

115TH CONGRESS
1ST SESSION

S. 385

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

IN THE SENATE OF THE UNITED STATES

FEBRUARY 15, 2017

Mr. PORTMAN (for himself, Mrs. SHAHEEN, Mr. COONS, Mr. WICKER, Mr. FRANKEN, Ms. COLLINS, Mr. MANCHIN, Mr. BENNET, Mr. WARNER, Ms. HEITKAMP, and Mr. HELLER) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

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

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the
5 “Energy Savings and Industrial Competitiveness Act”.

6 (b) TABLE OF CONTENTS.—The table of contents of
7 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.

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. Energy efficient data centers.

Sec. 303. 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—Energy Performance Requirement for Federal Buildings

Sec. 421. Energy performance requirement for Federal buildings.

Sec. 422. Federal building energy efficiency performance standards; certification system and level for green buildings.

Sec. 423. Enhanced energy efficiency underwriting.

TITLE V—MISCELLANEOUS

Sec. 501. Budgetary effects.

Sec. 502. Advance appropriations required.

1 **SEC. 2. DEFINITION OF SECRETARY.**

2 In this Act, the term “Secretary” means the Sec-
3 retary of Energy.

4 **TITLE I—BUILDINGS**

5 **Subtitle A—Building Energy Codes**

6 **SEC. 101. GREATER ENERGY EFFICIENCY IN BUILDING**
7 **CODES.**

8 (a) DEFINITIONS.—Section 303 of the Energy Con-
9 servation and Production Act (42 U.S.C. 6832) is amend-
10 ed—

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

13 “(14) MODEL BUILDING ENERGY CODE.—The
14 term ‘model building energy code’ means a voluntary
15 building energy code and standards developed and
16 updated through a consensus process among inter-
17 ested persons, such as the IECC or the code used
18 by—

19 “(A) the Council of American Building Of-
20 ficials, or its legal successor, International Code
21 Council, Inc.;

22 “(B) the American Society of Heating, Re-
23 frigerating, and Air-Conditioning Engineers; or

1 “(C) other appropriate organizations.”;

2 and

3 (2) by adding at the end the following:

4 “(17) IECC.—The term ‘IECC’ means the
5 International Energy Conservation Code.

6 “(18) INDIAN TRIBE.—The term ‘Indian tribe’
7 has the meaning given the term in section 4 of the
8 Native American Housing Assistance and Self-De-
9 termination Act of 1996 (25 U.S.C. 4103).”.

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

14 **“SEC. 304. UPDATING STATE BUILDING ENERGY EFFI-
15 CIENCY CODES.**

16 “(a) IN GENERAL.—The Secretary shall—

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

22 “(2) support full compliance with the State and
23 local codes.

24 “(b) STATE AND INDIAN TRIBE CERTIFICATION OF
25 BUILDING ENERGY CODE UPDATES.—

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

3 “(A) IN GENERAL.—Not later than 2 years
4 after the date on which a model building energy
5 code is updated, each State or Indian tribe shall
6 certify whether or not the State or Indian tribe,
7 respectively, has reviewed and updated the en-
8 ergy provisions of the building code of the State
9 or Indian tribe, respectively.

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

15 “(i) the energy savings of the updated
16 model building energy code; or

17 “(ii) the targets established under sec-
18 tion 307(b)(2).

19 “(C) NO MODEL BUILDING ENERGY CODE
20 UPDATE.—If a model building energy code is
21 not updated by a target date established under
22 section 307(b)(2)(D), each State or Indian tribe
23 shall, not later than 2 years after the specified
24 date, certify whether or not the State or Indian
25 tribe, respectively, has reviewed and updated

1 the energy provisions of the building code of the
 2 State or Indian tribe, respectively, to meet or
 3 exceed the target in section 307(b)(2).

4 “(2) VALIDATION BY SECRETARY.—Not later
 5 than 90 days after a State or Indian tribe certifi-
 6 cation under paragraph (1), the Secretary shall—

7 “(A) determine whether the code provi-
 8 sions of the State or Indian tribe, respectively,
 9 meet the criteria specified in paragraph (1);
 10 and

11 “(B) if the determination is positive, vali-
 12 date the certification.

13 “(c) IMPROVEMENTS IN COMPLIANCE WITH BUILD-
 14 ING ENERGY CODES.—

15 “(1) REQUIREMENT.—

16 “(A) IN GENERAL.—Not later than 3 years
 17 after the date of a certification under sub-
 18 section (b), each State and Indian tribe shall
 19 certify whether or not the State and Indian
 20 tribe, respectively, has—

21 “(i) achieved full compliance under
 22 paragraph (3) with the applicable certified
 23 State and Indian tribe building energy
 24 code or with the associated model building
 25 energy code; or

1 “(ii) made significant progress under
 2 paragraph (4) toward achieving compliance
 3 with the applicable certified State and In-
 4 dian tribe building energy code or with the
 5 associated model building energy code.

6 “(B) REPEAT CERTIFICATIONS.—If the
 7 State or Indian tribe certifies progress toward
 8 achieving compliance, the State or Indian tribe
 9 shall repeat the certification until the State or
 10 Indian tribe certifies that the State or Indian
 11 tribe has achieved full compliance, respectively.

12 “(2) MEASUREMENT OF COMPLIANCE.—A cer-
 13 tification under paragraph (1) shall include docu-
 14 mentation of the rate of compliance based on—

15 “(A) independent inspections of a random
 16 sample of the buildings covered by the code in
 17 the preceding year; or

18 “(B) an alternative method that yields an
 19 accurate measure of compliance.

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

23 “(A) at least 90 percent of building space
 24 covered by the code in the preceding year sub-
 25 stantially meets all the requirements of the ap-

1 applicable code specified in paragraph (1), or
 2 achieves equivalent or greater energy savings
 3 level; or

4 “(B) the estimated excess energy use of
 5 buildings that did not meet the applicable code
 6 specified in paragraph (1) in the preceding
 7 year, compared to a baseline of comparable
 8 buildings that meet this code, is not more than
 9 5 percent of the estimated energy use of all
 10 buildings covered by this code during the pre-
 11 ceding year.

12 “(4) SIGNIFICANT PROGRESS TOWARD
 13 ACHIEVEMENT OF COMPLIANCE.—A State or Indian
 14 tribe shall be considered to have made significant
 15 progress toward achieving compliance for purposes
 16 of paragraph (1) if the State or Indian tribe—

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

23 “(B) has met the most recent target under
 24 subparagraph (A).

1 “(5) VALIDATION BY SECRETARY.—Not later
2 than 90 days after a State or Indian tribe certifi-
3 cation under paragraph (1), the Secretary shall—

4 “(A) determine whether the State or In-
5 dian tribe has demonstrated meeting the cri-
6 teria of this subsection, including accurate
7 measurement of compliance; and

8 “(B) if the determination is positive, vali-
9 date the certification.

10 “(d) STATES OR INDIAN TRIBES THAT DO NOT
11 ACHIEVE COMPLIANCE.—

12 “(1) REPORTING.—A State or Indian tribe that
13 has not made a certification required under sub-
14 section (b) or (c) by the applicable deadline shall
15 submit to the Secretary a report on—

16 “(A) the status of the State or Indian tribe
17 with respect to meeting the requirements and
18 submitting the certification; and

19 “(B) a plan for meeting the requirements
20 and submitting the certification.

21 “(2) FEDERAL SUPPORT.—For any State or In-
22 dian tribe for which the Secretary has not validated
23 a certification by a deadline under subsection (b) or
24 (c), the lack of the certification may be a consider-

1 ation for Federal support authorized under this sec-
2 tion for code adoption and compliance activities.

3 “(3) LOCAL GOVERNMENT.—In any State or
4 Indian tribe for which the Secretary has not vali-
5 dated a certification under subsection (b) or (c), a
6 local government may be eligible for Federal support
7 by meeting the certification requirements of sub-
8 sections (b) and (c).

9 “(4) ANNUAL REPORTS BY SECRETARY.—

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

13 “(i) the status of model building en-
14 ergy codes;

15 “(ii) the status of code adoption and
16 compliance in the States and Indian tribes;

17 “(iii) implementation of this section;
18 and

19 “(iv) improvements in energy savings
20 over time as result of the targets estab-
21 lished under section 307(b)(2).

22 “(B) IMPACTS.—The report shall include
23 estimates of impacts of past action under this
24 section, and potential impacts of further action,
25 on—

1 “(i) upfront financial and construction
 2 costs, cost benefits and returns (using in-
 3 vestment analysis), and lifetime energy use
 4 for buildings;

5 “(ii) resulting energy costs to individ-
 6 uals and businesses; and

7 “(iii) resulting overall annual building
 8 ownership and operating costs.

9 “(e) TECHNICAL ASSISTANCE TO STATES AND IN-
 10 DIAN TRIBES.—The Secretary shall provide technical as-
 11 sistance to States and Indian tribes to implement the goals
 12 and requirements of this section, including procedures and
 13 technical analysis for States and Indian tribes—

14 “(1) to improve and implement State residential
 15 and commercial building energy codes;

16 “(2) to demonstrate that the code provisions of
 17 the States and Indian tribes achieve equivalent or
 18 greater energy savings than the model building en-
 19 ergy codes and targets;

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

22 “(4) to otherwise promote the design and con-
 23 struction of energy efficient buildings.

24 “(f) AVAILABILITY OF INCENTIVE FUNDING.—

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

3 “(A) to implement the requirements of this
4 section;

5 “(B) to improve and implement residential
6 and commercial building energy codes, including
7 increasing and verifying compliance with the
8 codes and training of State, tribal, and local
9 building code officials to implement and enforce
10 the codes; and

11 “(C) to promote building energy efficiency
12 through the use of the codes.

13 “(2) ADDITIONAL FUNDING.—Additional fund-
14 ing shall be provided under this subsection for im-
15 plementation of a plan to achieve and document full
16 compliance with residential and commercial building
17 energy codes under subsection (c)—

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

21 “(B) in a State or Indian tribe that is not
22 eligible under subparagraph (A), to a local gov-
23 ernment that is eligible under this section.

24 “(3) TRAINING.—Of the amounts made avail-
25 able under this subsection, the State or Indian tribe

1 may use amounts required, but not to exceed
 2 \$750,000 for a State, to train State and local build-
 3 ing code officials to implement and enforce codes de-
 4 scribed in paragraph (2).

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

8 “(g) STRETCH CODES AND ADVANCED STAND-
 9 ARDS.—

10 “(1) IN GENERAL.—The Secretary shall provide
 11 technical and financial support for the development
 12 of stretch codes and advanced standards for residen-
 13 tial and commercial buildings for use as—

14 “(A) an option for adoption as a building
 15 energy code by local, tribal, or State govern-
 16 ments; and

17 “(B) guidelines for energy-efficient build-
 18 ing design.

