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[Report No. 116–143]

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

IN THE SENATE OF THE UNITED STATES

JULY 17, 2019

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

OCTOBER 23, 2019

Reported by Ms. MURKOWSKI, with amendments

[Omit the part struck through and insert the part printed in *italic*]

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,*

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

2 (a) SHORT TITLE.—This Act may be cited as the
 3 “Energy Savings and Industrial Competitiveness Act of
 4 2019”.

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

Sec. 102. Cost-effective codes implementation for efficiency and resilience.

Sec. 103. Commercial building energy consumption information sharing.

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 and industrial research and assessment
 centers.

Sec. 203. Sustainable manufacturing initiative.

Sec. 204. Conforming amendments.

Subtitle B—Extended Product System Rebate Program

Sec. 211. Extended Product System Rebate Program.

Subtitle C—Transformer Rebate Program

Sec. 221. 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.

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 and Water Performance Requirements for Federal Buildings

Sec. 421. Energy and water performance requirements for Federal buildings.

Sec. 422. Federal Energy Management Program.

Sec. 423. Federal building energy efficiency performance standards; certification system and level for green buildings.

Sec. 424. 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 or standard developed and up-
16 dated by interested persons, such as the code or
17 standard developed by—

1 “(A) the Council of American Building Of-
2 ficials, or its legal successor, International Code
3 Council, Inc.;

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

6 “(C) other appropriate organizations.”;
7 and

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

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

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

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

19 "SEC. 304. UPDATING STATE BUILDING ENERGY EFFI-
20 CIENCY CODES.

21 “(a) VOLUNTARY CODES AND STANDARDS.—Not-
22 withstanding any other provision of this section, any
23 model building code or standard established under section
24 304 shall not be binding on a State, local government, or
25 Indian tribe as a matter of Federal law.

1 “(b) ACTION BY SECRETARY.—The Secretary shall—

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

7 “(2) support full compliance with the State and
8 local codes.

9 “(c) STATE AND INDIAN TRIBE CERTIFICATION OF
10 BUILDING ENERGY CODE UPDATES.—

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

13 “(A) IN GENERAL.—Not later than 2 years
14 after the date of publication of a revision to a
15 model building energy code, each State or In-
16 dian tribe shall certify whether the State or In-
17 dian tribe, respectively, has reviewed and up-
18 dated the energy provisions of the building code
19 of the State or Indian tribe, respectively.

20 “(B) DEMONSTRATION.—The certification
21 shall include a demonstration of whether the
22 energy savings for the code provisions that are
23 in effect throughout the territory of the State
24 or Indian tribe meet or exceed the energy sav-
25 ings of the updated model building energy code.

1 “(C) NO MODEL BUILDING ENERGY CODE
 2 UPDATE.—If a model building energy code is
 3 not updated by a target date established under
 4 section 307(b)(2)(E), each State or Indian tribe
 5 shall, not later than 2 years after the specified
 6 date, certify whether 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, to meet or exceed
 10 the target in section 307(b)(2).

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

14 “(A) determine whether the code provi-
 15 sions of the State or Indian tribe, respectively,
 16 meet the criteria specified in paragraph (1);
 17 and

18 “(B) if the determination is positive, vali-
 19 date the certification.

20 “(d) IMPROVEMENTS IN COMPLIANCE WITH BUILD-
 21 ING ENERGY CODES.—

22 “(1) REQUIREMENT.—

23 “(A) IN GENERAL.—Not later than 3 years
 24 after the date of a certification under sub-
 25 section (c), each State and Indian tribe shall

1 certify whether the State and Indian tribe, re-
2 spectively, has—

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

8 “(ii) made significant progress under
9 paragraph (4) toward achieving compliance
10 with the applicable certified State and In-
11 dian tribe building energy code or with the
12 associated model building energy code.

13 “(B) REPEAT CERTIFICATIONS.—If the
14 State or Indian tribe certifies progress toward
15 achieving compliance, the State or Indian tribe
16 shall repeat the certification until the State or
17 Indian tribe certifies that the State or Indian
18 tribe has achieved full compliance, respectively.

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

22 “(A) independent inspections of a random
23 sample of the buildings covered by the code in
24 the preceding year; or

1 “(B) an alternative method that yields an
2 accurate measure of compliance.

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

6 “(A) at least 90 percent of building space
7 covered by the code in the preceding year sub-
8 stantially meets all the requirements of the ap-
9 plicable code specified in paragraph (1), or
10 achieves equivalent or greater energy savings
11 level; or

12 “(B) the estimated excess energy use of
13 buildings that did not meet the applicable code
14 specified in paragraph (1) in the preceding
15 year, compared to a baseline of comparable
16 buildings that meet this code, is not more than
17 5 percent of the estimated energy use of all
18 buildings covered by this code during the pre-
19 ceding year.

20 “(4) SIGNIFICANT PROGRESS TOWARD
21 ACHIEVEMENT OF COMPLIANCE.—A State or Indian
22 tribe shall be considered to have made significant
23 progress toward achieving compliance for purposes
24 of paragraph (1) if the State or Indian tribe—

1 “(A) has developed and is implementing a
 2 plan for achieving compliance during the 8-
 3 year-period beginning on the date of enactment
 4 of the Energy Savings and Industrial Competi-
 5 tiveness Act of 2019, including annual targets
 6 for compliance and active training and enforce-
 7 ment programs; and

8 “(B) has met the most recent target under
 9 subparagraph (A).

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

13 “(A) determine whether the State or In-
 14 dian tribe has demonstrated meeting the cri-
 15 teria of this subsection, including accurate
 16 measurement of compliance; and

17 “(B) if the determination is positive, vali-
 18 date the certification.

19 “(e) STATES OR INDIAN TRIBES THAT DO NOT
 20 ACHIEVE COMPLIANCE.—

21 “(1) REPORTING.—A State or Indian tribe that
 22 has not made a certification required under sub-
 23 section (c) or (d) by the applicable deadline shall
 24 submit to the Secretary a report describing—

1 “(A) the status of the State or Indian tribe
2 with respect to meeting the requirements and
3 submitting the certification; and

4 “(B) a plan for meeting the requirements
5 and submitting the certification.

6 “(2) FEDERAL SUPPORT.—For any State or In-
7 dian tribe for which the Secretary has not validated
8 a certification by a deadline under subsection (c) or
9 (d), the lack of the certification may be a consider-
10 ation for Federal support authorized under this sec-
11 tion for code adoption and compliance activities.

12 “(3) LOCAL GOVERNMENT.—In any State or
13 Indian tribe for which the Secretary has not vali-
14 dated a certification under subsection (c) or (d), a
15 local government may be eligible for Federal support
16 under subsections (f) and (g) by meeting the certifi-
17 cation requirements of subsections (c) and (d).

18 “(4) REPORTS BY SECRETARY.—

19 “(A) IN GENERAL.—Not later than De-
20 cember 31, 2020, and not less frequently than
21 once every 3 years thereafter, the Secretary
22 shall submit to Congress and publish a report
23 describing—

24 “(i) the status of model building en-
25 ergy codes;

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

3 “(iii) implementation of this section;
4 and

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

8 “(B) IMPACTS.—The report shall include
9 estimates of impacts of past action under this
10 section, and potential impacts of further action,
11 on—

12 “(i) upfront financial and construction
13 costs, cost benefits and returns (using in-
14 vestment analysis), and lifetime energy use
15 for buildings;

16 “(ii) resulting energy costs to individ-
17 uals and businesses; and

18 “(iii) resulting overall annual building
19 ownership and operating costs.

20 “(f) TECHNICAL ASSISTANCE TO STATES AND IN-
21 DIAN TRIBES.—The Secretary shall provide technical as-
22 sistance to States and Indian tribes to implement the goals
23 and requirements of this section, including procedures and
24 technical analysis for States and Indian tribes—

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

3 “(2) to demonstrate that the code provisions of
4 the States and Indian tribes achieve equivalent or
5 greater energy savings than the model building en-
6 ergy codes and targets;

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

9 “(4) to otherwise promote the design and con-
10 struction of energy- and water-efficient buildings.

11 “(g) AVAILABILITY OF INCENTIVE FUNDING.—

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

14 “(A) to implement the requirements of this
15 section;

16 “(B) to improve and implement residential
17 and commercial building energy codes, including
18 increasing and verifying compliance with the
19 codes and training of State, tribal, and local
20 building code officials to implement and enforce
21 the codes; and

22 “(C) to promote building energy and water
23 efficiency through the use of the codes and
24 standards.

1 “(2) ADDITIONAL FUNDING.—Additional fund-
 2 ing shall be provided under this subsection for im-
 3 plementation of a plan to achieve and document full
 4 compliance with residential and commercial building
 5 energy codes under subsection (d)—

6 “(A) to a State or Indian tribe for which
 7 the Secretary has validated a certification under
 8 subsection (c) or (d); and

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

12 “(3) TRAINING.—Of the amounts made avail-
 13 able under this subsection, the State or Indian tribe
 14 may use amounts required, but not to exceed
 15 \$750,000 for a State, to train State and local build-
 16 ing code officials to implement and enforce codes de-
 17 scribed in paragraph (2).

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

21 “(h) STRETCH CODES AND ADVANCED STAND-
 22 ARDS.—

23 “(1) IN GENERAL.—The Secretary shall provide
 24 technical and financial support for the development

1 of stretch codes and advanced standards for residen-
2 tial and commercial buildings for use as—

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

6 “(B) guidelines for energy-efficient build-
7 ing design.

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

10 “(A) to achieve substantial energy savings
11 compared to the model building energy codes;
12 and

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

16 “(i) STUDIES.—The Secretary, in consultation with
17 building science experts from the National Laboratories
18 and institutions of higher education, designers and build-
19 ers of energy-efficient residential and commercial build-
20 ings, code officials, code and standards developers, and
21 other stakeholders, shall undertake a study of the feasi-
22 bility, impact, economics, and merit of—

23 “(1) code and standards improvements that
24 would require that buildings be designed, sited, and
25 constructed in a manner that makes the buildings

1 more adaptable in the future to become zero-net-en-
2 ergy after initial construction, as advances are
3 achieved in energy-saving technologies;

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

7 “(3) legislative options for increasing energy
8 savings from building energy codes and standards,
9 including additional incentives for effective State
10 and local action, and verification of compliance with
11 and enforcement of a code or standard other than by
12 a State or local government; and

13 “(4) code and standards improvements that
14 consider energy efficiency and water efficiency and,
15 to the maximum extent practicable, consider energy
16 efficiency and water efficiency in an integrated man-
17 ner.

18 “(j) EFFECT ON OTHER LAWS.—Nothing in this sec-
19 tion or section 307 supersedes or modifies the application
20 of sections 321 through 346 of the Energy Policy and
21 Conservation Act (42 U.S.C. 6291 et seq.).

22 “(k) AUTHORIZATION OF APPROPRIATIONS.—There
23 is authorized to be appropriated to carry out this section
24 and section 307 \$200,000,000, to remain available until
25 expended.”.

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

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

10 **“SEC. 307. SUPPORT FOR MODEL BUILDING ENERGY**
 11 **CODES.**

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

14 “(b) TARGETS.—

15 “(1) IN GENERAL.—The Secretary shall sup-
 16 port the updating of the model building energy codes
 17 to enable the achievement of aggregate energy sav-
 18 ings targets established under paragraph (2).

19 “(2) TARGETS.—

20 “(A) IN GENERAL.—The Secretary shall
 21 work with State, Indian tribes, local govern-
 22 ments, code and standards developers (such as
 23 the entities described in section 303(14)), and
 24 other interested parties to support the updating
 25 of model building energy codes by establishing

1 one or more national aggregate energy savings
2 targets to achieve the purposes of this section.

3 “(B) SEPARATE TARGETS.—The Secretary
4 shall establish separate targets for commercial
5 and residential buildings.

6 “(C) BASELINES.—The baseline for updat-
7 ing model building energy codes shall be the
8 2009 IECC for residential buildings and
9 ASHRAE Standard 90.1–2010 for commercial
10 buildings.

