secretary—

"(I) shall not subject products or equipment that are certified under a voluntary verification program described in subparagraph (A) to periodic verification testing that verifies the accuracy of the certified performance rating of the products or equipment; but

"(II) may test products or equipment described in subclause (I) if the testing is necessary—

"(aa) to assess the overall performance of a voluntary verification program;

"(bb) to address specific performance issues;

"(cc) to determine other performance characteristics for use in updating test procedures and standards; or

"(dd) for other purposes consistent with this title.

"(D) EFFECT ON OTHER AUTHORITY.—Nothing in this paragraph limits the authority of the Secretary or the Administrator of the Environmental Protection Agency to enforce compliance with any law.".

TITLE V—MISCELLANEOUS

SEC. 501. BUDGETARY EFFECTS.

The budgetary effects of this Act, for the purpose of complying with the Statutory Pay-As-You-Go Act of 2010, shall be determined by reference to the latest statement titled "Budgetary Effects of PAYGO Legislation" for this Act, submitted for printing in the Congressional Record by the Chairman of the Senate Budget Committee, provided that such statement has been submitted prior to the vote on passage.

SEC. 502. ADVANCE APPROPRIATIONS REQUIRED.

The authorization of amounts under this Act and the amendments made by this Act shall be effective for any fiscal year only to the extent and in the amount provided in advance in appropriations Acts.

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