19 “(2) TARGETS.—The stretch codes and ad-
 20 vanced standards shall be designed—

21 “(A) to achieve substantial energy savings
 22 compared to the model building energy codes;
 23 and

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

4 “(h) STUDIES.—The Secretary, in consultation with
5 building science experts from the National Laboratories
6 and institutions of higher education, designers and build-
7 ers of energy-efficient residential and commercial build-
8 ings, code officials, and other stakeholders, shall under-
9 take a study of the feasibility, impact, economics, and
10 merit of—

11 “(1) code improvements that would require that
12 buildings be designed, sited, and constructed in a
13 manner that makes the buildings more adaptable in
14 the future to become zero-net-energy after initial
15 construction, as advances are achieved in energy-sav-
16 ing technologies;

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

20 “(3) legislative options for increasing energy
21 savings from building energy codes, including addi-
22 tional incentives for effective State and local action,
23 and verification of compliance with and enforcement
24 of a code other than by a State or local government.

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

5 “(j) AUTHORIZATION OF APPROPRIATIONS.—There
 6 are authorized to be appropriated to carry out this section
 7 and section 307 \$200,000,000, to remain available until
 8 expended.”.

9 (c) FEDERAL BUILDING ENERGY EFFICIENCY
 10 STANDARDS.—Section 305 of the Energy Conservation
 11 and Production Act (42 U.S.C. 6834) is amended by strik-
 12 ing “voluntary building energy code” each place it appears
 13 in subsections (a)(2)(B) and (b) and inserting “model
 14 building energy code”.

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

18 **“SEC. 307. SUPPORT FOR MODEL BUILDING ENERGY**
 19 **CODES.**

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

22 “(b) TARGETS.—

23 “(1) IN GENERAL.—The Secretary shall sup-
 24 port the updating of the model building energy codes

1 to enable the achievement of aggregate energy sav-
2 ings targets established under paragraph (2).

3 “(2) TARGETS.—

4 “(A) IN GENERAL.—The Secretary shall
5 work with State, Indian tribes, local govern-
6 ments, nationally recognized code and stand-
7 ards developers, and other interested parties to
8 support the updating of model building energy
9 codes by establishing one or more aggregate en-
10 ergy savings targets to achieve the purposes of
11 this section.

12 “(B) SEPARATE TARGETS.—The Secretary
13 may establish separate targets for commercial
14 and residential buildings.

15 “(C) BASELINES.—The baseline for updat-
16 ing model building energy codes shall be the
17 2009 IECC for residential buildings and
18 ASHRAE Standard 90.1–2010 for commercial
19 buildings.

20 “(D) SPECIFIC YEARS.—

21 “(i) IN GENERAL.—Targets for spe-
22 cific years shall be established and revised
23 by the Secretary through rulemaking and
24 coordinated with nationally recognized code
25 and standards developers at a level that—

1 “(I) is at the maximum level of
 2 energy efficiency that is techno-
 3 logically feasible and life-cycle cost ef-
 4 fective, while accounting for the eco-
 5 nomic considerations under paragraph
 6 (4);

7 “(II) is higher than the preceding
 8 target; and

9 “(III) promotes the achievement
 10 of commercial and residential high-
 11 performance buildings through high
 12 performance energy efficiency (within
 13 the meaning of section 401 of the En-
 14 ergy Independence and Security Act
 15 of 2007 (42 U.S.C. 17061)).

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

20 “(iii) DIFFERENT TARGET YEARS.—
 21 Subject to clause (i), prior to the applica-
 22 ble year, the Secretary may set a later tar-
 23 get year for any of the model building en-
 24 ergy codes described in subparagraph (A)

1 if the Secretary determines that a target
2 cannot be met.

3 “(iv) SMALL BUSINESS.—When estab-
4 lishing targets under this paragraph
5 through rulemaking, the Secretary shall
6 ensure compliance with the Small Business
7 Regulatory Enforcement Fairness Act of
8 1996 (5 U.S.C. 601 note; Public Law 104–
9 121).

10 “(3) APPLIANCE STANDARDS AND OTHER FAC-
11 TORS AFFECTING BUILDING ENERGY USE.—In es-
12 tablishing building code targets under paragraph
13 (2), the Secretary shall develop and adjust the tar-
14 gets in recognition of potential savings and costs re-
15 lating to—

16 “(A) efficiency gains made in appliances,
17 lighting, windows, insulation, and building enve-
18 lope sealing;

19 “(B) advancement of distributed genera-
20 tion and on-site renewable power generation
21 technologies;

22 “(C) equipment improvements for heating,
23 cooling, and ventilation systems;

1 “(D) building management systems and
2 SmartGrid technologies to reduce energy use;
3 and

4 “(E) other technologies, practices, and
5 building systems that the Secretary considers
6 appropriate regarding building plug load and
7 other energy uses.

8 “(4) ECONOMIC CONSIDERATIONS.—In estab-
9 lishing and revising building code targets under
10 paragraph (2), the Secretary shall consider the eco-
11 nomic feasibility of achieving the proposed targets
12 established under this section and the potential costs
13 and savings for consumers and building owners, in-
14 cluding a return on investment analysis.

15 “(c) TECHNICAL ASSISTANCE TO MODEL BUILDING
16 ENERGY CODE-SETTING AND STANDARD DEVELOPMENT
17 ORGANIZATIONS.—

18 “(1) IN GENERAL.—The Secretary shall, on a
19 timely basis, provide technical assistance to model
20 building energy code-setting and standard develop-
21 ment organizations consistent with the goals of this
22 section.

23 “(2) ASSISTANCE.—The assistance shall in-
24 clude, as requested by the organizations, technical
25 assistance in—

1 “(A) evaluating code or standards pro-
2 posals or revisions;

3 “(B) building energy analysis and design
4 tools;

5 “(C) building demonstrations;

6 “(D) developing definitions of energy use
7 intensity and building types for use in model
8 building energy codes to evaluate the efficiency
9 impacts of the model building energy codes;

10 “(E) performance-based standards;

11 “(F) evaluating economic considerations
12 under subsection (b)(4); and

13 “(G) developing model building energy
14 codes by Indian tribes in accordance with tribal
15 law.

16 “(3) AMENDMENT PROPOSALS.—The Secretary
17 may submit timely model building energy code
18 amendment proposals to the model building energy
19 code-setting and standard development organiza-
20 tions, with supporting evidence, sufficient to enable
21 the model building energy codes to meet the targets
22 established under subsection (b)(2).

23 “(4) ANALYSIS METHODOLOGY.—The Secretary
24 shall make publicly available the entire calculation
25 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 re-
vised, the Secretary shall make a preliminary deter-
mination 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 TAR-
GETS.—

“(A) IN GENERAL.—If the Secretary
makes a preliminary determination under para-
graph (1)(B) that a code or standard does not
meet the targets established under subsection
(b)(2), the Secretary may at the same time pro-
vide the model building energy code or standard
developer with proposed changes that would re-

1 sult in a model building energy code that meets
2 the targets and with supporting evidence, tak-
3 ing into consideration—

4 “(i) whether the modified code is tech-
5 nically feasible and life-cycle cost effective;

6 “(ii) available appliances, technologies,
7 materials, and construction practices; and

8 “(iii) the economic considerations
9 under subsection (b)(4).

10 “(B) INCORPORATION OF CHANGES.—

11 “(i) IN GENERAL.—On receipt of the
12 proposed changes, the model building en-
13 ergy code or standard developer shall have
14 an additional 270 days to accept or reject
15 the proposed changes of the Secretary to
16 the model building energy code or standard
17 for the Secretary to make a final deter-
18 mination.

19 “(ii) FINAL DETERMINATION.—A
20 final determination under paragraph (1)
21 shall be on the modified model building en-
22 ergy code or standard.

23 “(e) ADMINISTRATION.—In carrying out this section,
24 the Secretary shall—

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

7 “(2) provide an opportunity for public comment
 8 on targets and supporting analysis and determina-
 9 tions under this section.

10 “(f) VOLUNTARY CODES AND STANDARDS.—Not-
 11 withstanding any other provision of this section, any
 12 model building code or standard established under section
 13 304 shall not be binding on a State, local government, or
 14 Indian tribe as a matter of Federal law.”.

15 **Subtitle B—Worker Training and** 16 **Capacity Building**

17 **SEC. 111. BUILDING TRAINING AND ASSESSMENT CENTERS.**

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

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

4 (2) to promote the application of emerging con-
5 cepts and technologies in commercial and institu-
6 tional buildings;

7 (3) to train engineers, architects, building sci-
8 entists, building energy permitting and enforcement
9 officials, and building technicians in energy-efficient
10 design and operation;

11 (4) to assist institutions of higher education
12 and Tribal Colleges or Universities in training build-
13 ing technicians;

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

18 (6) to coordinate with and assist State-accred-
19 ited technical training centers, community colleges,
20 Tribal Colleges or Universities, and local offices of
21 the National Institute of Food and Agriculture and
22 ensure appropriate services are provided under this
23 section to each region of the United States.

24 (b) COORDINATION AND NONDUPLICATION.—

1 (1) IN GENERAL.—The Secretary shall coordi-
 2 nate the program with the industrial research and
 3 assessment centers program and with other Federal
 4 programs to avoid duplication of effort.

5 (2) COLLOCATION.—To the maximum extent
 6 practicable, building, training, and assessment cen-
 7 ters established under this section shall be collocated
 8 with Industrial Assessment Centers.

9 (c) AUTHORIZATION OF APPROPRIATIONS.—There is
 10 authorized to be appropriated to carry out this section
 11 \$10,000,000, to remain available until expended.

12 **SEC. 112. CAREER SKILLS TRAINING.**

13 (a) IN GENERAL.—The Secretary shall pay grants to
 14 eligible entities described in subsection (b) to pay the Fed-
 15 eral share of associated career skills training programs
 16 under which students concurrently receive classroom in-
 17 struction and on-the-job training for the purpose of ob-
 18 taining an industry-related certification to install energy
 19 efficient buildings technologies, including technologies de-
 20 scribed in section 307(b)(3) of the Energy Conservation
 21 and Production Act (42 U.S.C. 6836(b)(3)).

22 (b) ELIGIBILITY.—To be eligible to obtain a grant
 23 under subsection (a), an entity shall be a nonprofit part-
 24 nership described in section 171(e)(2)(B)(ii) of the Work-

1 force Investment Act of 1998 (29 U.S.C.
2 2916(e)(2)(B)(ii)).