11 “(D) CODE CYCLES.—The targets estab-
12 lished under subparagraph (A) shall align with
13 the respective code development cycles deter-
14 mined by the model building energy code-setting
15 and standards development organizations de-
16 scribed in section 303(14).

17 “(E) SPECIFIC YEARS.—

18 “(i) IN GENERAL.—Targets for spe-
19 cific years shall be established and revised
20 by the Secretary through rulemaking and
21 coordinated with code and standards devel-
22 opers (such as the entities described in sec-
23 tion 303(14)) at a level that—

24 “(I) is at the maximum level of
25 energy efficiency that is techno-

1 logically feasible and lifecycle cost ef-
2 fective, while accounting for the eco-
3 nomic considerations under paragraph
4 (4);

5 “(II) is higher than the preceding
6 target;

7 “(III) promotes the achievement
8 of commercial and residential high-
9 performance buildings (as defined in
10 section 401 of the Energy Independ-
11 ence and Security Act of 2007 (42
12 U.S.C. 17061)) through high perform-
13 ance energy efficiency; and

14 “(IV) takes into consideration
15 the variations in climate zones used in
16 model building energy codes.

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

21 “(iii) DIFFERENT TARGET YEARS.—
22 Subject to clause (i), prior to the applica-
23 ble year, the Secretary may set a later tar-
24 get year for any of the model building en-
25 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;

24 “(D) building management systems and
25 smart technologies to reduce energy use; and

1 “(E) other technologies, practices, and
 2 building systems that the Secretary considers
 3 appropriate regarding building plug load and
 4 other energy uses.

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

12 “(c) TECHNICAL ASSISTANCE TO MODEL BUILDING
 13 ENERGY CODE-SETTING AND STANDARDS DEVELOPMENT
 14 ORGANIZATIONS.—

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

20 “(2) ASSISTANCE.—The assistance shall in-
 21 clude, as requested by the organizations, technical
 22 assistance in—

23 “(A) evaluating code or standards pro-
 24 posals or revisions;

1 “(B) building energy and water analysis
2 and design tools;

3 “(C) building demonstrations;

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

8 “(E) performance-based standards;

9 “(F) evaluating economic considerations
10 under subsection (b)(4); and

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

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

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

1 “(d) DETERMINATION.—

2 “(1) REVISION OF MODEL BUILDING ENERGY
3 CODES.—If the provisions of the IECC or ASHRAE
4 Standard 90.1 regarding building energy use are
5 proposed to be revised, the Secretary shall make a
6 preliminary determination, by not later than 90 days
7 after the date of receipt of the proposed revision,
8 and a final determination by not later than 15
9 months after the date of publication of the revision,
10 regarding whether the revision will—

11 “(A) improve energy efficiency in build-
12 ings, as compared to the existing model build-
13 ing energy code; and

14 “(B) meet the applicable targets under
15 subsection (b)(2).

16 “(2) CODES OR STANDARDS NOT MEETING TAR-
17 GETS.—

18 “(A) PRELIMINARY DETERMINATION BY
19 SECRETARY.—If the Secretary makes a prelimi-
20 nary determination under paragraph (1)(B)
21 that a code or standard does not meet an appli-
22 cable target under subsection (b)(2), the Sec-
23 retary shall contemporaneously provide to the
24 developer of the model building energy code or
25 standard not fewer than 2 proposed changes

that would result in a model building energy code that meets the applicable target, together with supporting evidence, taking into consideration—

“(i) whether the modified code is technically feasible and lifecycle cost effective;

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

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

“(B) DETERMINATION OR ELECTION BY DEVELOPER.—Not later than 270 days after the date of receipt of proposed changes of the Secretary under subparagraph (A), a developer shall—

“(i) determine whether—

“(I) to publish a new revised code accepting the proposed changes;

or

“(II) to reject the proposed changes; or

“(ii) if the developer elects not to make a determination under clause (i), publish a notice of that election, together with the proposed changes.

1 “(C) FINAL DETERMINATION BY SEC-
2 RETARY.—

3 “(i) IN GENERAL.—A final determina-
4 tion by the Secretary shall be made on the
5 model building energy code or standard, as
6 modified by the changes proposed by the
7 Secretary under subparagraph (A).

8 “(ii) ADDITIONAL DETERMINA-
9 TIONS.—If a model building energy code or
10 standards developer makes an election pur-
11 suant to subparagraph (B)(ii), the Sec-
12 retary shall make the following final deter-
13 minations for purposes of this subsection:

14 “(I) A final determination re-
15 garding whether the code or standard
16 of the developer, absent any changes
17 proposed by the Secretary under sub-
18 paragraph (A), will—

19 “(aa) improve energy effi-
20 ciency in buildings, as compared
21 to the existing model building en-
22 ergy code; and

23 “(bb) meet the applicable
24 targets under subsection (b)(2).

1 “(II) A final determination re-
2 garding whether the code or standard
3 of the developer, as modified by the
4 changes proposed by the Secretary
5 under subparagraph (A), would—

6 “(aa) improve energy effi-
7 ciency in buildings, as compared
8 to the existing model building en-
9 ergy code; and

10 “(bb) meet the applicable
11 targets under subsection (b)(2).

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

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

20 “(2) provide an opportunity for public comment
21 on targets and supporting analysis and determina-
22 tions under this section.”.

1 **SEC. 102. COST-EFFECTIVE CODES IMPLEMENTATION FOR**
 2 **EFFICIENCY AND RESILIENCE.**

3 (a) IN GENERAL.—Title III of the Energy Conserva-
 4 tion and Production Act (42 U.S.C. 6831 et seq.) is
 5 amended by adding at the end the following:

6 **“SEC. 309. COST-EFFECTIVE CODES IMPLEMENTATION FOR**
 7 **EFFICIENCY AND RESILIENCE.**

8 “(a) DEFINITIONS.—In this section:

9 “(1) ELIGIBLE ENTITY.—The term ‘eligible en-
 10 tity’ means—

11 “(A) a relevant State agency, as deter-
 12 mined by the Secretary, such as a State build-
 13 ing code agency or State energy office; and

14 “(B) a partnership.

15 “(2) PARTNERSHIP.—The term ‘partnership’
 16 means a partnership between an eligible entity de-
 17 scribed in paragraph (1)(A) and one or more of the
 18 following entities:

19 “(A) Local building code agencies.

20 “(B) Codes and standards developers.

21 “(C) Associations of builders and design
 22 and construction professionals.

23 “(D) Local and utility energy efficiency
 24 programs.

25 “(E) Consumer, energy efficiency, and en-
 26 vironmental advocates.

1 “(F) Other entities, as determined by the
2 Secretary.

3 “(3) SECRETARY.—The term ‘Secretary’ means
4 the Secretary of Energy.

5 “(b) ESTABLISHMENT.—

6 “(1) IN GENERAL.—The Secretary shall estab-
7 lish within the Building Technologies Office of the
8 Department of Energy a program under which the
9 Secretary shall award grants on a competitive basis
10 to eligible entities to enable sustained cost-effective
11 implementation of updated building energy codes.

12 “(2) UPDATED BUILDING ENERGY CODE.—An
13 update to a building energy code under this section
14 shall include any update made available after the ex-
15 isting building energy code, even if it is not the most
16 recent updated code available.

17 “(c) CRITERIA; PRIORITY.—In awarding grants
18 under subsection (b), the Secretary shall—

19 “(1) consider—

20 “(A) prospective energy savings and plans
21 to measure the savings;

22 “(B) the long-term sustainability of those
23 measures and savings;

1 “(C) prospective benefits, and plans to as-
 2 sess the benefits, including benefits relating
 3 to—

4 “(i) resilience and peak load reduc-
 5 tion;

6 “(ii) occupant safety and health; and

7 “(iii) environmental performance;

8 “(D) the demonstrated capacity of the eli-
 9 gible entity to carry out the proposed project;
 10 and

11 “(E) the need of the eligible entity for as-
 12 sistance; and

13 “(2) give priority to applications from partner-
 14 ships.

15 “(d) ELIGIBLE ACTIVITIES.—

16 “(1) IN GENERAL.—An eligible entity awarded
 17 a grant under this section may use the grant
 18 funds—

19 “(A) to create or enable State or regional
 20 partnerships to provide training and materials
 21 to—

22 “(i) builders, contractors and sub-
 23 contractors, architects, and other design
 24 and construction professionals, relating to

1 meeting updated building energy codes in a
 2 cost-effective manner; and

3 “(ii) building code officials, relating to
 4 improving implementation of and compli-
 5 ance with building energy codes;

6 “(B) to collect and disseminate quan-
 7 titative data on construction and codes imple-
 8 mentation, including code pathways, perform-
 9 ance metrics, and technologies used;

10 “(C) to develop and implement a plan for
 11 highly effective codes implementation, including
 12 measuring compliance;

13 “(D) to address various implementation
 14 needs in rural, suburban, and urban areas; and

15 “(E) to implement updates in energy codes
 16 for—

17 “(i) new residential and commercial
 18 buildings (including multifamily buildings);
 19 and

20 “(ii) additions and alterations to ex-
 21 isting residential and commercial buildings
 22 (including multifamily buildings).

23 “(2) RELATED TOPICS.—Training and mate-
 24 rials provided using a grant under this section may

1 include information on the relationship between en-
2 ergy codes and—

3 “(A) cost-effective, high-performance, and
4 zero-net-energy buildings;

5 “(B) improving resilience, health, and safe-
6 ty;

7 “(C) water savings and other environ-
8 mental impacts; and

9 “(D) the economic impacts of energy
10 codes.

11 “(e) AUTHORIZATION OF APPROPRIATIONS.—There
12 are authorized to be appropriated to the Secretary to carry
13 out this section—

14 “(1) \$25,000,000 for each of fiscal years 2020
15 through 2029; and

16 “(2) for fiscal year 2030 and each fiscal year
17 thereafter, such sums as are necessary.”.

18 (b) CONFORMING AMENDMENT.—Section 303 of the
19 Energy Conservation and Production Act (42 U.S.C.
20 6832) is amended, in the matter preceding paragraph (1),
21 by striking “As used in” and inserting “Except as other-
22 wise provided, in”.

1 **SEC. 103. COMMERCIAL BUILDING ENERGY CONSUMPTION**
2 **INFORMATION SHARING.**

3 (a) IN GENERAL.—Not later than 120 days after the
4 date of enactment of this Act, the Administrator of the
5 Energy Information Administration (referred to in this
6 section as the “Administrator”) and the Administrator of
7 the Environmental Protection Agency shall sign, and sub-
8 mit to Congress, an information sharing agreement (re-
9 ferred to in this section as the “agreement”) relating to
10 commercial building energy consumption data.

11 (b) CONTENT OF AGREEMENT.—The agreement
12 shall—

13 (1) provide that the Administrator shall have
14 access to building-specific data in the Portfolio Man-
15 ager database of the Environmental Protection
16 Agency;

17 (2) describe the manner in which the Adminis-
18 trator shall incorporate appropriate data (including
19 the data described in subsection (c)) into any Com-
20 mercial Buildings Energy Consumption Survey (re-
21 ferred to in this section as “CBECS”) published
22 after the date of enactment of this Act for the pur-
23 pose of analyzing and estimating building popu-
24 lation, size, location, activity, energy usage, and any
25 other relevant building characteristic; and

26 (3) describe and compare—

1 (A) the methodologies that the Energy In-
 2 formation Administration, the Environmental
 3 Protection Agency, and State and local govern-
 4 ment managers use to maximize the quality, re-
 5 liability, and integrity of data collected through
 6 CBECS, the Portfolio Manager database of the
 7 Environmental Protection Agency, and State
 8 and local building energy disclosure laws (in-
 9 cluding regulations), respectively, and the man-
 10 ner in which those methodologies can be im-
 11 proved; and

12 (B) consistencies and variations in data for
 13 buildings that were captured in the 2012
 14 CBECS cycle and in the Portfolio Manager
 15 database of the Environmental Protection
 16 Agency.

17 (c) DATA.—The data referred in subsection (b)(2) in-
 18 cludes data that—

19 (1) is collected through the Portfolio Manager
 20 database of the Environmental Protection Agency;

21 (2) is required to be publicly available on the
 22 internet under State and local government building
 23 energy disclosure laws (including regulations); and

24 (3) includes information on private sector build-
 25 ings that are not less than 250,000 square feet.

1 (d) PROTECTION OF INFORMATION.—In carrying out
 2 the agreement, the Administrator and the Administrator
 3 of the Environmental Protection Agency shall protect in-
 4 formation in accordance with—

5 (1) section 552(b)(4) of title 5, United States
 6 Code (commonly known as the ‘Freedom of Informa-
 7 tion Act’);

8 (2) subchapter III of chapter 35 of title 44,
 9 United States Code; and

10 (3) any other applicable law (including regula-
 11 tions).

12 **Subtitle B—Worker Training and** 13 **Capacity Building**

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

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

21 (1) to identify opportunities for optimizing en-
 22 ergy efficiency and environmental performance in
 23 buildings;

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

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

8 (4) to assist institutions of higher education
9 and Tribal Colleges or Universities in training build-
10 ing technicians;

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

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

21 (b) COORDINATION AND NONDUPLICATION.—

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

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

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

8 **SEC. 112. CAREER SKILLS TRAINING.**

9 (a) DEFINITION OF ELIGIBLE ENTITY.—In this sec-
 10 tion, the term “eligible entity” means a nonprofit partner-
 11 ship that—

12 (1) includes the equal participation of industry,
 13 including public or private employers, and labor or-
 14 ganizations, including joint labor-management train-
 15 ing programs;

16 (2) may include workforce investment boards,
 17 community-based organizations, qualified service and
 18 conservation corps, educational institutions, small
 19 businesses, cooperatives, State and local veterans
 20 agencies, and veterans service organizations; and

21 (3) demonstrates—

22 (A) experience in implementing and oper-
 23 ating worker skills training and education pro-
 24 grams;

1 (B) the ability to identify and involve in
2 training programs carried out under this sec-
3 tion, target populations of individuals who
4 would benefit from training and be actively in-
5 volved in activities relating to energy efficiency
6 and renewable energy industries; and

7 (C) the ability to help individuals achieve
8 economic self-sufficiency.

9 (b) ESTABLISHMENT.—The Secretary shall award
10 grants to eligible entities to pay the Federal share of asso-
11 ciated career skills training programs under which stu-
12 dents concurrently receive classroom instruction and on-
13 the-job training for the purpose of obtaining an industry-
14 related certification to install energy efficient buildings
15 technologies, including technologies described in sub-
16 section (b)(3) of section 307 of the Energy Conservation
17 and Production Act (42 U.S.C. 6836).

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

21 (d) AUTHORIZATION OF APPROPRIATIONS.—There is
22 authorized to be appropriated to carry out this section
23 \$10,000,000, to remain available until expended.

1 **Subtitle C—School Buildings**

2 **SEC. 121. COORDINATION OF ENERGY RETROFITTING AS-** 3 **SISTANCE FOR SCHOOLS.**

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

6 (1) an elementary school or secondary school
 7 (as defined in section 8101 of the Elementary and
 8 Secondary Education Act of 1965 (20 U.S.C.
 9 7801));

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

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

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

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

23 (6) a Tribal College or University (as defined in
 24 section 316(b) of the Higher Education Act of 1965
 25 (20 U.S.C. 1059c(b))).

1 (b) DESIGNATION OF LEAD AGENCY.—The Sec-
2 retary, acting through the Office of Energy Efficiency and
3 Renewable Energy, shall act as the lead Federal agency
4 for coordinating and disseminating information on exist-
5 ing Federal programs and assistance that may be used
6 to help initiate, develop, and finance energy efficiency, re-
7 newable energy, and energy retrofitting projects for
8 schools.

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

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

1 (2) establish a Federal cross-departmental col-
2 laborative coordination, education, and outreach ef-
3 fort to streamline communication and promote avail-
4 able Federal opportunities and assistance described
5 in paragraph (1), for energy efficiency, renewable
6 energy, and energy retrofitting projects that enables
7 States, local educational agencies, and schools—

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

10 (B) to form partnerships with Governors,
11 State energy programs, local educational, finan-
12 cial, and energy officials, State and local gov-
13 ernment officials, nonprofit organizations, and
14 other appropriate entities, to support the initi-
15 ation of the projects;

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

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

22 (B) to install systems that individually
23 generate energy from renewable energy re-
24 sources;

1 (C) to establish partnerships to leverage
2 economies of scale and additional financing
3 mechanisms available to larger clean energy ini-
4 tiatives; or

5 (D) to promote—

6 (i) the maintenance of health, environ-
7 mental quality, and safety in schools, in-
8 cluding the ambient air quality, through
9 energy efficiency, renewable energy, and
10 energy retrofit projects; and

11 (ii) the achievement of expected en-
12 ergy savings and renewable energy produc-
13 tion through proper operations and main-
14 tenance practices;

15 (4) develop and maintain a single online re-
16 source website with contact information for relevant
17 technical assistance and support staff in the Office
18 of Energy Efficiency and Renewable Energy for
19 States, local educational agencies, and schools to ef-
20 fectively access and use Federal opportunities and
21 assistance described in paragraph (1) to develop en-
22 ergy efficiency, renewable energy, and energy retro-
23 fitting projects; and

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

1 (A) have successfully implemented energy
 2 efficiency, renewable energy, and energy retro-
 3 fitting projects; and

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

7 (d) REPORT.—Not later than 180 days after the date
 8 of enactment of this Act, the Secretary shall submit to
 9 Congress a report describing the implementation of this
 10 section.

11 **TITLE II—INDUSTRIAL EFFI-**
 12 **CIENCY AND COMPETITIVE-**
 13 **NESS**

14 **Subtitle A—Manufacturing Energy**
 15 **Efficiency**

16 **SEC. 201. PURPOSES.**

17 The purposes of this subtitle are—

18 (1) to establish a clear and consistent authority
 19 for industrial efficiency programs of the Department
 20 of Energy;

21 (2) to accelerate the deployment of technologies
 22 and practices that will increase industrial energy ef-
 23 ficiency and improve productivity;

24 (3) to accelerate the development and dem-
 25 onstration of technologies that will assist the deploy-

1 ment goals of the industrial efficiency programs of
 2 the Department of Energy and increase manufac-
 3 turing efficiency;

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

6 (5) to meet the future workforce needs of in-
 7 dustry; and

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

11 **SEC. 202. FUTURE OF INDUSTRY PROGRAM AND INDUS-**
 12 **TRIAL RESEARCH AND ASSESSMENT CEN-**
 13 **TERS.**

14 (a) FUTURE OF INDUSTRY PROGRAM.—Section 452
 15 of the Energy Independence and Security Act of 2007 (42
 16 U.S.C. 17111) is amended—

17 (1) by striking the section heading and insert-
 18 ing the following: “**FUTURE OF INDUSTRY PRO-**
 19 **GRAM**”;

20 (2) in subsection (a)(2)—

21 (A) by redesignating subparagraph (E) as
 22 subparagraph (F); and

23 (B) by inserting after subparagraph (D)
 24 the following:

1 “(E) water and wastewater treatment fa-
 2 cilities, including systems that treat municipal,
 3 industrial, and agricultural waste; and”;
 4 (3) by striking subsection (e); and
 5 (4) by redesignating subsection (f) as sub-
 6 section (e).

7 (b) INDUSTRIAL RESEARCH AND ASSESSMENT CEN-
 8 TERS.—Subtitle D of title IV of the Energy Independence
 9 and Security Act of 2007 (42 U.S.C. 17111 et seq.) is
 10 amended by adding at the end the following:

11 **“SEC. 454. INDUSTRIAL RESEARCH AND ASSESSMENT CEN-**
 12 **TERS.**

13 “(a) DEFINITIONS.—In this section:

14 “(1) ENERGY SERVICE PROVIDER.—The term
 15 ‘energy service provider’ means—

16 “(A) any business providing technology or
 17 services to improve the energy efficiency, water
 18 efficiency, power factor, or load management of
 19 a manufacturing site or other industrial process
 20 in an energy-intensive industry (as defined in
 21 section 452(a)); and

22 “(B) any utility operating under a utility
 23 energy service project.

1 “(2) INDUSTRIAL RESEARCH AND ASSESSMENT
2 CENTER.—The term ‘industrial research and assess-
3 ment center’ means—

4 “(A) an institution of higher education-
5 based industrial research and assessment center
6 that is funded by the Secretary under sub-
7 section (b); and

8 “(B) an industrial research and assess-
9 ment center at a trade school, community col-
10 lege, or union training program that is funded
11 by the Secretary under subsection (f).

12 “(b) INSTITUTION OF HIGHER EDUCATION-BASED
13 INDUSTRIAL RESEARCH AND ASSESSMENT CENTERS.—

14 “(1) IN GENERAL.—The Secretary shall provide
15 funding to institution of higher education-based in-
16 dustrial research and assessment centers.

17 “(2) PURPOSE.—The purpose of each institu-
18 tion of higher education-based industrial research
19 and assessment center shall be—

20 “(A) to identify opportunities for opti-
21 mizing energy efficiency and environmental per-
22 formance, including implementation of—

23 “(i) smart manufacturing;

24 “(ii) energy management systems;

25 “(iii) sustainable manufacturing; and

1 “(iv) information technology advance-
2 ments for supply chain analysis, logistics,
3 system monitoring, industrial and manu-
4 facturing processes, and other purposes;

5 “(B) to promote applications of emerging
6 concepts and technologies in small- and me-
7 dium-sized manufacturers (including water and
8 wastewater treatment facilities and federally
9 owned manufacturing facilities);

10 “(C) to promote research and development
11 for the use of alternative energy sources to sup-
12 ply heat, power, and new feedstocks for energy-
13 intensive industries;

14 “(D) to coordinate with appropriate Fed-
15 eral and State research offices;

16 “(E) to provide a clearinghouse for indus-
17 trial process and energy efficiency technical as-
18 sistance resources; and

19 “(F) to coordinate with State-accredited
20 technical training centers and community col-
21 leges, while ensuring appropriate services to all
22 regions of the United States.

23 “(c) COORDINATION.—To increase the value and ca-
24 pabilities of the industrial research and assessment cen-
25 ters, the centers shall—

1 “(1) coordinate with Manufacturing Extension
2 Partnership Centers of the National Institute of
3 Standards and Technology;

4 “(2) coordinate with the Federal Energy Man-
5 agement Program and the Building Technologies
6 Program of the Department of Energy to provide
7 building assessment services to manufacturers;

8 “(3) increase partnerships with the National
9 Laboratories of the Department of Energy to lever-
10 age the expertise, technologies, and research and de-
11 velopment capabilities of the National Laboratories
12 for national industrial and manufacturing needs;

13 “(4) increase partnerships with energy service
14 providers and technology providers to leverage pri-
15 vate sector expertise and accelerate deployment of
16 new and existing technologies and processes for en-
17 ergy efficiency, power factor, and load management;

18 “(5) identify opportunities for reducing green-
19 house gas emissions and other air emissions; and

20 “(6) promote sustainable manufacturing prac-
21 tices for small- and medium-sized manufacturers.

22 “(d) OUTREACH.—The Secretary shall provide fund-
23 ing for—

24 “(1) outreach activities by the industrial re-
25 search and assessment centers to inform small- and

1 medium-sized manufacturers of the information,
 2 technologies, and services available; and

3 “(2) coordination activities by each industrial
 4 research and assessment center to leverage efforts
 5 with—

6 “(A) Federal and State efforts;

7 “(B) the efforts of utilities and energy
 8 service providers;

9 “(C) the efforts of regional energy effi-
 10 ciency organizations; and

11 “(D) the efforts of other industrial re-
 12 search and assessment centers.