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

6 (d) AUTHORIZATION OF APPROPRIATIONS.—There is
7 authorized to be appropriated to carry out this section
8 \$10,000,000, to remain available until expended.

9 **Subtitle C—School Buildings**

10 **SEC. 121. COORDINATION OF ENERGY RETROFITTING AS-** 11 **SISTANCE FOR SCHOOLS.**

12 (a) DEFINITION OF SCHOOL.—In this section, the
13 term “school” means—

14 (1) an elementary school or secondary school
15 (as defined in section 8101 of the Elementary and
16 Secondary Education Act of 1965 (20 U.S.C.
17 7801));

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

21 (3) a school of the defense dependents’ edu-
22 cation system under the Defense Dependents’ Edu-
23 cation Act of 1978 (20 U.S.C. 921 et seq.) or estab-
24 lished under section 2164 of title 10, United States
25 Code;

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

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

6 (6) a Tribal College or University (as defined in
7 section 316(b) of the Higher Education Act of 1965
8 (20 U.S.C. 1059c(b))).

9 (b) DESIGNATION OF LEAD AGENCY.—The Sec-
10 retary, acting through the Office of Energy Efficiency and
11 Renewable Energy, shall act as the lead Federal agency
12 for coordinating and disseminating information on exist-
13 ing Federal programs and assistance that may be used
14 to help initiate, develop, and finance energy efficiency, re-
15 newable energy, and energy retrofitting projects for
16 schools.

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

19 (1) in consultation and coordination with the
20 appropriate Federal agencies, carry out a review of
21 existing programs and financing mechanisms (in-
22 cluding revolving loan funds and loan guarantees)
23 available in or from the Department of Agriculture,
24 the Department of Energy, the Department of Edu-
25 cation, the Department of the Treasury, the Internal

1 Revenue Service, the Environmental Protection
2 Agency, and other appropriate Federal agencies with
3 jurisdiction over energy financing and facilitation
4 that are currently used or may be used to help ini-
5 tiate, develop, and finance energy efficiency, renew-
6 able energy, and energy retrofitting projects for
7 schools;

8 (2) establish a Federal cross-departmental col-
9 laborative coordination, education, and outreach ef-
10 fort to streamline communication and promote avail-
11 able Federal opportunities and assistance described
12 in paragraph (1), for energy efficiency, renewable
13 energy, and energy retrofitting projects that enables
14 States, local educational agencies, and schools—

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

17 (B) to form partnerships with Governors,
18 State energy programs, local educational, finan-
19 cial, and energy officials, State and local gov-
20 ernment officials, nonprofit organizations, and
21 other appropriate entities, to support the initi-
22 ation of the projects;

23 (3) provide technical assistance for States, local
24 educational agencies, and schools to help develop

1 and finance energy efficiency, renewable energy, and
2 energy retrofitting projects—

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

5 (B) to install systems that individually
6 generate energy from renewable energy re-
7 sources;

8 (C) to establish partnerships to leverage
9 economies of scale and additional financing
10 mechanisms available to larger clean energy ini-
11 tiatives; or

12 (D) to promote—

13 (i) the maintenance of health, environ-
14 mental quality, and safety in schools, in-
15 cluding the ambient air quality, through
16 energy efficiency, renewable energy, and
17 energy retrofit projects; and

18 (ii) the achievement of expected en-
19 ergy savings and renewable energy produc-
20 tion through proper operations and main-
21 tenance practices;

22 (4) develop and maintain a single online re-
23 source website with contact information for relevant
24 technical assistance and support staff in the Office
25 of Energy Efficiency and Renewable Energy for

1 States, local educational agencies, and schools to ef-
 2 fectively access and use Federal opportunities and
 3 assistance described in paragraph (1) to develop en-
 4 ergy efficiency, renewable energy, and energy retro-
 5 fitting projects; and

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

8 (A) have successfully implemented energy
 9 efficiency, renewable energy, and energy retro-
 10 fitting projects; and

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

14 (d) REPORT.—Not later than 180 days after the date
 15 of enactment of this Act, the Secretary shall submit to
 16 Congress a report describing the implementation of this
 17 section.

18 **TITLE II—INDUSTRIAL EFFI-** 19 **CIENCY AND COMPETITIVE-** 20 **NESS**

21 **Subtitle A—Manufacturing Energy** 22 **Efficiency**

23 **SEC. 201. PURPOSES.**

24 The purposes of this subtitle are—

1 (1) to reform and reorient the industrial effi-
2 ciency programs of the Department of Energy;

3 (2) to establish a clear and consistent authority
4 for industrial efficiency programs of the Depart-
5 ment;

6 (3) to accelerate the deployment of technologies
7 and practices that will increase industrial energy ef-
8 ficiency and improve productivity;

9 (4) to accelerate the development and dem-
10 onstration of technologies that will assist the deploy-
11 ment goals of the industrial efficiency programs of
12 the Department and increase manufacturing effi-
13 ciency;

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

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

20 **SEC. 202. FUTURE OF INDUSTRY PROGRAM.**

21 (a) IN GENERAL.—Section 452 of the Energy Inde-
22 pendence and Security Act of 2007 (42 U.S.C. 17111) is
23 amended by striking the section heading and inserting the
24 following: “**FUTURE OF INDUSTRY PROGRAM**”.

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

4 (1) by redesignating paragraphs (3) through
 5 (5) as paragraphs (4) through (6), respectively; and
 6 (2) by inserting after paragraph (2):

7 “(3) ENERGY SERVICE PROVIDER.—The term
 8 ‘energy service provider’ means any business pro-
 9 viding technology or services to improve the energy
 10 efficiency, water efficiency, power factor, or load
 11 management of a manufacturing site or other indus-
 12 trial process in an energy-intensive industry, or any
 13 utility operating under a utility energy service
 14 project.”.

15 (c) INDUSTRIAL RESEARCH AND ASSESSMENT CEN-
 16 TERS.—Section 452(e) of the Energy Independence and
 17 Security Act of 2007 (42 U.S.C. 17111(e)) is amended—

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

21 (2) by striking “The Secretary” and inserting
 22 the following:

23 “(1) IN GENERAL.—The Secretary”;

24 (3) in subparagraph (A) (as redesignated by
 25 paragraph (1)), by inserting before the semicolon at

1 the end the following: “, including assessments of
 2 sustainable manufacturing goals and the implemen-
 3 tation of information technology advancements for
 4 supply chain analysis, logistics, system monitoring,
 5 industrial and manufacturing processes, and other
 6 purposes”; and

7 (4) by adding at the end the following:

8 “(2) COORDINATION.—

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

12 “(i) coordinate with Manufacturing
 13 Extension Partnership Centers of the Na-
 14 tional Institute of Standards and Tech-
 15 nology;

16 “(ii) coordinate with the Building
 17 Technologies Program of the Department
 18 of Energy to provide building assessment
 19 services to manufacturers;

20 “(iii) increase partnerships with the
 21 National Laboratories of the Department
 22 of Energy to leverage the expertise and
 23 technologies of the National Laboratories
 24 for national industrial and manufacturing
 25 needs;

1 “(iv) increase partnerships with en-
2 ergy service providers and technology pro-
3 viders to leverage private sector expertise
4 and accelerate deployment of new and ex-
5 isting technologies and processes for en-
6 ergy efficiency, power factor, and load
7 management;

8 “(v) identify opportunities for reduc-
9 ing greenhouse gas emissions; and

10 “(vi) promote sustainable manufac-
11 turing practices for small- and medium-
12 sized manufacturers.

13 “(3) OUTREACH.—The Secretary shall provide
14 funding for—

15 “(A) outreach activities by the industrial
16 research and assessment centers to inform
17 small- and medium-sized manufacturers of the
18 information, technologies, and services avail-
19 able; and

20 “(B) coordination activities by each indus-
21 trial research and assessment center to leverage
22 efforts with—

23 “(i) Federal and State efforts;

24 “(ii) the efforts of utilities and energy
25 service providers;

1 “(iii) the efforts of regional energy ef-
 2 ficiency organizations; and

3 “(iv) the efforts of other industrial re-
 4 search and assessment centers.

5 “(4) WORKFORCE TRAINING.—

6 “(A) IN GENERAL.—The Secretary shall
 7 pay the Federal share of associated internship
 8 programs under which students work with or
 9 for industries, manufacturers, and energy serv-
 10 ice providers to implement the recommendations
 11 of industrial research and assessment centers.

12 “(B) FEDERAL SHARE.—The Federal
 13 share of the cost of carrying out internship pro-
 14 grams described in subparagraph (A) shall be
 15 50 percent.

16 “(5) SMALL BUSINESS LOANS.—The Adminis-
 17 trator of the Small Business Administration shall, to
 18 the maximum extent practicable, expedite consider-
 19 ation of applications from eligible small business
 20 concerns for loans under the Small Business Act (15
 21 U.S.C. 631 et seq.) to implement recommendations
 22 of industrial research and assessment centers estab-
 23 lished under paragraph (1).

24 “(6) ADVANCED MANUFACTURING STEERING
 25 COMMITTEE.—The Secretary shall establish an advi-

1 sory steering committee to provide recommendations
 2 to the Secretary on planning and implementation of
 3 the Advanced Manufacturing Office of the Depart-
 4 ment of Energy.”.

5 **SEC. 203. SUSTAINABLE MANUFACTURING INITIATIVE.**

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

9 **“SEC. 376. SUSTAINABLE MANUFACTURING INITIATIVE.**

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

14 “(1) maximizing the energy efficiency of indus-
 15 trial processes and cross-cutting systems;

16 “(2) preventing pollution and minimizing waste;

17 “(3) improving efficient use of water in manu-
 18 facturing processes;

19 “(4) conserving natural resources; and

20 “(5) achieving such other goals as the Secretary
 21 determines to be appropriate.

22 “(b) COORDINATION.—The Secretary shall carry out
 23 the initiative in coordination with the private sector and
 24 appropriate agencies, including the National Institute of
 25 Standards and Technology, to accelerate adoption of new

1 and existing technologies and processes that improve en-
 2 ergy efficiency.

3 “(c) RESEARCH AND DEVELOPMENT PROGRAM FOR
 4 SUSTAINABLE MANUFACTURING AND INDUSTRIAL TECH-
 5 NOLOGIES AND PROCESSES.—As part of the industrial ef-
 6 ficiency programs of the Department of Energy, the Sec-
 7 retary shall carry out a joint industry-government partner-
 8 ship program to research, develop, and demonstrate new
 9 sustainable manufacturing and industrial technologies and
 10 processes that maximize the energy efficiency of industrial
 11 plants, reduce pollution, and conserve natural resources.”.