13 “(e) CENTERS OF EXCELLENCE.—

14 “(1) ESTABLISHMENT.—The Secretary shall es-
 15 tablish a Center of Excellence at not more than 5
 16 of the highest-performing industrial research and as-
 17 sessment centers, as determined by the Secretary.

18 “(2) DUTIES.—A Center of Excellence shall co-
 19 ordinate with and advise the industrial research and
 20 assessment centers located in the region of the Cen-
 21 ter of Excellence, including—

22 “(A) by mentoring new directors and staff
 23 of the industrial research and assessment cen-
 24 ters with respect to—

25 “(i) the availability of resources; and

1 “(ii) best practices for carrying out
2 assessments, including through the partici-
3 pation of the staff of the Center of Excel-
4 lence in assessments carried out by new in-
5 dustrial research and assessment centers;

6 “(B) by providing training to staff and
7 students at the industrial research and assess-
8 ment centers on new technologies, practices,
9 and tools to expand the scope and impact of the
10 assessments carried out by the centers;

11 “(C) by assisting the industrial research
12 and assessment centers with specialized tech-
13 nical opportunities, including by providing a
14 clearinghouse of available expertise and tools to
15 assist the centers and clients of the centers in
16 assessing and implementing those opportunities;

17 “(D) by identifying and coordinating with
18 regional, State, local, and utility energy effi-
19 ciency programs for the purpose of facilitating
20 efforts by industrial research and assessment
21 centers to connect industrial facilities receiving
22 assessments from those centers with regional,
23 State, local, and utility energy efficiency pro-
24 grams that could aid the industrial facilities in

1 implementing any recommendations resulting
 2 from the assessments;

3 “(E) by facilitating coordination between
 4 the industrial research and assessment centers
 5 and other Federal programs described in para-
 6 graphs (1) through (3) of subsection (c); and

7 “(F) by coordinating the outreach activi-
 8 ties of the industrial research and assessment
 9 centers under subsection (d)(1).

10 “(3) FUNDING.—Subject to the availability of
 11 appropriations, for each fiscal year, out of any
 12 amounts made available to carry out this section
 13 under subsection (i), the Secretary shall use not less
 14 than \$500,000 to support each Center of Excellence.

15 “(f) EXPANSION OF INDUSTRIAL RESEARCH AND AS-
 16 SESSMENT CENTERS.—

17 “(1) IN GENERAL.—The Secretary shall provide
 18 funding to establish additional industrial research
 19 and assessment centers at trade schools, community
 20 colleges, and union training programs.

21 “(2) PURPOSE.—

22 “(A) IN GENERAL.—Subject to subpara-
 23 graph (B), to the maximum extent practicable,
 24 an industrial research and assessment center
 25 established under paragraph (1) shall have the

1 same purpose as an institution of higher edu-
2 cation-based industrial research center that is
3 funded by the Secretary under subsection
4 (b)(1).

5 “(B) CONSIDERATION OF CAPABILITIES.—

6 In evaluating or establishing the purpose of an
7 industrial research and assessment center es-
8 tablished under paragraph (1), the Secretary
9 shall take into consideration the varying capa-
10 bilities of trade schools, community colleges,
11 and union training programs.

12 “(g) WORKFORCE TRAINING.—

13 “(1) INTERNSHIPS.—The Secretary shall pay
14 the Federal share of associated internship programs
15 under which students work with or for industries,
16 manufacturers, and energy service providers to im-
17 plement the recommendations of industrial research
18 and assessment centers.

19 “(2) APPRENTICESHIPS.—The Secretary shall
20 pay the Federal share of associated apprenticeship
21 programs under which—

22 “(A) students work with or for industries,
23 manufacturers, and energy service providers to
24 implement the recommendations of industrial
25 research and assessment centers; and

1 “(B) employees of facilities that have re-
2 ceived an assessment from an industrial re-
3 search and assessment center work with or for
4 an industrial research and assessment center to
5 gain knowledge on engineering practices and
6 processes to improve productivity and energy
7 savings.

8 “(3) FEDERAL SHARE.—The Federal share of
9 the cost of carrying out internship programs de-
10 scribed in paragraph (1) and apprenticeship pro-
11 grams described in paragraph (2) shall be 50 per-
12 cent.

13 “(h) SMALL BUSINESS LOANS.—The Administrator
14 of the Small Business Administration shall, to the max-
15 imum extent practicable, expedite consideration of applica-
16 tions from eligible small business concerns for loans under
17 the Small Business Act (15 U.S.C. 631 et seq.) to imple-
18 ment recommendations developed by the industrial re-
19 search and assessment centers.

20 “(i) FUNDING.—There is authorized to be appro-
21 priated to the Secretary to carry out this section
22 \$30,000,000 for each fiscal year, to remain available until
23 expended.”.

24 “(c) CLERICAL AMENDMENT.—The table of contents
25 of the Energy Independence and Security Act of 2007 (42

1 U.S.C. prec. 17001) is amended by adding at the end of
 2 the items relating to subtitle D of title IV the following:

“Sec. 454. Industrial research and assessment centers.”.

3 **SEC. 203. SUSTAINABLE MANUFACTURING INITIATIVE.**

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

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

8 “(a) IN GENERAL.—As part of the Office of Energy
 9 Efficiency and Renewable Energy of the Department of
 10 Energy, the Secretary, on the request of a manufacturer,
 11 shall carry out onsite technical assessments to identify op-
 12 portunities for—

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

15 “(2) preventing pollution and minimizing waste;

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

18 “(4) conserving natural resources; and

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

21 “(b) COORDINATION.—To implement any rec-
 22 ommendations resulting from an onsite technical assess-
 23 ment carried out under subsection (a) and to accelerate
 24 the adoption of new and existing technologies and proc-

1 esses that improve energy efficiency, the Secretary shall
 2 coordinate with—

3 “(1) the Advanced Manufacturing Office of the
 4 Department of Energy;

5 “(2) the Building Technologies Office of the
 6 Department of Energy;

7 “(3) the Federal Energy Management Program
 8 of the Department of Energy; and

9 “(4) the private sector and other appropriate
 10 agencies, including the National Institute of Stand-
 11 ards and Technology.

12 “(c) RESEARCH AND DEVELOPMENT PROGRAM FOR
 13 SUSTAINABLE MANUFACTURING AND INDUSTRIAL TECH-
 14 NOLOGIES AND PROCESSES.—As part of the industrial ef-
 15 ficiency programs of the Department of Energy, the Sec-
 16 retary shall carry out a joint industry-government partner-
 17 ship program to research, develop, and demonstrate new
 18 sustainable manufacturing and industrial technologies and
 19 processes that maximize the energy efficiency of industrial
 20 plants, reduce pollution, and conserve natural resources.”.

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

“Sec. 376. Sustainable manufacturing initiative.”.

1 **SEC. 204. CONFORMING AMENDMENTS.**

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

4 (b) Sections 131, 132, 133, 2103, and 2107 of the
5 Energy Policy Act of 1992 (42 U.S.C. 6348, 6349, 6350,
6 13453, 13456) are repealed.

7 (c) Section 2101(a) of the Energy Policy Act of 1992
8 (42 U.S.C. 13451(a)) is amended in the third sentence
9 by striking “sections 2102, 2103, 2104, 2105, 2106,
10 2107, and 2108” and inserting “sections 2102, 2104,
11 2105, 2106, and 2108 of this Act and section 376 of the
12 Energy Policy and Conservation Act,”.

13 **Subtitle B—Extended Product**
14 **System Rebate Program**

15 **SEC. 211. EXTENDED PRODUCT SYSTEM REBATE PROGRAM.**

16 (a) DEFINITIONS.—In this section:

17 (1) ELECTRIC MOTOR.—The term “electric
18 motor” has the meaning given the term in section
19 431.12 of title 10, Code of Federal Regulations (as
20 in effect on the date of enactment of this Act).

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

23 (A) a power converter; or

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

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

5 (A) offers variable speed or multispeed op-
6 eration;

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

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

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

14 (4) QUALIFIED EXTENDED PRODUCT SYS-
15 TEM.—

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

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

21 (ii) reduces the input energy (as
22 measured in kilowatt-hours) required to
23 operate the extended product system by
24 not less than 5 percent, as compared to
25 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 2020 or 2021.

(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 C—Transformer Rebate** 18 **Program**

19 **SEC. 221. 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

1 described in the tables in subsection (b)(2) and
2 paragraphs (1) and (2) of subsection (c) of section
3 431.196 of title 10, Code of Federal Regulations (as
4 in effect on the date of enactment of this Act).

5 (2) QUALIFIED ENERGY INEFFICIENT TRANS-
6 FORMER.—The term “qualified energy inefficient
7 transformer” means a transformer with an equal
8 number of phases and capacity to a transformer de-
9 scribed in any of the tables in subsection (b)(2) and
10 paragraphs (1) and (2) of subsection (c) of section
11 431.196 of title 10, Code of Federal Regulations (as
12 in effect on the date of enactment of this Act)
13 that—

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

17 (B)(i) was manufactured between January
18 1, 1987, and December 31, 2008, for a trans-
19 former with an equal number of phases and ca-
20 pacity as a transformer described in the table
21 in subsection (b)(2) of section 431.196 of title
22 10, Code of Federal Regulations (as in effect on
23 the date of enactment of this Act); or

24 (ii) was manufactured between January 1,
25 1992, and December 31, 2011, 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 2020 and 2021, 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 2021.

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 by adding at the
 24 end the following:

1 “(h) FEDERAL IMPLEMENTATION STRATEGY FOR
2 ENERGY-EFFICIENT AND ENERGY-SAVING INFORMATION
3 TECHNOLOGIES.—

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

5 “(A) DIRECTOR.—The term ‘Director’
6 means the Director of the Office of Manage-
7 ment and Budget.

8 “(B) INFORMATION TECHNOLOGY.—The
9 term ‘information technology’ has the meaning
10 given that term in section 11101 of title 40,
11 United States Code.

12 “(2) DEVELOPMENT OF IMPLEMENTATION
13 STRATEGY.—Not later than 1 year after the date of
14 enactment of the Energy Savings and Industrial
15 Competitiveness Act of 2019, each Federal agency
16 shall coordinate with the Director, the Secretary,
17 and the Administrator of the Environmental Protec-
18 tion Agency to develop an implementation strategy
19 (including best-practices and measurement and
20 verification techniques) for the maintenance, pur-
21 chase, and use by the Federal agency of energy-effi-
22 cient and energy-saving information technologies at
23 or for facilities owned and operated by the Federal
24 agency, taking into consideration the performance
25 goals established under paragraph (4).

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

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

13 “(F) mechanisms to ensure that the agen-
14 cy realizes the energy cost savings of increased
15 efficiency and utilization.

16 “(4) PERFORMANCE GOALS.—

17 “(A) IN GENERAL.—Not later than 180
18 days after the date of enactment of the Energy
19 Savings and Industrial Competitiveness Act of
20 2019, the Director, in consultation with the
21 Secretary, shall establish performance goals for
22 evaluating the efforts of Federal agencies in im-
23 proving the maintenance, purchase, and use of
24 energy-efficient and energy-saving information

1 technology at or for facilities owned and oper-
2 ated by the Federal agencies.

3 “(B) BEST PRACTICES.—The Chief Infor-
4 mation Officers Council established under sec-
5 tion 3603 of title 44, United States Code, shall
6 recommend best practices for the attainment of
7 the performance goals established under sub-
8 paragraph (A), which shall include, to the ex-
9 tent applicable by law, consideration by a Fed-
10 eral agency of the use of—

11 “(i) energy savings performance con-
12 tracting; and

13 “(ii) utility energy services con-
14 tracting.

15 “(5) REPORTS.—

16 “(A) AGENCY REPORTS.—Each Federal
17 agency shall include in the report of the agency
18 under section 527 of the Energy Independence
19 and Security Act of 2007 (42 U.S.C. 17143) a
20 description of the efforts and results of the
21 agency under this subsection.

22 “(B) OMB GOVERNMENT EFFICIENCY RE-
23 PORTS AND SCORECARDS.—Effective beginning
24 not later than October 1, 2019, the Director
25 shall include in the annual report and scorecard

of the Director required under section 528 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17144) a description of the efforts and results of Federal agencies under this subsection.