12 (b) TABLE OF CONTENTS.—The table of contents of
 13 the Energy Policy and Conservation Act (42 U.S.C. prec.
 14 6201) is amended by adding at the end of the items relat-
 15 ing to part E of title III the following:

“Sec. 376. Sustainable manufacturing initiative.”.

16 **SEC. 204. CONFORMING AMENDMENTS.**

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

19 (b) Sections 131, 132, 133, 2103, and 2107 of the
 20 Energy Policy Act of 1992 (42 U.S.C. 6348, 6349, 6350,
 21 13453, 13456) are repealed.

22 (c) Section 2101(a) of the Energy Policy Act of 1992
 23 (42 U.S.C. 13451(a)) is amended in the third sentence
 24 by striking “sections 2102, 2103, 2104, 2105, 2106,
 25 2107, and 2108” and inserting “sections 2102, 2104,

1 2105, 2106, and 2108 of this Act and section 376 of the
 2 Energy Policy and Conservation Act,”.

3 **Subtitle B—Supply Star**

4 **SEC. 211. SUPPLY STAR.**

5 The Energy Policy and Conservation Act is amended
 6 by inserting after section 324A (42 U.S.C. 6294a) the fol-
 7 lowing:

8 **“SEC. 324B. SUPPLY STAR PROGRAM.**

9 “(a) IN GENERAL.—There is established within the
 10 Department of Energy a Supply Star program to identify
 11 and promote practices, recognize companies, and, as ap-
 12 propriate, recognize products that use highly efficient sup-
 13 ply chains in a manner that conserves energy, water, and
 14 other resources.

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

17 “(1) consult with other appropriate agencies;
 18 and

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

21 “(c) DUTIES.—In carrying out the Supply Star pro-
 22 gram described in subsection (a), the Secretary shall—

23 “(1) promote practices, recognize companies,
 24 and, as appropriate, recognize products that comply
 25 with the Supply Star program as the preferred prac-

1 tices, companies, and products in the marketplace
 2 for maximizing supply chain efficiency;

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

5 “(3) collect and disseminate data on supply
 6 chain energy resource consumption;

7 “(4) develop and disseminate metrics, proc-
 8 esses, and analytical tools (including software) for
 9 evaluating supply chain energy resource use;

10 “(5) develop guidance at the sector level for im-
 11 proving supply chain efficiency;

12 “(6) work with domestic and international orga-
 13 nizations to harmonize approaches to analyzing sup-
 14 ply chain efficiency, including the development of a
 15 consistent set of tools, templates, calculators, and
 16 databases; and

17 “(7) work with industry, including small busi-
 18 nesses, to improve supply chain efficiency through
 19 activities that include—

20 “(A) developing and sharing best practices;

21 and

22 “(B) providing opportunities to benchmark
 23 supply chain efficiency.

24 “(d) EVALUATION.—In any evaluation of supply
 25 chain efficiency carried out by the Secretary with respect

1 to a specific product, the Secretary shall consider energy
2 consumption and resource use throughout the entire
3 lifecycle of a product, including production, transport,
4 packaging, use, and disposal.

5 “(e) GRANTS AND INCENTIVES.—

6 “(1) IN GENERAL.—The Secretary may award
7 grants or other forms of incentives on a competitive
8 basis to eligible entities, as determined by the Sec-
9 retary, for the purposes of—

10 “(A) studying supply chain energy resource
11 efficiency; and

12 “(B) demonstrating and achieving reduc-
13 tions in the energy resource consumption of
14 commercial products through changes and im-
15 provements to the production supply and dis-
16 tribution chain of the products.

17 “(2) USE OF INFORMATION.—Any information
18 or data generated as a result of the grants or incen-
19 tives described in paragraph (1) shall be used to in-
20 form the development of the Supply Star Program.

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

1 “(g) EFFECT OF OUTSOURCING OF AMERICAN
2 JOBS.—For purposes of this section, the outsourcing of
3 American jobs in the production of a product shall not
4 count as a positive factor in determining supply chain effi-
5 ciency.

6 “(h) AUTHORIZATION OF APPROPRIATIONS.—There
7 is authorized to be appropriated to carry out this section
8 \$10,000,000 for the period of fiscal years 2018 through
9 2027.”.

10 **Subtitle C—Extended Product** 11 **System Rebate Program**

12 **SEC. 221. EXTENDED PRODUCT SYSTEM REBATE PROGRAM.**

13 (a) DEFINITIONS.—In this section:

14 (1) ELECTRIC MOTOR.—The term “electric
15 motor” has the meaning given the term in section
16 431.12 of title 10, Code of Federal Regulations (as
17 in effect on the date of enactment of this Act).

18 (2) ELECTRONIC CONTROL.—The term “elec-
19 tronic control” means—

20 (A) a power converter; or

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

23 (3) EXTENDED PRODUCT SYSTEM.—The term
24 “extended product system” means an electric motor

1 and any required associated electronic control and
2 driven load that—

3 (A) offers variable speed or multispeed op-
4 eration;

5 (B) offers partial load control that reduces
6 input energy requirements (as measured in kilo-
7 watt-hours) as compared to identified base lev-
8 els set by the Secretary; and

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

10 (ii) uses an extended product system tech-
11 nology, as determined by the Secretary.

12 (4) QUALIFIED EXTENDED PRODUCT SYS-
13 TEM.—

14 (A) IN GENERAL.—The term “qualified ex-
15 tended product system” means an extended
16 product system that—

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

19 (ii) reduces the input energy (as
20 measured in kilowatt-hours) required to
21 operate the extended product system by
22 not less than 5 percent, as compared to
23 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 2019 or 2020.

(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

1 (B) in the case of a qualified extended
2 product system described in subsection
3 (a)(4)(B), the manufacturer of the commercial
4 or industrial machinery or equipment that in-
5 corporated the extended product system into
6 that machinery or equipment.

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

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

13 (B) a certification that includes dem-
14 onstrated evidence—

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

16 and

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

19 (aa) that the qualified entity in-
20 stalled the qualified extended product
21 system during the 2 fiscal years fol-
22 lowing the date of enactment of this
23 Act;

1 (bb) that the qualified extended
 2 product system meets the require-
 3 ments of subsection (a)(4)(A); and

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

10 (II) in the case of a qualified entity
 11 described in paragraph (1)(B), dem-
 12 onstrated evidence—

13 (aa) that the qualified extended
 14 product system meets the require-
 15 ments of subsection (a)(4)(B); and

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

22 (d) AUTHORIZED AMOUNT OF REBATE.—

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

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

3 (i) the electric motor to which the
4 qualified extended product system is at-
5 tached; and

6 (ii) the electronic control; and

7 (B) \$25.

8 (2) MAXIMUM AGGREGATE AMOUNT.—A quali-
9 fied entity shall not be entitled to aggregate rebates
10 under this section in excess of \$25,000 per calendar
11 year.

12 (e) AUTHORIZATION OF APPROPRIATIONS.—There is
13 authorized to be appropriated to carry out this section
14 \$5,000,000 for each of the first 2 full fiscal years following
15 the date of enactment of this Act, to remain available until
16 expended.

17 **Subtitle D—Transformer Rebate** 18 **Program**

19 **SEC. 231. ENERGY EFFICIENT TRANSFORMER REBATE PRO-** 20 **GRAM.**

21 (a) DEFINITIONS.—In this section:

22 (1) QUALIFIED ENERGY EFFICIENT TRANS-
23 FORMER.—The term “qualified energy efficient
24 transformer” means a transformer that meets or ex-
25 ceeds 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-

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

6 (3) QUALIFIED ENTITY.—The term “qualified
 7 entity” means an owner of industrial or manufac-
 8 turing facilities, commercial buildings, or multifamily
 9 residential buildings, a utility, or an energy service
 10 company that fulfills the requirements of subsection
 11 (d).

12 (b) ESTABLISHMENT.—Not later than 90 days after
 13 the date of enactment of this Act, the Secretary shall es-
 14 tablish a program to provide rebates to qualified entities
 15 for expenditures made by the qualified entity for the re-
 16 placement of a qualified energy inefficient transformer
 17 with a qualified energy efficient transformer.

18 (c) REQUIREMENTS.—To be eligible to receive a re-
 19 bate under this section, an entity shall submit to the Sec-
 20 retary an application in such form, at such time, and con-
 21 taining such information as the Secretary may require, in-
 22 cluding demonstrated evidence—

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

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

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

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

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

10 (B) for transformers described in sub-
11 section (a)(2)(B)(i), as selected from a table of
12 default values as determined by the Secretary
13 in consultation with applicable industry; and

14 (5) that the qualified energy inefficient trans-
15 former has been permanently decommissioned and
16 scrapped.

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

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

1 (A) the qualified energy inefficient trans-
 2 former; and

3 (B) the qualified energy efficient trans-
 4 former; or

5 (2) for a transformer described in subsection
 6 (a)(2)(B)(i), the amount determined using a table of
 7 default rebate values by rated transformer output,
 8 as measured in kilovolt-amperes, as determined by
 9 the Secretary in consultation with applicable indus-
 10 try.

11 (e) AUTHORIZATION OF APPROPRIATIONS.—There is
 12 authorized to be appropriated to carry out this section
 13 \$5,000,000 for each of fiscal years 2018 and 2019, to re-
 14 main available until expended.

15 (f) TERMINATION OF EFFECTIVENESS.—The author-
 16 ity provided by this section terminates on December 31,
 17 2019.

18 **TITLE III—FEDERAL AGENCY** 19 **ENERGY EFFICIENCY**

20 **SEC. 301. ENERGY-EFFICIENT AND ENERGY-SAVING INFOR-** 21 **MATION TECHNOLOGIES.**

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

1 (1) by redesignating the second subsection (f)
 2 (relating to large capital energy investments) as sub-
 3 section (g); and

4 (2) by adding at the end the following:

5 “(h) FEDERAL IMPLEMENTATION STRATEGY FOR
 6 ENERGY-EFFICIENT AND ENERGY-SAVING INFORMATION
 7 TECHNOLOGIES.—

8 “(1) DEFINITIONS.—In this subsection:

9 “(A) DIRECTOR.—The term ‘Director’
 10 means the Director of the Office of Manage-
 11 ment and Budget.

12 “(B) INFORMATION TECHNOLOGY.—The
 13 term ‘information technology’ has the meaning
 14 given the term in section 11101 of title 40,
 15 United States Code.

16 “(2) DEVELOPMENT OF IMPLEMENTATION
 17 STRATEGY.—Not later than 1 year after the date of
 18 enactment of this subsection, each Federal agency
 19 shall collaborate with the Director to develop an im-
 20 plementation strategy (including best-practices and
 21 measurement and verification techniques) for the
 22 maintenance, purchase, and use by the Federal
 23 agency of energy-efficient and energy-saving infor-
 24 mation technologies.

1 “(3) ADMINISTRATION.—In developing an im-
2 plementation strategy, each Federal agency shall
3 consider—

4 “(A) advanced metering infrastructure;

5 “(B) energy efficient data center strategies
6 and methods of increasing asset and infrastruc-
7 ture utilization;

8 “(C) advanced power management tools;

9 “(D) building information modeling, in-
10 cluding building energy management; and

11 “(E) secure telework and travel substi-
12 tution tools.

13 “(4) PERFORMANCE GOALS.—

14 “(A) IN GENERAL.—Not later than Sep-
15 tember 30, 2017, the Director, in consultation
16 with the Secretary, shall establish performance
17 goals for evaluating the efforts of Federal agen-
18 cies in improving the maintenance, purchase,
19 and use of energy-efficient and energy-saving
20 information technology systems.

21 “(B) BEST PRACTICES.—The Chief Infor-
22 mation Officers Council established under sec-
23 tion 3603 of title 44, United States Code, shall
24 supplement the performance goals established
25 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, 2017, 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.

1 “(C) USE OF EXISTING REPORTING STRUC-
 2 TURES.—The Director may require Federal
 3 agencies to submit any information required to
 4 be submitted under this subsection though re-
 5 porting structures in use as of the date of en-
 6 actment of the Energy Savings and Industrial
 7 Competitiveness Act.”.

8 **SEC. 302. ENERGY EFFICIENT DATA CENTERS.**

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

11 (1) in subsection (b)—

12 (A) in paragraph (2)(D)(iv), by striking
 13 “the organization” and inserting “an organiza-
 14 tion”; and

15 (B) by striking paragraph (3); and

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

18 “(c) STAKEHOLDER INVOLVEMENT.—

19 “(1) IN GENERAL.—The Secretary and the Ad-
 20 ministrators shall carry out subsection (b) in con-
 21 sultation with the information technology industry
 22 and other key stakeholders, with the goal of pro-
 23 ducing results that accurately reflect the best knowl-
 24 edge in the most pertinent domains.

1 “(2) CONSIDERATIONS.—In carrying out con-
2 sultation described in paragraph (1), the Secretary
3 and the Administrator shall pay particular attention
4 to organizations that—

5 “(A) have members with expertise in en-
6 ergy efficiency and in the development, oper-
7 ation, and functionality of data centers, infor-
8 mation technology equipment, and software, in-
9 cluding representatives of hardware manufac-
10 turers, data center operators, and facility man-
11 agers;

12 “(B) obtain and address input from the
13 National Laboratories (as that term is defined
14 in section 2 of the Energy Policy Act of 2005
15 (42 U.S.C. 15801)) or any institution of higher
16 education, research institution, industry asso-
17 ciation, company, or public interest group with
18 applicable expertise;

19 “(C) follow—

20 “(i) commonly accepted procedures
21 for the development of specifications; and

22 “(ii) accredited standards development
23 processes; or

1 “(D) have a mission to promote energy ef-
2 ficiency for data centers and information tech-
3 nology.

4 “(d) MEASUREMENTS AND SPECIFICATIONS.—The
5 Secretary and the Administrator shall consider and assess
6 the adequacy of the specifications, measurements, and
7 benchmarks described in subsection (b) for use by the
8 Federal Energy Management Program, the Energy Star
9 Program, and other efficiency programs of the Depart-
10 ment of Energy or the Environmental Protection Agency.

11 “(e) STUDY.—The Secretary, in consultation with the
12 Administrator, not later than 18 months after the date
13 of enactment of the Energy Savings and Industrial Com-
14 petitiveness Act, shall make available to the public an up-
15 date to the report submitted to Congress pursuant to sec-
16 tion 1 of the Act of December 20, 2006 (Public Law 109–
17 431; 120 Stat. 2920), entitled ‘Report to Congress on
18 Server and Data Center Energy Efficiency’ and dated Au-
19 gust 2, 2007, that provides—

20 “(1) a comparison and gap analysis of the esti-
21 mates and projections contained in the original re-
22 port with new data regarding the period from 2007
23 through 2016;

1 “(2) an analysis considering the impact of in-
2 formation technologies, including virtualization and
3 cloud computing, in the public and private sectors;

4 “(3) an evaluation of the impact of the com-
5 bination of cloud platforms, mobile devices, social
6 media, and big data on data center energy usage;
7 and

8 “(4) updated projections and recommendations
9 for best practices through fiscal year 2022.

10 “(f) DATA CENTER ENERGY PRACTITIONER PRO-
11 GRAM.—

12 “(1) IN GENERAL.—The Secretary, in consulta-
13 tion with key stakeholders and the Director of the
14 Office of Management and Budget, shall maintain a
15 data center energy practitioner program that pro-
16 vides for the certification of energy practitioners
17 qualified to evaluate the energy usage and efficiency
18 opportunities in Federal data centers.

19 “(2) EVALUATIONS.—Each Federal agency
20 shall consider having the data centers of the agency
21 evaluated once every 4 years by energy practitioners
22 certified pursuant to the program, whenever prac-
23 ticable using certified practitioners employed by the
24 agency.

25 “(g) OPEN DATA INITIATIVE.—

1 “(1) IN GENERAL.—The Secretary, in consulta-
2 tion with key stakeholders and the Director of the
3 Office of Management and Budget, shall establish
4 an open data initiative for Federal data center en-
5 ergy usage data, with the purpose of making the
6 data available and accessible in a manner that en-
7 courages further data center innovation, optimiza-
8 tion, and consolidation.

9 “(2) CONSIDERATION.—In establishing the ini-
10 tiative under paragraph (1), the Secretary shall con-
11 sider using the online Data Center Maturity Model.

12 “(h) INTERNATIONAL SPECIFICATIONS AND
13 METRICS.—The Secretary, in consultation with key stake-
14 holders, shall actively participate in efforts to harmonize
15 global specifications and metrics for data center energy
16 efficiency.

17 “(i) DATA CENTER UTILIZATION METRIC.—The Sec-
18 retary, in collaboration with key stakeholders, shall facili-
19 tate in the development of an efficiency metric that meas-
20 ures the energy efficiency of a data center (including
21 equipment and facilities).

22 “(j) PROTECTION OF PROPRIETARY INFORMATION.—
23 The Secretary and the Administrator shall not disclose
24 any proprietary information or trade secrets provided by
25 any individual or company for the purposes of carrying

1 out this section or the programs and initiatives established
 2 under this section.”.

3 **SEC. 303. BUDGET-NEUTRAL DEMONSTRATION PROGRAM**
 4 **FOR ENERGY AND WATER CONSERVATION IM-**
 5 **PROVEMENTS AT MULTIFAMILY RESIDEN-**
 6 **TIAL UNITS.**

7 (a) ESTABLISHMENT.—The Secretary of Housing
 8 and Urban Development (referred to in this section as the
 9 “Secretary”) shall establish a demonstration program
 10 under which, during the period beginning on the date of
 11 enactment of this Act, and ending on September 30, 2020,
 12 the Secretary may enter into budget-neutral, performance-
 13 based agreements that result in a reduction in energy or
 14 water costs with such entities as the Secretary determines
 15 to be appropriate under which the entities shall carry out
 16 projects for energy or water conservation improvements at
 17 not more than 20,000 residential units in multifamily
 18 buildings participating in—

- 19 (1) the project-based rental assistance program
 20 under section 8 of the United States Housing Act of
 21 1937 (42 U.S.C. 1437f), other than assistance pro-
 22 vided under section 8(o) of that Act;
- 23 (2) the supportive housing for the elderly pro-
 24 gram under section 202 of the Housing Act of 1959
 25 (12 U.S.C. 1701q); or

1 (3) the supportive housing for persons with dis-
2 abilities program under section 811(d)(2) of the
3 Cranston-Gonzalez National Affordable Housing Act
4 (42 U.S.C. 8013(d)(2)).

5 (b) REQUIREMENTS.—

6 (1) PAYMENTS CONTINGENT ON SAVINGS.—

7 (A) IN GENERAL.—The Secretary shall
8 provide to an entity a payment under an agree-
9 ment under this section only during applicable
10 years for which an energy or water cost savings
11 is achieved with respect to the applicable multi-
12 family portfolio of properties, as determined by
13 the Secretary, in accordance with subparagraph
14 (B).

15 (B) PAYMENT METHODOLOGY.—

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

19 (I) that will serve as a payment
20 threshold for the term of the agree-
21 ment; and

22 (II) pursuant to which the De-
23 partment of Housing and Urban De-
24 velopment shall share a percentage of
25 the savings at a level determined by

1 the Secretary that is sufficient to
2 cover the administrative costs of car-
3 rying out this section.

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

7 (I) be contingent on documented
8 utility savings; and

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

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

18 (i) establishment of a weather-normal-
19 ized and occupancy-normalized utility con-
20 sumption baseline established preretrofit;

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

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

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

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

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

7 (3) ENTITY ELIGIBILITY.—The Secretary
8 shall—

9 (A) establish a competitive process for en-
10 tering into agreements under this section; and

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

14 (i) financing and operating properties
15 receiving assistance under a program de-
16 scribed in subsection (a);

17 (ii) oversight of energy and water con-
18 servation programs, including oversight of
19 contractors; and

20 (iii) raising capital for energy and
21 water conservation improvements from
22 charitable organizations or private inves-
23 tors.

24 (4) GEOGRAPHICAL DIVERSITY.—Each agree-
25 ment entered into under this section shall provide

1 for the inclusion of properties with the greatest fea-
2 sible regional and State variance.

3 (c) PLAN AND REPORTS.—

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

9 (2) REPORTS.—Not later than 1 year after the
10 date of enactment of this Act, and annually there-
11 after, the Secretary shall—

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

14 (B) submit to Congress a report describing
15 each evaluation conducted under subparagraph

16 (A).

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

1 **TITLE IV—REGULATORY**
 2 **PROVISIONS**
 3 **Subtitle A—Third-Party Certifi-**
 4 **cation Under Energy Star Pro-**
 5 **gram**

6 **SEC. 401. THIRD-PARTY CERTIFICATION UNDER ENERGY**
 7 **STAR PROGRAM.**

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

11 “(e) THIRD-PARTY CERTIFICATION.—

12 “(1) IN GENERAL.—Subject to paragraph (2),
 13 not later than 180 days after the date of enactment
 14 of this subsection, the Administrator shall revise the
 15 certification requirements for the labeling of con-
 16 sumer, home, and office electronic products for pro-
 17 gram partners that have complied with all require-
 18 ments of the Energy Star program for a period of
 19 at least 18 months.