“(C) USE OF EXISTING REPORTING STRUCTURES.—The Director may require Federal agencies to submit any information required to be submitted under this subsection though reporting structures in use as of the date of enactment of the Energy Savings and Industrial Competitiveness Act of 2019.”.

SEC. 302. ENERGY EFFICIENT DATA CENTERS.

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

(1) in subsection (b)—

(A) in paragraph (2)(D)(iv), by striking “determined by the organization” and inserting “proposed by the stakeholders”; and

(B) by striking paragraph (3); and

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

“(c) STAKEHOLDER INVOLVEMENT.—

“(1) IN GENERAL.—The Secretary and the Administrator shall carry out subsection (b) in collabo-

1 ration with the information technology industry and
2 other key stakeholders, with the goal of producing
3 results that accurately reflect the most relevant and
4 useful information.

5 “(2) CONSIDERATIONS.—In carrying out the
6 collaboration described in paragraph (1), the Sec-
7 retary and the Administrator shall pay particular at-
8 tention to organizations that—

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

16 “(B) obtain and address input from the
17 National Laboratories (as that term is defined
18 in section 2 of the Energy Policy Act of 2005
19 (42 U.S.C. 15801)) or any institution of higher
20 education, research institution, industry asso-
21 ciation, company, or public interest group with
22 applicable expertise;

23 “(C) follow—

24 “(i) commonly accepted procedures
25 for the development of specifications; and

1 “(ii) accredited standards development
2 processes; or

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

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

14 “(e) STUDY.—

15 “(1) DEFINITION OF REPORT.—In this sub-
16 section, the term ‘report’ means the report of the
17 Lawrence Berkeley National Laboratory entitled
18 ‘United States Data Center Energy Usage Report’
19 and dated June 2016, which was prepared as an up-
20 date to the ‘Report to Congress on Server and Data
21 Center Energy Efficiency’, published on August 2,
22 2007, pursuant to section 1 of Public Law 109–431
23 (120 Stat. 2920).

24 “(2) STUDY.—Not later than 4 years after the
25 date of enactment of the Energy Savings and Indus-

1 trial Competitiveness Act of 2019, the Secretary, in
2 collaboration with the Administrator, shall make
3 available to the public an update to the report that
4 provides—

5 “(A) a comparison and gap analysis of the
6 estimates and projections contained in the re-
7 port with new data regarding the period from
8 2015 through 2019;

9 “(B) an analysis considering the impact of
10 information technologies, including virtualiza-
11 tion and cloud computing, in the public and pri-
12 vate sectors;

13 “(C) an evaluation of the impact of the
14 combination of cloud platforms, mobile devices,
15 social media, and big data on data center en-
16 ergy usage;

17 “(D) an evaluation of water usage in data
18 centers and recommendations for reductions in
19 that water usage; and

20 “(E) updated projections and recommenda-
21 tions for best practices through fiscal year
22 2025.

23 “(f) DATA CENTER ENERGY PRACTITIONER PRO-
24 GRAM.—

1 “(1) IN GENERAL.—The Secretary, in collabo-
2 ration with key stakeholders and the Director of the
3 Office of Management and Budget, shall maintain a
4 data center energy practitioner program that pro-
5 vides for the certification of energy practitioners
6 qualified to evaluate the energy usage and efficiency
7 opportunities in federally owned and operated data
8 centers.

9 “(2) EVALUATIONS.—Each Federal agency
10 shall consider having the data centers of the agency
11 evaluated once every 4 years by energy practitioners
12 certified pursuant to the program, whenever prac-
13 ticable using certified practitioners employed by the
14 agency.

15 “(g) OPEN DATA INITIATIVE.—

16 “(1) IN GENERAL.—The Secretary, in collabo-
17 ration with key stakeholders and the Director of the
18 Office of Management and Budget, shall establish
19 an open data initiative relating to energy usage at
20 federally owned and operated data centers, with the
21 purpose of making the data available and accessible
22 in a manner that encourages further data center in-
23 novation, optimization, and consolidation.

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

4 “(h) INTERNATIONAL SPECIFICATIONS AND
5 METRICS.—The Secretary, in collaboration with key
6 stakeholders, shall actively participate in efforts to har-
7 monize global specifications and metrics for data center
8 energy and water efficiency.

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

14 “(j) PROTECTION OF PROPRIETARY INFORMATION.—
15 The Secretary and the Administrator shall not disclose
16 any proprietary information or trade secrets provided by
17 any individual or company for the purposes of carrying
18 out this section or the programs and initiatives established
19 under this section.”.

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:

1 “(A) an ongoing review provided to the
2 Secretary pursuant to section 305(a)(3)(D) of
3 the Energy Conservation and Production Act
4 (42 U.S.C. 6834(a)(3)(D)), which shall—

5 “(i) be carried out by the Federal Di-
6 rector to compare and evaluate standards;
7 and

8 “(ii) allow any developer or adminis-
9 trator of a rating system or certification
10 system to be included in the review;”;

11 (C) in subparagraph (E)(v), by striking
12 “and” after the semicolon at the end;

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

16 (E) by adding at the end the following:

17 “(G) a finding that, for all credits address-
18 ing the sourcing of grown, harvested, or mined
19 materials, the system rewards the use of prod-
20 ucts that have obtained certifications of respon-
21 sible sourcing, such as certifications provided by
22 the Sustainable Forestry Initiative, the Forest
23 Stewardship Council, the American Tree Farm
24 System, or the Programme for the Endorse-
25 ment 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 and Water Per-**
 5 **formance Requirements for Fed-**
 6 **eral Buildings**

7 **SEC. 421. ENERGY AND WATER PERFORMANCE REQUIRE-**
 8 **MENTS FOR FEDERAL BUILDINGS.**

9 (a) IN GENERAL.—Section 543 of the National En-
 10 energy Conservation Policy Act (42 U.S.C. 8253) is amend-
 11 ed—

12 (1) in the section heading, by inserting “**AND**
 13 **WATER**” after “**ENERGY**”;

14 (2) by striking subsection (a) and inserting the
 15 following:

16 “(a) ENERGY AND WATER PERFORMANCE REQUIRE-
 17 MENTS FOR FEDERAL BUILDINGS.—

18 “(1) ENERGY REQUIREMENTS.—Subject to
 19 paragraph (3), to the maximum extent life cycle
 20 cost-effective (as defined in subsection (f)(1)), each
 21 agency shall apply energy conservation measures to,
 22 and shall improve the design for the construction of,
 23 the Federal buildings of the agency (including each
 24 industrial or laboratory facility) so that the energy
 25 consumption per gross square foot of the Federal

1 buildings of the agency in fiscal years 2020 through
 2 2027 is reduced, as compared with the energy con-
 3 sumption per gross square foot of the Federal build-
 4 ings of the agency in fiscal year 2018, by the per-
 5 centage specified in the following table:

“Fiscal Year	Percentage Reduction
2020	2.5
2021	5
2022	7.5
2023	10
2024	12.5
2025	15
2026	17.5
2027	20.

6 “(2) WATER REQUIREMENTS.—Subject to para-
 7 graph (3), the head of each Federal agency shall, for
 8 each of fiscal years 2020 through 2030, improve
 9 water use efficiency and management, including
 10 stormwater management, at facilities of the agency
 11 by reducing agency potable water consumption in-
 12 tensity—

13 “(A) by 54 percent by fiscal year 2030,
 14 relative to the water consumption of the agency
 15 in fiscal year 2007, through reductions of 2
 16 percent each fiscal year (as measured in gallons
 17 per gross square foot);

18 “(B) by reducing the industrial, land-
 19 scaping, and agricultural water consumption of
 20 the agency, as compared to a baseline of that

1 consumption by the agency in fiscal year 2010,
 2 through reductions of 2 percent each fiscal year
 3 (as measured in gallons); and

4 “(C) by installing appropriate infrastruc-
 5 ture features on federally owned property to im-
 6 prove stormwater and wastewater management.

7 “(3) ENERGY AND WATER INTENSIVE BUILDING
 8 EXCLUSION.—

9 “(A) IN GENERAL.—An agency may ex-
 10 clude from the requirements of paragraphs (1)
 11 and (2) any building (including the associated
 12 energy consumption and gross square footage of
 13 the building) in which energy and water inten-
 14 sive activities are carried out.

15 “(B) REPORTS.—Each agency shall iden-
 16 tify and include in each report under section
 17 548(a) each building designated by the agency
 18 for exclusion under subparagraph (A) during
 19 the period covered by the report.

20 “(4) RECOMMENDATIONS.—Not later than De-
 21 cember 31, 2026, the Secretary shall—

22 “(A) review the results of the implementa-
 23 tion of the energy and water performance re-
 24 quirements established under paragraph (1);

1 “(B) submit to Congress recommendations
 2 concerning energy performance requirements
 3 for fiscal years 2028 through 2037; and

4 “(C) submit to Congress recommendations
 5 concerning water performance requirements for
 6 fiscal years 2031 through 2040.”;

7 (3) in subsection (b)—

8 (A) in the subsection heading, by inserting
 9 “AND WATER” after “ENERGY”;

10 (B) by redesignating paragraphs (2)
 11 through (4) as paragraphs (3) through (5), re-
 12 spectively; and

13 (C) by striking paragraph (1) and insert-
 14 ing the following:

15 “(1) IN GENERAL.—Each agency shall—

16 “(A) not later than October 1, 2019, to
 17 the maximum extent practicable, begin install-
 18 ing in Federal buildings owned by the United
 19 States all energy and water conservation meas-
 20 ures determined by the Secretary to be life cycle
 21 cost-effective (as defined in subsection (f)(1));
 22 and

23 “(B) complete the installation described in
 24 subparagraph (A) as soon as practicable after
 25 the date referred to in that subparagraph.

1 “(2) EXPLANATION OF NONCOMPLIANCE.—

2 “(A) IN GENERAL.—If an agency fails to
3 comply with paragraph (1), the agency shall
4 submit to the Secretary, using guidelines devel-
5 oped by the Secretary, an explanation of the
6 reasons for the failure.

7 “(B) REPORT TO CONGRESS.—Not later
8 than October 1, 2021, and every 2 years there-
9 after, the Secretary shall submit to Congress a
10 report that describes any noncompliance by an
11 agency with the requirements of paragraph
12 (1).”;

13 (4) in subsection (c)(1)—

14 (A) in subparagraph (A)—

15 (i) in the matter preceding clause (i),
16 by striking “An agency” and inserting
17 “The head of each agency”; and

18 (ii) by inserting “or water” after “en-
19 ergy” each place it appears; and

20 (B) in subparagraph (B)(i), by inserting
21 “or water” after “energy”;

22 (5) in subsection (d)(2), by inserting “and
23 water” after “energy”;

24 (6) in subsection (e)—

1 (A) in the subsection heading, by inserting
2 “and Water” after “Energy”;

3 (B) in paragraph (1)—

4 (i) in the first sentence—

5 (I) by striking “October 1, 2012”
6 and inserting “October 1, 2020”;

7 (II) by inserting “and water”
8 after “energy”; and

9 (III) by inserting “and water”
10 after “electricity”;

11 (ii) in the second sentence, by insert-
12 ing “and water” after “electricity”; and

13 (iii) in the fourth sentence, by insert-
14 ing “and water” after “energy”;

15 (C) in paragraph (2)—

16 (i) in subparagraph (A)—

17 (I) by striking “and” before
18 “Federal”; and

19 (II) by inserting “and any other
20 person the Secretary deems nec-
21 essary,” before “shall”;

22 (ii) in subparagraph (B)—

23 (I) in clause (i)(II), by inserting
24 “and water” after “energy” each
25 place it appears;

1 (II) in clause (ii), by inserting
 2 “and water” after “energy”; and

3 (III) in clause (iv), by inserting
 4 “and water” after “energy”; and

5 (iii) by adding at the end the fol-
 6 lowing:

7 “(C) UPDATE.—Not later than 180 days
 8 after the date of enactment of this subpara-
 9 graph, the Secretary shall update the guidelines
 10 established under subparagraph (A) to take into
 11 account water efficiency requirements under
 12 this section.”;

13 (D) in paragraph (3), in the matter pre-
 14 ceding subparagraph (A), by striking “estab-
 15 lished under paragraph (2)” and inserting “up-
 16 dated under paragraph (2)(C)”; and

17 (E) in paragraph (4)—

18 (i) in subparagraph (A)—

19 (I) by striking “this paragraph”
 20 and inserting “the Energy Savings
 21 and Industrial Competitiveness Act of
 22 2019”; and

23 (II) by inserting “and water” be-
 24 fore “use in”; and

1 (ii) in subparagraph (B)(ii), in the
 2 matter preceding clause (I), by inserting
 3 “and water” after “energy”; and

4 (7) in subsection (f)—

5 (A) in paragraph (1)—

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

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

11 “(E) ONGOING COMMISSIONING.—The
 12 term ‘ongoing commissioning’ means an ongo-
 13 ing process of commissioning using monitored
 14 data, the primary goal of which is to ensure
 15 continuous optimum performance of a facility,
 16 in accordance with design or operating needs,
 17 over the useful life of the facility, while meeting
 18 facility occupancy requirements.”;

19 (B) in paragraph (2)—

20 (i) in subparagraph (A), by inserting
 21 “and water” before “use”;

22 (ii) in subparagraph (B)—

23 (I) by striking “energy” before
 24 “efficiency”; and

1 (II) by inserting “or water” be-
2 fore “use”; and

3 (iii) by adding at the end the fol-
4 lowing:

5 “(C) ENERGY MANAGEMENT SYSTEM.—An
6 energy manager designated for a facility under
7 subparagraph (A) shall take into consider-
8 ation—

9 “(i) the use of a system to manage
10 energy and water use at the facility; and

11 “(ii) the applicability of the certifi-
12 cation of the facility in accordance with the
13 International Organization for Standard-
14 ization standard numbered 50001 and en-
15 titled ‘Energy Management Systems’.”;

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

18 “(3) ENERGY AND WATER EVALUATIONS AND
19 COMMISSIONING.—

20 “(A) EVALUATIONS.—Except as provided
21 in subparagraph (B), not later than the date
22 that is 180 days after the date of enactment of
23 the Energy Savings and Industrial Competitive-
24 ness Act of 2019, and annually thereafter, each
25 energy manager shall complete, for the pre-

1 ceding calendar year, a comprehensive energy
2 and water evaluation and recommissioning or
3 retrocommissioning for approximately 25 per-
4 cent of the facilities of the applicable agency
5 that meet the criteria under paragraph (2)(B)
6 in a manner that ensures that an evaluation of
7 each facility is completed not less frequently
8 than once every 4 years.

9 “(B) EXCEPTIONS.—An evaluation and re-
10 commissioning or retrocommissioning shall not
11 be required under subparagraph (A) with re-
12 spect to a facility that, as of the date on which
13 the evaluation and recommissioning or retro-
14 commissioning would occur—

15 “(i) has had a comprehensive energy
16 and water evaluation during the preceding
17 8-year period;

18 “(ii)(I) has been commissioned, re-
19 commissioned, or retrocommissioned dur-
20 ing the preceding 10-year period; or

21 “(II) is under ongoing commissioning,
22 recommissioning, or retrocomissioning;

23 “(iii) has not had a major change in
24 function or use since the previous evalua-

tion and recommissioning or retrocommis-
sioning;

“(iv) has been benchmarked with pub-
lic disclosure under paragraph (8) during
the preceding calendar year; and

“(v)(I) based on the benchmarking de-
scribed in clause (iv), has achieved at a fa-
cility level the most recent cumulative en-
ergy savings target under subsection (a)
compared to the earlier of—

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

“(bb) the date—

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

“(BB) on which ongoing
commissioning began; or

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

“(4) IMPLEMENTATION OF IDENTIFIED ENERGY
AND WATER EFFICIENCY MEASURES.—Not later
than 2 years after the date of completion of each

1 evaluation under paragraph (3), each energy man-
 2 ager shall—

3 “(A) implement any energy- or water-sav-
 4 ing measure that the Federal agency identified
 5 in the evaluation that is life cycle cost-effective;
 6 and

7 “(B) bundle individual measures of varying
 8 paybacks together into combined projects.”;

9 (D) in paragraph (7)(B)(ii)(II), by insert-
 10 ing “and water” after “energy”; and

11 (E) in paragraph (9)(A), in the matter
 12 preceding clause (i), by inserting “and water”
 13 after “energy”.

14 (b) CONFORMING AMENDMENT.—The table of con-
 15 tents for the National Energy Conservation Policy Act
 16 (Public Law 95–619; 92 Stat. 3206) is amended by strik-
 17 ing the item relating to section 543 and inserting the fol-
 18 lowing:

“Sec. 543. Energy and water management requirements.”.

19 **SEC. 422. FEDERAL ENERGY MANAGEMENT PROGRAM.**

20 Section 543 of the National Energy Conservation
 21 Policy Act (42 U.S.C. 8253) *(as amended by section 301)*
 22 is amended by adding at the end the following:

23 “~~(h)~~ FEDERAL ENERGY MANAGEMENT PROGRAM.—

24 “(1) IN GENERAL.—The Secretary shall estab-
 25 lish a program, to be known as the ‘Federal Energy

1 Management Program’ (referred to in this sub-
2 section as the ‘Program’), to facilitate the implemen-
3 tation by the Federal Government of cost-effective
4 energy and water management and energy-related
5 investment practices—

6 “(A) to coordinate and strengthen Federal
7 energy and water resilience; and

8 “(B) to promote environmental steward-
9 ship.

10 “(2) PROGRAM ACTIVITIES.—

11 “(A) STRATEGIC PLANNING AND TECH-
12 NICAL ASSISTANCE.—Under the Program, the
13 Federal Director appointed under paragraph
14 (3)(A) (referred to in this subsection as the
15 ‘Federal Director’) shall—

16 “(i) provide technical assistance and
17 project implementation support and guid-
18 ance to Federal agencies to identify, imple-
19 ment, procure, and track energy and water
20 conservation measures required under this
21 Act and under other provisions of law (in-
22 cluding regulations);

23 “(ii) in coordination with the Admin-
24 istrator of the General Services Adminis-
25 tration, establish appropriate procedures,

1 methods, and best practices for use by
2 Federal agencies to select, monitor, and
3 terminate contracts entered into under sec-
4 tion 546 with utilities;

5 “(iii) in coordination with the Federal
6 Acquisition Regulatory Council, establish
7 appropriate procedures, methods, and best
8 practices for use by Federal agencies to se-
9 lect, monitor, and terminate contracts en-
10 tered into under section 801 with energy
11 service contractors and utilities;

12 “(iv) establish and maintain internet-
13 based information resources and project
14 tracking systems and tools for energy and
15 water management;

16 “(v) coordinate comprehensive and
17 strategic approaches to energy and water
18 resilience planning for Federal agencies;
19 and

20 “(vi) establish a recognition program
21 for Federal achievement in energy and
22 water management, energy-related invest-
23 ment practices, environmental stewardship,
24 and other relevant areas, through events

1 such as individual recognition award cere-
2 monies and public announcements.

3 “(B) ENERGY AND WATER MANAGEMENT
4 AND REPORTING.—Under the Program, the
5 Federal Director shall—

6 “(i) track and report on the progress
7 of Federal agencies in meeting the require-
8 ments of the agency under this section;

9 “(ii) make publicly available annual
10 Federal agency performance data required
11 under—

12 “(I) this section and sections 544
13 through 548; and

14 “(II) section 203 of the Energy
15 Policy Act of 2005 (42 U.S.C.
16 15852);

17 “(iii)(I) collect energy and water use
18 and consumption data from each Federal
19 agency; and

20 “(II) based on that data, submit to
21 each Federal agency a report that will fa-
22 cilitate the energy and water management,
23 energy-related investment practices, and
24 environmental stewardship of the agency in
25 support of Federal goals under this Act

1 and under other provisions of law (includ-
2 ing regulations);

3 “(iv)(I) establish new Federal building
4 energy efficiency standards; and

5 “(II) in consultation with the Admin-
6 istrator of the General Services Adminis-
7 tration, acting through the head of the Of-
8 fice of High-Performance Green Buildings,
9 establish and implement Federal building
10 sustainable design principles for Federal
11 facilities;

12 “(v) manage the implementation of
13 Federal building energy efficiency stand-
14 ards established under section 305 of the
15 Energy Conservation and Production Act
16 (42 U.S.C. 6834); and

17 “(vi) designate products that meet the
18 highest energy conservation standards for
19 categories not covered under the Energy
20 Star program established under section
21 324A of the Energy Policy and Conserva-
22 tion Act (42 U.S.C. 6294a).

23 “(C) FEDERAL POLICY COORDINATION.—

24 Under the Program, the Federal Director
25 shall—

1 “(i) develop and implement accredited
2 training consistent with existing Federal
3 programs and activities—

4 “(I) relating to energy and water
5 use, management, and resilience in
6 Federal buildings, energy-related in-
7 vestment practices, and environmental
8 stewardship; and

9 “(II) that includes in-person
10 training, internet-based programs,
11 and national in-person training
12 events;

13 “(ii) coordinate and facilitate energy
14 and water management, energy-related in-
15 vestment practices, and environmental
16 stewardship through the Interagency En-
17 ergy Management Task Force established
18 under section 547; and

19 “(iii) report on the implementation of
20 the priorities of the President, including
21 Executive orders, relating to energy and
22 water use in Federal buildings, in coordi-
23 nation with—

24 “(I) the Office of Management
25 and Budget;

1 “(II) the Council on Environ-
2 mental Quality; and

3 “(III) any other entity, as consid-
4 ered necessary by the Federal Direc-
5 tor.

6 “(D) FACILITY AND FLEET OPTIMIZA-
7 TION.—Under the Program, the Federal Direc-
8 tor shall develop guidance, supply assistance to,
9 and track the progress of Federal agencies—

10 “(i) in conducting portfolio-wide facil-
11 ity energy and water resilience planning
12 and project integration;

13 “(ii) in building new construction and
14 major renovations to meet the sustainable
15 design and energy and water performance
16 standards required under this section;

17 “(iii) in developing guidelines for—

18 “(I) building commissioning; and

19 “(II) facility operations and
20 maintenance; and

21 “(iv) in coordination with the Admin-
22 istrator of the General Services Adminis-
23 tration, in meeting statutory and agency
24 goals for Federal fleet vehicles.

25 “(3) FEDERAL DIRECTOR.—

1 “(A) APPOINTMENT.—The Secretary shall
2 appoint an individual to serve as Federal Direc-
3 tor of the Program, which shall be a career po-
4 sition in the Senior Executive service, to man-
5 age the Program and carry out the activities of
6 the Program described in paragraph (2).

7 “(B) DUTIES.—The Federal Director
8 shall—

9 “(i) oversee, manage, and administer
10 the Program;

11 “(ii) provide leadership in energy and
12 water management, energy-related invest-
13 ment practices, and environmental stew-
14 ardship through coordination with Federal
15 agencies and other appropriate entities;
16 and

17 “(iii) establish a management council
18 to advise the Federal Director that shall—

19 “(I) convene not less frequently
20 than once every quarter; and

21 “(II) consist of representatives
22 from—

23 “(aa) the Council on Envi-
24 ronmental Quality;

1 “(bb) the Office of Manage-
2 ment and Budget; and

3 “(cc) the Office of Federal
4 High-Performance Green Build-
5 ings in the General Services Ad-
6 ministration.

7 “(4) SAVINGS CLAUSE.—Nothing in this sub-
8 section impedes, supersedes, or alters the authority
9 of the Secretary to carry out the remainder of this
10 section or section 305 of the Energy Conservation
11 and Production Act (42 U.S.C. 6834).