20 “(2) ADMINISTRATION.—In the case of a pro-
 21 gram partner described in paragraph (1), the new
 22 requirements under paragraph (1)—

23 “(A) shall not require third-party certifi-
 24 cation for a product to be listed; but

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

5 “(3) THIRD PARTIES.—Nothing in this sub-
6 section prevents the Administrator from using third
7 parties in the course of the administration of the
8 Energy Star program.

9 “(4) TERMINATION.—

10 “(A) IN GENERAL.—Subject to subpara-
11 graph (B), an exemption from third-party cer-
12 tification provided to a program partner under
13 paragraph (1) shall terminate if the program
14 partner is found to have violated program re-
15 quirements with respect to at least 2 separate
16 models during a 2-year period.

17 “(B) RESUMPTION.—A termination for a
18 program partner under subparagraph (A) shall
19 cease if the program partner complies with all
20 Energy Star program requirements for a period
21 of at least 3 years.”.

Subtitle B—Federal Green Buildings

SEC. 411. HIGH-PERFORMANCE GREEN FEDERAL BUILD- INGS.

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 the sourcing of grown, harvested, or mined materials, the system rewards the use of products that have obtained certifications of responsible sourcing, such as certifications provided by the Sustainable Forestry Initiative, the Forest Stewardship Council, the American Tree Farm System, or the Programme for the Endorsement of Forest Certification; and

1 “(H) a finding that the system incor-
 2 porates life-cycle assessment as a credit path-
 3 way.”.

4 **Subtitle C—Energy Performance** 5 **Requirement for Federal Buildings**

6 **SEC. 421. ENERGY PERFORMANCE REQUIREMENT FOR FED-** 7 **ERAL BUILDINGS.**

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

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

12 “(a) ENERGY PERFORMANCE REQUIREMENT FOR
 13 FEDERAL BUILDINGS.—

14 “(1) REQUIREMENT.—Subject to paragraph
 15 (2), each agency shall apply energy conservation
 16 measures to, and shall improve the design for the
 17 construction of, the Federal buildings of the agency
 18 (including each industrial or laboratory facility) so
 19 that the energy consumption per gross square foot
 20 of the Federal buildings of the agency in fiscal years
 21 2006 through 2017 is reduced, as compared with the
 22 energy consumption per gross square foot of the
 23 Federal buildings of the agency in fiscal year 2003,
 24 by the percentage specified in the following table:

“Fiscal Year	Percentage Reduction
2006	2

“Fiscal Year	Percentage Reduction
2007	4
2008	9
2009	12
2010	15
2011	18
2012	21
2013	24
2014	27
2015	30
2016	33
2017	36.

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

3 “(A) IN GENERAL.—An agency may ex-
4 clude from the requirements of paragraph (1)
5 any building (including the associated energy
6 consumption and gross square footage) in which
7 energy intensive activities are carried out.

8 “(B) REPORTS.—Each agency shall iden-
9 tify and list in each report made under section
10 548(a) the buildings designated by the agency
11 for exclusion under subparagraph (A).

12 “(3) REVIEW.—Not later than December 31,
13 2017, the Secretary shall—

14 “(A) review the results of the implementa-
15 tion of the energy performance requirements es-
16 tablished under paragraph (1); and

17 “(B) based on the review conducted under
18 subparagraph (A), submit to Congress a report
19 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 (including 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,

1 over the useful life of the facility, while meeting
2 facility occupancy requirements.”;

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

5 “(C) ENERGY MANAGEMENT SYSTEM.—An
6 energy manager designated under subparagraph
7 (A) shall consider use of a system to manage
8 energy use at the facility and certification of
9 the facility in accordance with the International
10 Organization for Standardization standard
11 numbered 50001 and entitled ‘Energy Manage-
12 ment Systems’.”;

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

15 “(3) ENERGY AND WATER EVALUATIONS AND
16 COMMISSIONING.—

17 “(A) EVALUATIONS.—Except as provided
18 in subparagraph (B), effective beginning on the
19 date that is 180 days after the date of enact-
20 ment of the Energy Savings and Industrial
21 Competitiveness Act, and annually thereafter,
22 each energy manager shall complete, for each
23 calendar year, a comprehensive energy and
24 water evaluation and recommissioning or
25 retrocommissioning for approximately 25 per-

cent 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 re-commissioning 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, re-commissioned, 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

1 under subsection (a) compared to the ear-
2 lier of—

3 “(aa) the date of the most recent
4 evaluation; or

5 “(bb) the date—

6 “(AA) of the most recent
7 commissioning, recommissioning,
8 or retrocommissioning; or

9 “(BB) on which ongoing
10 commissioning began; or

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

15 “(4) IMPLEMENTATION OF IDENTIFIED ENERGY
16 AND WATER EFFICIENCY MEASURES.—

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

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

1 “(ii) bundle individual measures of
 2 varying paybacks together into combined
 3 projects.

4 “(B) MEASURES NOT IMPLEMENTED.—
 5 The energy manager shall, as part of the cer-
 6 tification system under paragraph (7), explain
 7 the reasons why any life-cycle cost effective
 8 measures were not implemented under subpara-
 9 graph (A) using guidelines developed by the
 10 Secretary.”; and

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

13 “(iii) SUMMARY REPORT.—The Sec-
 14 retary shall make available a report that
 15 summarizes the information tracked under
 16 subparagraph (B)(i) by each agency and,
 17 as applicable, by each type of measure.”.

18 **SEC. 422. FEDERAL BUILDING ENERGY EFFICIENCY PER-**
 19 **FORMANCE STANDARDS; CERTIFICATION**
 20 **SYSTEM AND LEVEL FOR GREEN BUILDINGS.**

21 (a) DEFINITIONS.—Section 303 of the Energy Con-
 22 servation and Production Act (42 U.S.C. 6832) (as
 23 amended by section 101(a)) is amended—

1 (1) in paragraph (6), by striking “to be con-
 2 structed” and inserting “constructed or altered”;
 3 and

4 (2) by adding at the end the following:

5 “(19) MAJOR RENOVATION.—The term ‘major
 6 renovation’ means a modification of building energy
 7 systems sufficiently extensive that the whole building
 8 can meet energy standards for new buildings, based
 9 on criteria to be established by the Secretary
 10 through notice and comment rulemaking.”.

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

14 (1) in subsection (a)(3)—

15 (A) by striking “(3)(A) Not later than”
 16 and all that follows through subparagraph (B)
 17 and inserting the following:

18 “(3) REVISED FEDERAL BUILDING ENERGY EF-
 19 FICIENCY PERFORMANCE STANDARDS; CERTIFI-
 20 CATION FOR GREEN BUILDINGS.—

21 “(A) REVISED FEDERAL BUILDING EN-
 22 ERGY EFFICIENCY PERFORMANCE STAND-
 23 ARDS.—

24 “(i) IN GENERAL.—Not later than 1
 25 year after the date of enactment of the En-

1 ergy Savings and Industrial Competitive-
2 ness Act, the Secretary shall establish, by
3 rule, revised Federal building energy effi-
4 ciency performance standards that require
5 that—

6 “(I) new Federal buildings and
7 alterations and additions to existing
8 Federal buildings—

9 “(aa) meet or exceed the
10 most recent revision of the Inter-
11 national Energy Conservation
12 Code (in the case of residential
13 buildings) or ASHRAE Standard
14 90.1 (in the case of commercial
15 buildings) as of the date of en-
16 actment of the Energy Savings
17 and Industrial Competitiveness
18 Act; and

19 “(bb) meet or exceed the en-
20 ergy provisions of State and local
21 building codes applicable to the
22 building, if the codes are more
23 stringent than the International
24 Energy Conservation Code or

1 ASHRAE Standard 90.1, as ap-
2 plicable;

3 “(II) unless demonstrated not to
4 be life-cycle cost effective for new
5 Federal buildings and Federal build-
6 ings with major renovations—

7 “(aa) the buildings be de-
8 signed to achieve energy con-
9 sumption levels that are at least
10 30 percent below the levels estab-
11 lished in the version of the
12 ASHRAE Standard or the Inter-
13 national Energy Conservation
14 Code, as appropriate, that is ap-
15 plied under subclause (I)(aa), in-
16 cluding updates under subpara-
17 graph (B); and

18 “(bb) sustainable design
19 principles are applied to the loca-
20 tion, siting, design, and construc-
21 tion of all new Federal buildings
22 and replacement Federal build-
23 ings;

24 “(III) if water is used to achieve
25 energy efficiency, water conservation

1 technologies shall be applied to the ex-
 2 tent that the technologies are life-
 3 cycle cost effective; and

4 “(IV) if life-cycle cost effective,
 5 as compared to other reasonably avail-
 6 able technologies, not less than 30
 7 percent of the hot water demand for
 8 each new Federal building or Federal
 9 building undergoing a major renova-
 10 tion be met through the installation
 11 and use of solar hot water heaters.

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

16 “(B) UPDATES.—Not later than 1 year
 17 after the date of approval of each subsequent
 18 revision of the ASHRAE Standard or the Inter-
 19 national Energy Conservation Code, as appro-
 20 priate, the Secretary shall determine whether
 21 the revised standards established under sub-
 22 paragraph (A) should be updated to reflect the
 23 revisions, based on the energy savings and life-
 24 cycle cost-effectiveness of the revisions.”;

1 (B) in subparagraph (C), by striking “(C)
2 In the budget request” and inserting the fol-
3 lowing:

4 “(C) BUDGET REQUEST.—In the budget
5 request”; and

6 (C) by striking subparagraph (D) and in-
7 serting the following:

8 “(D) CERTIFICATION FOR GREEN BUILD-
9 INGS.—

10 “(i) SUSTAINABLE DESIGN PRIN-
11 CIPLES.—Sustainable design principles
12 shall be applied to the siting, design, and
13 construction of buildings covered by this
14 subparagraph.

15 “(ii) SELECTION OF CERTIFICATION
16 SYSTEMS.—The Secretary, after reviewing
17 the findings of the Federal Director under
18 section 436(h) of the Energy Independence
19 and Security Act of 2007 (42 U.S.C.
20 17092(h)), in consultation with the Admin-
21 istrator of General Services, and in con-
22 sultation with the Secretary of Defense re-
23 lating to those facilities under the custody
24 and control of the Department of Defense,
25 shall determine those certification systems

1 for green commercial and residential build-
 2 ings that the Secretary determines to be
 3 the most likely to encourage a comprehen-
 4 sive and environmentally sound approach
 5 to certification of green buildings.

6 “(iii) BASIS FOR SELECTION.—The
 7 determination of the certification systems
 8 under clause (ii) shall be based on ongoing
 9 review of the findings of the Federal Direc-
 10 tor under section 436(h) of the Energy
 11 Independence and Security Act of 2007
 12 (42 U.S.C. 17092(h)) and the criteria de-
 13 scribed in clause (v).

14 “(iv) ADMINISTRATION.—In deter-
 15 mining certification systems under this
 16 subparagraph, the Secretary shall—

17 “(I) make a separate determina-
 18 tion for all or part of each system;
 19 and

20 “(II) confirm that the criteria
 21 used to support the selection of build-
 22 ing products, materials, brands, and
 23 technologies—

24 “(aa) are based on relevant
 25 technical data;

1 “(bb) use and reward eval-
2 uation of health, safety, and envi-
3 ronmental risks and impacts
4 across the lifecycle of the build-
5 ing product, material, brand, or
6 technology, including methodolo-
7 gies generally accepted by the ap-
8 plicable scientific disciplines;

9 “(cc) as practicable, give
10 preference to performance stand-
11 ards instead of prescriptive meas-
12 ures; and

13 “(dd) reward continual im-
14 provements in the lifecycle man-
15 agement of health, safety, and
16 environmental risks and impacts.

17 “(v) CONSIDERATIONS.—In deter-
18 mining the green building certification sys-
19 tems under this subparagraph, the Sec-
20 retary shall take into consideration—

21 “(I) the ability and availability of
22 assessors and auditors to independ-
23 ently verify the criteria and measure-
24 ment of metrics at the scale necessary
25 to implement this subparagraph;

1 “(II) the ability of the applicable
2 certification organization to collect
3 and reflect public comment;

4 “(III) the ability of the standard
5 to be developed and revised through a
6 consensus-based process;

7 “(IV) an evaluation of the
8 robustness of the criteria for a high-
9 performance green building, which
10 shall give credit for promoting—

11 “(aa) efficient and sustain-
12 able use of water, energy, and
13 other natural resources;

14 “(bb) use of renewable en-
15 ergy sources;

16 “(cc) improved indoor envi-
17 ronmental quality through en-
18 hanced indoor air quality, ther-
19 mal comfort, acoustics, day light-
20 ing, pollutant source control, and
21 use of low-emission materials and
22 building system controls;

23 “(dd)(AA) the sourcing of
24 grown, harvested, or mined mate-
25 rials; and

1 “(BB) certifications of re-
 2 sponsible sourcing, such as cer-
 3 tifications provided by the Forest
 4 Stewardship Council, the Sus-
 5 tainable Forestry Initiative, the
 6 American Tree Farm System, or
 7 the Programme for the Endorse-
 8 ment of Forest Certification; and

9 “(ee) such other criteria as
 10 the Secretary determines to be
 11 appropriate; and

12 “(V) national recognition within
 13 the building industry.

14 “(vi) REVIEW.—The Secretary, in
 15 consultation with the Administrator of
 16 General Services and the Secretary of De-
 17 fense, shall conduct an ongoing review to
 18 evaluate and compare private sector green
 19 building certification systems, taking into
 20 account—

21 “(I) the criteria described in
 22 clause (v); and

23 “(II) the identification made by
 24 the Federal Director under section
 25 436(h) of the Energy Independence

1 and Security Act of 2007 (42 U.S.C.
2 17092(h)).

3 “(vii) EXCLUSIONS.—

4 “(I) IN GENERAL.—Subject to
5 subclause (II), if a certification sys-
6 tem fails to meet the review require-
7 ments of clause (v), the Secretary
8 shall—

9 “(aa) identify the portions
10 of the system, whether pre-
11 requisites, credits, points, or oth-
12 erwise, that meet the review cri-
13 teria of clause (v);

14 “(bb) determine the portions
15 of the system that are suitable
16 for use; and

17 “(cc) exclude all other por-
18 tions of the system from identi-
19 fication and use.

20 “(II) ENTIRE SYSTEMS.—The
21 Secretary shall exclude an entire sys-
22 tem from use if an exclusion under
23 subclause (I)—

24 “(aa) impedes the integrated
25 use of the system;

1 “(bb) creates disparate re-
 2 view criteria or unequal point ac-
 3 cess for competing materials; or

4 “(cc) increases agency costs
 5 of the use.

6 “(viii) INTERNAL CERTIFICATION
 7 PROCESSES.—The Secretary may by rule
 8 allow Federal agencies to develop internal
 9 certification processes, using certified pro-
 10 fessionals, in lieu of certification by certifi-
 11 cation entities identified under clause (ii).

12 “(ix) PRIVATIZED MILITARY HOUS-
 13 ING.—With respect to privatized military
 14 housing, the Secretary of Defense, after
 15 consultation with the Secretary may,
 16 through rulemaking, develop alternative
 17 certification systems and levels than the
 18 systems and levels identified under clause
 19 (ii) that achieve an equivalent result in
 20 terms of energy savings, sustainable de-
 21 sign, and green building performance.

22 “(x) WATER CONSERVATION TECH-
 23 NOLOGIES.—In addition to any use of
 24 water conservation technologies otherwise
 25 required by this section, water conservation

technologies shall be applied to the extent that the technologies are life-cycle cost-effective.

“(xi) EFFECTIVE DATE.—

“(I) DETERMINATIONS MADE AFTER DECEMBER 31, 2017.—The amendments made by section 432(b)(1)(C) of Energy Savings and Industrial Competitiveness Act shall apply to any determination made by a Federal agency after December 31, 2017.

“(II) DETERMINATIONS MADE ON OR BEFORE DECEMBER 31, 2017.—

This subparagraph (as in effect on the day before the date of enactment of Energy Savings and Industrial Competitiveness Act) shall apply to any use of a certification system for green commercial and residential buildings by a Federal agency on or before December 31, 2017.”; and

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

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

1 “(1) once every 5 years, review the Federal
2 building energy standards established under this sec-
3 tion; and

4 “(2) on completion of a review under paragraph
5 (1), if the Secretary determines that significant en-
6 ergy savings would result, upgrade the standards to
7 include all new energy efficiency and renewable en-
8 ergy measures that are technologically feasible and
9 economically justified.”.

10 **SEC. 423. ENHANCED ENERGY EFFICIENCY UNDER-**
11 **WRITING.**

12 (a) DEFINITIONS.—In this section:

13 (1) COVERED AGENCY.—The term “covered
14 agency”—

15 (A) means—

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

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

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

1 (2) COVERED LOAN.—The term “covered loan”
 2 means a loan secured by a home that is issued, in-
 3 sured, purchased, or securitized by a covered agency.

4 (3) HOMEOWNER.—The term “homeowner”
 5 means the mortgagor under a covered loan.

6 (4) MORTGAGEE.—The term “mortgagee”
 7 means—

8 (A) an original lender under a covered loan
 9 or the holder of a covered loan at the time at
 10 which that mortgage transaction is con-
 11 summated;

12 (B) any affiliate, agent, subsidiary, suc-
 13 cessor, or assignee of an original lender under
 14 a covered loan or the holder of a covered loan
 15 at the time at which that mortgage transaction
 16 is consummated;

17 (C) any servicer of a covered loan; and

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

21 (5) SECRETARY.—The term “Secretary” means
 22 the Secretary of Housing and Urban Development.

23 (6) SERVICER.—The term “servicer” means the
 24 person or entity responsible for the servicing of a
 25 covered loan, including the person or entity who

1 makes or holds a covered loan if that person or enti-
 2 ty also services the covered loan.

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

7 (b) FINDINGS AND PURPOSES.—

8 (1) FINDINGS.—Congress finds that—

9 (A) energy costs for homeowners are a sig-
 10 nificant and increasing portion of their house-
 11 hold budgets;

12 (B) household energy use can vary sub-
 13 stantially depending on the efficiency and char-
 14 acteristics of the house;

15 (C) expected energy cost savings are im-
 16 portant to the value of the house;

17 (D) the current test for loan affordability
 18 used by most covered agencies, commonly
 19 known as the “debt-to-income” test, is inad-
 20 equate because it does not take into account the
 21 expected energy cost savings for the homeowner
 22 of an energy efficient home; and

23 (E) another loan limitation, commonly
 24 known as the “loan-to-value” test, is tied to the

1 appraisal, which often does not adjust for effi-
2 ciency features of houses.

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

5 (A) improve the accuracy of mortgage un-
6 derwriting by Federal mortgage agencies by en-
7 suring that energy cost savings are included in
8 the underwriting process as described below,
9 and thus to reduce the amount of energy con-
10 sumed by homes and to facilitate the creation
11 of energy efficiency retrofit and construction
12 jobs;

13 (B) require a covered agency to include the
14 expected energy cost savings of a homeowner as
15 a regular expense in the tests, such as the debt-
16 to-income test, used to determine the ability of
17 the loan applicant to afford the cost of home-
18 ownership for all loan programs; and

19 (C) require a covered agency to include the
20 value home buyers place on the energy effi-
21 ciency of a house in tests used to compare the
22 mortgage amount to home value, taking pre-
23 cautions to avoid double-counting and to sup-
24 port safe and sound lending.

1 (c) ENHANCED ENERGY EFFICIENCY UNDER-
2 WRITING CRITERIA.—

3 (1) IN GENERAL.—Not later than 1 year after
4 the date of enactment of this Act, the Secretary
5 shall, in consultation with the advisory group estab-
6 lished in subsection (f)(2), develop and issue guide-
7 lines for a covered agency to implement enhanced
8 loan eligibility requirements, for use when testing
9 the ability of a loan applicant to repay a covered
10 loan, that account for the expected energy cost sav-
11 ings for a loan applicant at a subject property, in
12 the manner set forth in paragraphs (2) and (3).

13 (2) REQUIREMENTS TO ACCOUNT FOR ENERGY
14 COST SAVINGS.—The enhanced loan eligibility re-
15 quirements under paragraph (1) shall require that,
16 for all covered loans for which an energy efficiency
17 report is voluntarily provided to the mortgagee by
18 the mortgagor, the covered agency and the mort-
19 gagee shall take into consideration the estimated en-
20 ergy cost savings expected for the owner of the sub-
21 ject property in determining whether the loan appli-
22 cant has sufficient income to service the mortgage
23 debt plus other regular expenses. To the extent that
24 a covered agency uses a test such as a debt-to-in-
25 come test that includes certain regular expenses,

1 such as hazard insurance and property taxes, the ex-
 2 pected energy cost savings shall be included as an
 3 offset to these expenses. Energy costs to be assessed
 4 include the cost of electricity, natural gas, oil, and
 5 any other fuel regularly used to supply energy to the
 6 subject property.