12 “(5) AUTHORIZATION OF APPROPRIATIONS.—
13 There is authorized to be appropriated to the Sec-
14 retary to carry out this subsection \$36,000,000 for
15 each of fiscal years 2020 through 2030.”.

16 **SEC. 423. FEDERAL BUILDING ENERGY EFFICIENCY PER-**
17 **FORMANCE STANDARDS; CERTIFICATION**
18 **SYSTEM AND LEVEL FOR GREEN BUILDINGS.**

19 ~~(a) DEFINITIONS.—Section 303 of the Energy Con-~~
20 ~~servation and Production Act (42 U.S.C. 6832) is amend-~~
21 ~~ed—~~

22 ~~(1) in each of paragraphs (1) through (16), by~~
23 ~~inserting a paragraph heading, the text of which is~~
24 ~~comprised of the term defined in that paragraph;~~

1 ~~(2)~~ by redesignating paragraphs ~~(2)~~ through
 2 ~~(16)~~ as paragraphs ~~(3)~~, ~~(4)~~, ~~(6)~~, ~~(7)~~, ~~(8)~~, ~~(10)~~, ~~(12)~~,
 3 ~~(13)~~, ~~(14)~~, ~~(15)~~, ~~(16)~~, ~~(9)~~, ~~(17)~~, ~~(5)~~, and ~~(2)~~, respec-
 4 tively, and moving the paragraphs so as to appear
 5 in numerical order; and

6 ~~(3)~~ by inserting after paragraph ~~(10)~~ (as so re-
 7 designated) the following:

8 “~~(11)~~ MAJOR RENOVATION.—The term ‘major
 9 renovation’ means a modification of the energy sys-
 10 tems of a building that is sufficiently extensive to
 11 ensure that the entire building can achieve compli-
 12 ance with applicable energy standards for new build-
 13 ings, as established by the Secretary.”

14 (a) *DEFINITIONS.*—*Section 303 of the Energy Con-*
 15 *servation and Production Act (42 U.S.C. 6832) (as amend-*
 16 *ed by section 101(a)) is amended—*

17 (1) *in each of paragraphs (1) through (13), (15),*
 18 *and (16), by inserting a paragraph heading, the text*
 19 *of which is comprised of the term defined in that*
 20 *paragraph;*

21 (2) *by redesignating paragraphs (2) through (13)*
 22 *and (15) through (18) as paragraphs (3), (4), (6), (7),*
 23 *(8), (10), (15), (16), (17), (18), (19), (9), (5), (2),*
 24 *(11), and (12), respectively, and moving the para-*
 25 *graphs so as to appear in numerical order; and*

(3) by inserting after paragraph (12) (as so redesignated) the following:

“(13) *MAJOR RENOVATION.*—The term ‘major renovation’ means a modification of the energy systems of a building that is sufficiently extensive to ensure that the entire building can achieve compliance with applicable energy standards for new buildings, as established by the Secretary.”.

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

(1) in subsection (a)(3)—

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

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

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

“(i) *IN GENERAL.*—Not later than 1 year after the date of enactment of the Energy Savings and Industrial Competitiveness Act of 2019, the Secretary shall es-

1 tablish, by regulation, revised Federal
2 building energy efficiency performance
3 standards that require that—

4 “(I) subject to clause (ii), new
5 Federal buildings and Federal build-
6 ings with major renovations—

7 “(aa) meet or exceed the
8 most recently published version
9 of the International Energy Con-
10 servation Code (in the case of
11 residential buildings) or
12 ASHRAE Standard 90.1 (in the
13 case of commercial buildings) as
14 of the date of enactment of the
15 Energy Savings and Industrial
16 Competitiveness Act of 2019; and

17 “(bb) meet or exceed the en-
18 ergy provisions of the State and
19 local building codes applicable to
20 the building if the codes are more
21 stringent than the most recently
22 published version of the Inter-
23 national Energy Conservation
24 Code or ASHRAE Standard 90.1
25 as of the date of enactment of

1 the Energy Savings and Indus-
2 trial Competitiveness Act of
3 2019, as applicable;

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

8 “(aa) the buildings shall be
9 designed to achieve energy con-
10 sumption levels that are not less
11 than 30 percent below the levels
12 established in the most recently
13 published version of the Inter-
14 national Energy Conservation
15 Code or the ASHRAE Standard,
16 as of the date of enactment of
17 the Energy Savings and Indus-
18 trial Competitiveness Act of
19 2019, as appropriate; and

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

1 “(III) if water is used to achieve
2 energy efficiency, water conservation
3 technologies shall be applied to the ex-
4 tent that the technologies are life-
5 cycle cost effective; and

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

14 “(ii) EXCEPTION.—Clause (i)(I) shall
15 not apply to the unaltered portions of Fed-
16 eral buildings and systems that have un-
17 dergone major renovations.

18 “(B) UPDATES.—Not later than 1 year
19 after the date of approval of each subsequent
20 revision of the ASHRAE Standard or the Inter-
21 national Energy Conservation Code, as appro-
22 priate, the Secretary shall determine whether
23 the revised standards established under sub-
24 clauses (I) and (II) of subparagraph (A)(i)
25 should be updated to reflect the revisions, based

1 on the energy savings and life cycle cost-effec-
2 tiveness of the revisions.”;

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

6 “(C) BUDGET REQUEST.—In the budget
7 request”; and

8 (C) by striking subparagraph (D) and in-
9 serting the following:

10 “(D) CERTIFICATION FOR GREEN BUILD-
11 INGS.—

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

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

1 and control of the Department of Defense,
2 shall determine those certification systems
3 for green commercial and residential build-
4 ings that the Secretary determines to be
5 the most likely to encourage a comprehen-
6 sive and environmentally sound approach
7 to certification of green buildings.

8 “(iii) BASIS FOR SELECTION.—The
9 determination of the certification systems
10 under clause (ii) shall be based on ongoing
11 review of the findings of the Federal Direc-
12 tor under section 436(h) of the Energy
13 Independence and Security Act of 2007
14 (42 U.S.C. 17092(h)) and the criteria de-
15 scribed in clause (v).

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

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

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

1 “(aa) are based on relevant
2 technical data;

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

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

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

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

23 “(I) the ability and availability of
24 assessors and auditors to independ-
25 ently verify the criteria and measure-

1 ment of metrics at the scale necessary
2 to implement this subparagraph;

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

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

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

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

16 “(bb) use of renewable en-
17 ergy sources;

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

1 “(dd)(AA) the sourcing of
2 grown, harvested, or mined mate-
3 rials; and

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

12 “(ee) such other criteria as
13 the Secretary determines to be
14 appropriate; and

15 “(V) national recognition within
16 the building industry.

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

24 “(I) the criteria described in
25 clause (v); and

1 “(II) the identification made by
2 the Federal Director under section
3 436(h) of the Energy Independence
4 and Security Act of 2007 (42 U.S.C.
5 17092(h)).

6 “(vii) EXCLUSIONS.—

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

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

17 “(bb) determine the portions
18 of the system that are suitable
19 for use; and

20 “(cc) exclude all other por-
21 tions of the system from identi-
22 fication and use.

23 “(II) ENTIRE SYSTEMS.—The
24 Secretary shall exclude an entire sys-

tem from use if an exclusion under
subclause (I)—

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

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

“(cc) increases agency costs
of the use.

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

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

1 “(x) WATER CONSERVATION TECH-
2 NOLOGIES.—In addition to any use of
3 water conservation technologies otherwise
4 required by this section, water conservation
5 technologies shall be applied to the extent
6 that the technologies are life-cycle cost-ef-
7 fective.

8 “(xi) EFFECTIVE DATE.—

9 “(I) DETERMINATIONS MADE
10 AFTER DECEMBER 31, 2019.—The
11 amendments made by section
12 422(b)(1)(C) of the Energy Savings
13 and Industrial Competitiveness Act of
14 2019 shall apply to any determination
15 made by a Federal agency after De-
16 cember 31, 2019.

17 “(II) DETERMINATIONS MADE ON
18 OR BEFORE DECEMBER 31, 2019.—
19 This subparagraph (as in effect on the
20 day before the date of enactment of
21 the Energy Savings and Industrial
22 Competitiveness Act of 2019) shall
23 apply to any use of a certification sys-
24 tem for green commercial and residen-

1 tial buildings by a Federal agency on
 2 or before December 31, 2019.”; and

3 (2) by striking subsections (c) and (d) and in-
 4 serting the following:

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

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

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

15 (c) FEDERAL COMPLIANCE.—Section 306 of the En-
 16 ergy Conservation and Production Act (42 U.S.C. 6835)
 17 is amended—

18 (1) in subsection (a)—

19 (A) in paragraph (1)—

20 (i) by striking “(1) The head” and in-
 21 serting the following:

22 “(1) IN GENERAL.—The head”; and

23 (ii) by striking “assure that new Fed-
 24 eral buildings” and inserting “ensure that

1 new Federal buildings and Federal build-
 2 ings with major renovations”; and

3 (B) in paragraph (2)—

4 (i) by striking the second sentence
 5 and inserting the following:

6 “(B) PROCEDURES.—The Architect of the
 7 Capitol shall adopt procedures necessary to en-
 8 sure that the buildings referred to in subpara-
 9 graph (A) meet or exceed the standards de-
 10 scribed in that subparagraph.”; and

11 (ii) in the first sentence—

12 (I) by inserting “and Federal
 13 buildings with major renovations”
 14 after “new buildings”; and

15 (II) by striking “(2) The Fed-
 16 eral” and inserting the following:

17 “(2) APPLICABILITY.—

18 “(A) IN GENERAL.—The Federal”; and

19 (2) in subsection (b)—

20 (A) by striking the subsection heading and
 21 inserting “EXPENDITURES”; and

22 (B) by inserting “or a Federal building
 23 with major renovations” after “new Federal
 24 building”.

1 **SEC. 424. ENHANCED ENERGY EFFICIENCY UNDER-**
2 **WRITING.**

3 (a) DEFINITIONS.—In this section:

4 (1) COVERED AGENCY.—The term “covered
5 agency”—

6 (A) means—

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

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

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

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

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

21 (4) MORTGAGEE.—The term “mortgagee”
22 means—

23 (A) an original lender under a covered loan
24 or the holder of a covered loan at the time at
25 which that mortgage transaction is con-
26 summated;

1 (B) any affiliate, agent, subsidiary, suc-
 2 cessor, or assignee of an original lender under
 3 a covered loan or the holder of a covered loan
 4 at the time at which that mortgage transaction
 5 is consummated;

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

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

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

12 (6) SERVICER.—The term “servicer” means the
 13 person or entity responsible for the servicing of a
 14 covered loan, including the person or entity who
 15 makes or holds a covered loan if that person or enti-
 16 ty also services the covered loan.

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

21 (b) FINDINGS AND PURPOSES.—

22 (1) FINDINGS.—Congress finds that—

23 (A) energy costs for homeowners are a sig-
 24 nificant and increasing portion of their house-
 25 hold budgets;

1 (B) household energy use can vary sub-
2 stantially depending on the efficiency and char-
3 acteristics of the house;

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

6 (D) the current test for loan affordability
7 used by most covered agencies, commonly
8 known as the “debt-to-income” test, is inad-
9 equate because it does not take into account the
10 expected energy cost savings for the homeowner
11 of an energy efficient home; and

12 (E) another loan limitation, commonly
13 known as the “loan-to-value” test, is tied to the
14 appraisal, which often does not adjust for effi-
15 ciency features of houses.

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

18 (A) improve the accuracy of mortgage un-
19 derwriting by Federal mortgage agencies by en-
20 suring that energy cost savings are included in
21 the underwriting process as described below,
22 and thus to reduce the amount of energy con-
23 sumed by homes and to facilitate the creation
24 of energy efficiency retrofit and construction
25 jobs;

1 (B) require a covered agency to include the
 2 expected energy cost savings of a homeowner as
 3 a regular expense in the tests, such as the debt-
 4 to-income test, used to determine the ability of
 5 the loan applicant to afford the cost of home-
 6 ownership for all loan programs; and

7 (C) require a covered agency to include the
 8 value home buyers place on the energy effi-
 9 ciency of a house in tests used to compare the
 10 mortgage amount to home value, taking pre-
 11 cautions to avoid double-counting and to sup-
 12 port safe and sound lending.