7 (3) DETERMINATION OF ESTIMATED ENERGY
 8 COST SAVINGS.—

9 (A) IN GENERAL.—The guidelines to be
 10 issued under paragraph (1) shall include in-
 11 structions for the covered agency to calculate
 12 estimated energy cost savings using—

13 (i) the energy efficiency report;

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

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

18 (B) REPORT REQUIREMENTS.—For the
 19 purposes of subparagraph (A), an energy effi-
 20 ciency report shall—

21 (i) estimate the expected energy cost
 22 savings specific to the subject property,
 23 based on specific information about the
 24 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

1 the subject property and for potential adjust-
2 ments for energy efficiency.

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

8 (A) inform the loan applicant of the ex-
9 pected energy costs as estimated in the energy
10 efficiency report, in a manner and at a time as
11 prescribed by the Secretary, and if practicable,
12 in the documents delivered at the time of loan
13 application; and

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

17 (5) REQUIRED DISCLOSURE TO CONSUMER FOR
18 A HOME WITHOUT AN ENERGY EFFICIENCY RE-
19 PORT.—If an energy efficiency report is not used
20 under paragraph (2), the guidelines to be issued
21 under paragraph (1) shall require the mortgagee to
22 inform the loan applicant in a manner and at a time
23 as prescribed by the Secretary, and if practicable, in
24 the documents delivered at the time of loan applica-
25 tion of—

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

5 (B) the impact the typical energy cost sav-
6 ings would have on monthly ownership costs of
7 a typical home;

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

12 (D) resources for improving the energy ef-
13 ficiency of a home.

14 (6) PRICING OF LOANS.—

15 (A) IN GENERAL.—A covered agency may
16 price covered loans originated under the en-
17 hanced loan eligibility requirements required
18 under this section in accordance with the esti-
19 mated risk of the loans.

20 (B) IMPOSITION OF CERTAIN MATERIAL
21 COSTS, IMPEDIMENTS, OR PENALTIES.—In the
22 absence of a publicly disclosed analysis that
23 demonstrates significant additional default risk
24 or prepayment risk associated with the loans, a
25 covered agency shall not impose material costs,

1 impediments, or penalties on covered loans
2 merely because the loan uses an energy effi-
3 ciency report or the enhanced loan eligibility re-
4 quirements required under this section.

5 (7) LIMITATIONS.—

6 (A) IN GENERAL.—A covered agency may
7 price covered loans originated under the en-
8 hanced loan eligibility requirements required
9 under this section in accordance with the esti-
10 mated risk of those loans.

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

13 (i) modify existing underwriting cri-
14 teria or adopt new underwriting criteria
15 that intentionally negate or reduce the im-
16 pact of the requirements or resulting bene-
17 fits that are set forth or otherwise derived
18 from the enhanced loan eligibility require-
19 ments required under this subsection; or

20 (ii) impose greater buy back require-
21 ments, credit overlays, or insurance re-
22 quirements, including private mortgage in-
23 surance, on covered loans merely because
24 the loan uses an energy efficiency report or

1 the enhanced loan eligibility requirements
 2 required under this subsection.

3 (8) APPLICABILITY AND IMPLEMENTATION
 4 DATE.—Not later than 3 years after the date of en-
 5 actment of this Act, and before December 31, 2019,
 6 the enhanced loan eligibility requirements required
 7 under this subsection shall be implemented by each
 8 covered agency to—

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

12 (B) be available on any residential real
 13 property (including individual units of con-
 14 dominiums and cooperatives) that qualifies for
 15 a covered loan; and

16 (C) provide prospective mortgagees with
 17 sufficient guidance and applicable tools to im-
 18 plement the required underwriting methods.

19 (d) ENHANCED ENERGY EFFICIENCY UNDER-
 20 WRITING VALUATION GUIDELINES.—

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

24 (A) in consultation with the Federal Fi-
 25 nancial 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

1 the appraised value of the subject property by
2 a mortgagee or covered agency for the purpose
3 of determining the loan-to-value ratio of the
4 subject property, unless the appraisal includes
5 the value of the overall energy efficiency of the
6 subject property, using methods to be estab-
7 lished under the guidelines issued under para-
8 graph (1).

9 (3) DETERMINATION OF ESTIMATED ENERGY
10 SAVINGS.—

11 (A) AMOUNT OF ENERGY SAVINGS.—The
12 amount of estimated energy savings shall be de-
13 termined by calculating the difference between
14 the estimated energy costs for the average com-
15 parable houses, as determined in guidelines to
16 be issued under paragraph (1), and the esti-
17 mated energy costs for the subject property
18 based upon the energy efficiency report.

19 (B) DURATION OF ENERGY SAVINGS.—The
20 duration of the estimated energy savings shall
21 be based upon the estimated life of the applica-
22 ble equipment, consistent with the rating sys-
23 tem used to produce the energy efficiency re-
24 port.

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

7 (4) ENSURING CONSIDERATION OF ENERGY EF-
 8 FICIENT FEATURES.—Section 1110 of the Financial
 9 Institutions Reform, Recovery, and Enforcement Act
 10 of 1989 (12 U.S.C. 3339) is amended—

11 (A) in paragraph (2), by striking “; and”
 12 and inserting a semicolon; and

13 (B) in paragraph (3), by striking the pe-
 14 riod at the end and inserting “; and” and in-
 15 serting after paragraph (3) the following:

16 “(4) that State certified and licensed appraisers
 17 have timely access, whenever practicable, to informa-
 18 tion from the property owner and the lender that
 19 may be relevant in developing an opinion of value re-
 20 garding the energy- and water-saving improvements
 21 or features of a property, such as—

22 “(A) labels or ratings of buildings;

23 “(B) installed appliances, measures, sys-
 24 tems or technologies;

25 “(C) blueprints;

1 “(D) construction costs;

2 “(E) financial or other incentives regard-
3 ing energy- and water-efficient components and
4 systems installed in a property;

5 “(F) utility bills;

6 “(G) energy consumption and benchmark-
7 ing data; and

8 “(H) third-party verifications or represen-
9 tations of energy and water efficiency perform-
10 ance of a property, observing all financial pri-
11 vacy requirements adhered to by certified and
12 licensed appraisers, including section 501 of the
13 Gramm-Leach-Bliley Act (15 U.S.C. 6801).

14 Unless a property owner consents to a lender, an ap-
15 praiser, in carrying out the requirements of para-
16 graph (4), shall not have access to the commercial
17 or financial information of the owner that is privi-
18 leged or confidential.”.

19 (5) TRANSACTIONS REQUIRING STATE CER-
20 TIFIED APPRAISERS.—Section 1113 of the Financial
21 Institutions Reform, Recovery, and Enforcement Act
22 of 1989 (12 U.S.C. 3342) is amended—

23 (A) in paragraph (1), by inserting before
24 the semicolon the following: “, or any real prop-

erty 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

1 market value of the efficiency of the subject
 2 property or that a modified approach will better
 3 reflect an accurate market value.

4 (7) APPLICABILITY AND IMPLEMENTATION
 5 DATE.—Not later than 3 years after the date of en-
 6 actment of this Act, and before December 31, 2019,
 7 each covered agency shall implement the guidelines
 8 required under this subsection, which shall—

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

12 (B) be available on any residential real
 13 property, including individual units of con-
 14 dominiums and cooperatives, that qualifies for a
 15 covered loan.

16 (e) MONITORING.—Not later than 1 year after the
 17 date on which the enhanced eligibility and underwriting
 18 valuation requirements are implemented under this sec-
 19 tion, and every year thereafter, each covered agency with
 20 relevant activity shall issue and make available to the pub-
 21 lic a report that—

22 (1) enumerates the number of covered loans of
 23 the agency for which there was an energy efficiency
 24 report, and that used energy efficiency appraisal

1 guidelines and enhanced loan eligibility require-
2 ments;

3 (2) includes the default rates and rates of fore-
4 closures for each category of loans; and

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

8 (f) RULEMAKING.—

9 (1) IN GENERAL.—The Secretary shall pre-
10 scribe regulations to carry out this section, in con-
11 sultation with the Secretary of Energy and the advi-
12 sory group established in paragraph (2), which may
13 contain such classifications, differentiations, or other
14 provisions, and may provide for such proper imple-
15 mentation and appropriate treatment of different
16 types of transactions, as the Secretary determines
17 are necessary or proper to effectuate the purposes of
18 this section, to prevent circumvention or evasion
19 thereof, or to facilitate compliance therewith.

20 (2) ADVISORY GROUP.—To assist in carrying
21 out this section, the Secretary shall establish an ad-
22 visory group, consisting of individuals representing
23 the interests of—

24 (A) mortgage lenders;

25 (B) appraisers;

- 1 (C) energy raters and residential energy
2 consumption experts;
3 (D) energy efficiency organizations;
4 (E) real estate agents;
5 (F) home builders and remodelers;
6 (G) State energy officials; and
7 (H) others as determined by the Secretary.

8 (g) ADDITIONAL STUDY.—

9 (1) IN GENERAL.—Not later than 18 months
10 after the date of enactment of this Act, the Sec-
11 retary shall reconvene the advisory group established
12 in subsection (f)(2), in addition to water and loca-
13 tional efficiency experts, to advise the Secretary on
14 the implementation of the enhanced energy efficiency
15 underwriting criteria established in subsections (c)
16 and (d).

17 (2) RECOMMENDATIONS.—The advisory group
18 established in subsection (f)(2) shall provide rec-
19 ommendations to the Secretary on any revisions or
20 additions to the enhanced energy efficiency under-
21 writing criteria deemed necessary by the group,
22 which may include alternate methods to better ac-
23 count for home energy costs and additional factors
24 to account for substantial and regular costs of home-
25 ownership such as location-based transportation

1 costs and water costs. The Secretary shall forward
2 any legislative recommendations from the advisory
3 group to Congress for its consideration.

4 **TITLE V—MISCELLANEOUS**

5 **SEC. 501. BUDGETARY EFFECTS.**

6 The budgetary effects of this Act, for the purpose of
7 complying with the Statutory Pay-As-You-Go Act of 2010,
8 shall be determined by reference to the latest statement
9 titled “Budgetary Effects of PAYGO Legislation” for this
10 Act, submitted for printing in the Congressional Record
11 by the Chairman of the Senate Budget Committee, pro-
12 vided that such statement has been submitted prior to the
13 vote on passage.

14 **SEC. 502. ADVANCE APPROPRIATIONS REQUIRED.**

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

○