13 (c) ENHANCED ENERGY EFFICIENCY UNDER-
 14 WRITING CRITERIA.—

15 (1) IN GENERAL.—Not later than 1 year after
 16 the date of enactment of this Act, the Secretary
 17 shall, in consultation with the advisory group estab-
 18 lished in subsection (f)(2), develop and issue guide-
 19 lines for a covered agency to implement enhanced
 20 loan eligibility requirements, for use when testing
 21 the ability of a loan applicant to repay a covered
 22 loan, that account for the expected energy cost sav-
 23 ings for a loan applicant at a subject property, in
 24 the manner set forth in paragraphs (2) and (3).

1 (2) REQUIREMENTS TO ACCOUNT FOR ENERGY
2 COST SAVINGS.—

3 (A) IN GENERAL.—The enhanced loan eli-
4 gibility requirements under paragraph (1) shall
5 require that, for all covered loans for which an
6 energy efficiency report is voluntarily provided
7 to the mortgagee by the mortgagor, the covered
8 agency and the mortgagee shall take into con-
9 sideration the estimated energy cost savings ex-
10 pected for the owner of the subject property in
11 determining whether the loan applicant has suf-
12 ficient income to service the mortgage debt plus
13 other regular expenses.

14 (B) EXPENSES AS OFFSETS.—To the ex-
15 tent that a covered agency uses a test such as
16 a debt-to-income test that includes certain reg-
17 ular expenses, such as hazard insurance and
18 property taxes, the expected energy cost savings
19 shall be included as an offset to these expenses.

20 (C) ASSESSED ENERGY COSTS.—Energy
21 costs to be assessed include the cost of elec-
22 tricity, natural gas, oil, and any other fuel regu-
23 larly used to supply energy to the subject prop-
24 erty.

1 (3) DETERMINATION OF ESTIMATED ENERGY
2 COST SAVINGS.—

3 (A) IN GENERAL.—The guidelines to be
4 issued under paragraph (1) shall include in-
5 structions for the covered agency to calculate
6 estimated energy cost savings using—

7 (i) the energy efficiency report;

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

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

12 (B) REPORT REQUIREMENTS.—For the
13 purposes of subparagraph (A), an energy effi-
14 ciency report shall—

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

19 (ii) be prepared in accordance with
20 the guidelines to be issued under para-
21 graph (1); and

22 (iii) be prepared—

23 (I) in accordance with the Resi-
24 dential Energy Service Network's
25 Home Energy Rating System (com-

monly known as “HERS”) by an individual certified by the Residential Energy Service Network, unless the Secretary finds that the use of HERS does not further the purposes of this section; or

(II) by other methods approved by the Secretary, in consultation with the Secretary of Energy and the advisory group established in subsection (f)(2), for use under this section, which shall include a third-party quality assurance procedure.

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

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

1 (A) inform the loan applicant of the ex-
2 pected energy costs as estimated in the energy
3 efficiency report, in a manner and at a time as
4 prescribed by the Secretary, and if practicable,
5 in the documents delivered at the time of loan
6 application; and

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

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

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

23 (B) the impact the typical energy cost sav-
24 ings would have on monthly ownership costs of
25 a typical home;

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

5 (D) resources for improving the energy ef-
6 ficiency of a home.

7 (6) PRICING OF LOANS.—

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

13 (B) IMPOSITION OF CERTAIN MATERIAL
14 COSTS, IMPEDIMENTS, OR PENALTIES.—In the
15 absence of a publicly disclosed analysis that
16 demonstrates significant additional default risk
17 or prepayment risk associated with the loans, a
18 covered agency shall not impose material costs,
19 impediments, or penalties on covered loans
20 merely because the loan uses an energy effi-
21 ciency report or the enhanced loan eligibility re-
22 quirements required under this section.

23 (7) LIMITATIONS.—

24 (A) IN GENERAL.—A covered agency may
25 price covered loans originated under the en-

1 hanced loan eligibility requirements required
 2 under this section in accordance with the esti-
 3 mated risk of those loans.

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

6 (i) modify existing underwriting cri-
 7 teria or adopt new underwriting criteria
 8 that intentionally negate or reduce the im-
 9 pact of the requirements or resulting bene-
 10 fits that are set forth or otherwise derived
 11 from the enhanced loan eligibility require-
 12 ments required under this subsection; or

13 (ii) impose greater buy back require-
 14 ments, credit overlays, or insurance re-
 15 quirements, including private mortgage in-
 16 surance, on covered loans merely because
 17 the loan uses an energy efficiency report or
 18 the enhanced loan eligibility requirements
 19 required under this subsection.

20 (8) APPLICABILITY AND IMPLEMENTATION
 21 DATE.—Not later than 3 years after the date of en-
 22 actment of this Act, and before December 31, 2023,
 23 the enhanced loan eligibility requirements required
 24 under this subsection shall be implemented by each
 25 covered agency to—

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

4 (B) be available on any residential real
 5 property (including individual units of con-
 6 dominiums and cooperatives) that qualifies for
 7 a covered loan; and

8 (C) provide prospective mortgagees with
 9 sufficient guidance and applicable tools to im-
 10 plement the required underwriting methods.

11 (d) ENHANCED ENERGY EFFICIENCY UNDER-
 12 WRITING VALUATION GUIDELINES.—

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

16 (A) in consultation with the Federal Fi-
 17 nancial Institutions Examination Council and
 18 the advisory group established in subsection
 19 (f)(2), develop and issue guidelines for a cov-
 20 ered agency to determine the maximum per-
 21 mitted loan amount based on the value of the
 22 property for all covered loans made on prop-
 23 erties with an energy efficiency report that
 24 meets the requirements of subsection (c)(3)(B);
 25 and

1 (B) in consultation with the Secretary of
2 Energy, issue guidelines for a covered agency to
3 determine the estimated energy savings under
4 paragraph (3) for properties with an energy ef-
5 ficiency report.

6 (2) REQUIREMENTS.—The enhanced energy ef-
7 ficiency underwriting valuation guidelines required
8 under paragraph (1) shall include—

9 (A) a requirement that if an energy effi-
10 ciency report that meets the requirements of
11 subsection (c)(3)(B) is voluntarily provided to
12 the mortgagee, such report shall be used by the
13 mortgagee or covered agency to determine the
14 estimated energy savings of the subject prop-
15 erty; and

16 (B) a requirement that the estimated en-
17 ergy savings of the subject property be added to
18 the appraised value of the subject property by
19 a mortgagee or covered agency for the purpose
20 of determining the loan-to-value ratio of the
21 subject property, unless the appraisal includes
22 the value of the overall energy efficiency of the
23 subject property, using methods to be estab-
24 lished under the guidelines issued under para-
25 graph (1).

1 (3) DETERMINATION OF ESTIMATED ENERGY
2 SAVINGS.—

3 (A) AMOUNT OF ENERGY SAVINGS.—The
4 amount of estimated energy savings shall be de-
5 termined by calculating the difference between
6 the estimated energy costs for the average com-
7 parable houses, as determined in guidelines to
8 be issued under paragraph (1), and the esti-
9 mated energy costs for the subject property
10 based upon the energy efficiency report.

11 (B) DURATION OF ENERGY SAVINGS.—The
12 duration of the estimated energy savings shall
13 be based upon the estimated life of the applica-
14 ble equipment, consistent with the rating sys-
15 tem used to produce the energy efficiency re-
16 port.

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

23 (4) ENSURING CONSIDERATION OF ENERGY EF-
24 FICIENT FEATURES.—Section 1110 of the Financial

1 Institutions Reform, Recovery, and Enforcement Act
2 of 1989 (12 U.S.C. 3339) is amended—

3 (A) in paragraph (2), by striking “and” at
4 the end;

5 (B) in paragraph (3), by striking the pe-
6 riod at the end and inserting “; and”; and

7 (C) by inserting after paragraph (3) the
8 following:

9 “(4) that State certified and licensed appraisers
10 have timely access, whenever practicable, to informa-
11 tion from the property owner and the lender that
12 may be relevant in developing an opinion of value re-
13 garding the energy- and water-saving improvements
14 or features of a property, such as—

15 “(A) labels or ratings of buildings;

16 “(B) installed appliances, measures, sys-
17 tems or technologies;

18 “(C) blueprints;

19 “(D) construction costs;

20 “(E) financial or other incentives regard-
21 ing energy- and water-efficient components and
22 systems installed in a property;

23 “(F) utility bills;

24 “(G) energy consumption and benchmark-
25 ing data; and

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

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

(5) TRANSACTIONS REQUIRING STATE CERTIFIED APPRAISERS.—Section 1113 of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (12 U.S.C. 3342) is amended—

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

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

(6) PROTECTIONS.—

1 (A) AUTHORITY TO IMPOSE LIMITA-
2 TIONS.—The guidelines to be issued under
3 paragraph (1) shall include such limitations and
4 conditions as determined by the Secretary to be
5 necessary to protect against meaningful under
6 or over valuation of energy cost savings or du-
7 plicative counting of energy efficiency features
8 or energy cost savings in the valuation of any
9 subject property that is used to determine a
10 loan amount.

11 (B) ADDITIONAL AUTHORITY.—At the end
12 of the 7-year period following the implementa-
13 tion of enhanced eligibility and underwriting
14 valuation requirements under this section, the
15 Secretary may modify or apply additional ex-
16 ceptions to the approach described in paragraph
17 (2), where the Secretary finds that the
18 unadjusted appraisal will reflect an accurate
19 market value of the efficiency of the subject
20 property or that a modified approach will better
21 reflect an accurate market value.

22 (7) APPLICABILITY AND IMPLEMENTATION
23 DATE.—Not later than 3 years after the date of en-
24 actment of this Act, and before December 31, 2023,

1 each covered agency shall implement the guidelines
2 required under this subsection, which shall—

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

6 (B) be available on any residential real
7 property, including individual units of con-
8 dominiums and cooperatives, that qualifies for a
9 covered loan.

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

16 (1) enumerates the number of covered loans of
17 the agency for which there was an energy efficiency
18 report, and that used energy efficiency appraisal
19 guidelines and enhanced loan eligibility require-
20 ments;

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

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

1 (f) RULEMAKING.—

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

13 (2) ADVISORY GROUP.—To assist in carrying
 14 out this section, the Secretary shall establish an ad-
 15 visory group, consisting of individuals representing
 16 the interests of—

17 (A) mortgage lenders;

18 (B) appraisers;

19 (C) energy raters and residential energy
 20 consumption experts;

21 (D) energy efficiency organizations;

22 (E) real estate agents;

23 (F) home builders and remodelers;

24 (G) State energy officials; and

25 (H) others as determined by the Secretary.

1 (g) ADDITIONAL STUDY.—

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

10 (2) RECOMMENDATIONS.—

11 (A) IN GENERAL.—The advisory group es-
12 tablished in subsection (f)(2) shall provide rec-
13 ommendations to the Secretary on any revisions
14 or additions to the enhanced energy efficiency
15 underwriting criteria deemed necessary by the
16 group, which may include alternate methods to
17 better account for home energy costs and addi-
18 tional factors to account for substantial and
19 regular costs of homeownership such as loca-
20 tion-based transportation costs and water costs.

21 (B) LEGISLATIVE RECOMMENDATIONS.—

22 The Secretary shall forward any legislative rec-
23 ommendations from the advisory group to Con-
24 gress for consideration.

1 **TITLE V—MISCELLANEOUS**

2 **SEC. 501. BUDGETARY EFFECTS.**

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

11 **SEC. 502. ADVANCE APPROPRIATIONS REQUIRED.**

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

Calendar No. 263

116TH CONGRESS
1ST Session

S. 2137

[Report No. 116-143]

A BILL

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

OCTOBER 23, 2019

Reported with amendments