

116TH CONGRESS
1ST SESSION

S. _____

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

IN THE SENATE OF THE UNITED STATES

Mr. PORTMAN (for himself and Mrs. SHAHEEN) introduced the following bill; which was read twice and referred to the Committee on

A BILL

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

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

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

4 (a) **SHORT TITLE.**—This Act may be cited as the
5 “Energy Savings and Industrial Competitiveness Act of
6 2019”.

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

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

TITLE I—BUILDINGS

2

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 retrofiting 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—

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

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

23 “(C) other appropriate organizations.”;

24 and

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

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

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

5 “(A) IN GENERAL.—Not later than 2 years
6 after the date of publication of a revision to a
7 model building energy code, each State or In-
8 dian tribe shall certify whether the State or In-
9 dian tribe, respectively, has reviewed and up-
10 dated the energy provisions of the building code
11 of the State or Indian tribe, respectively.

12 “(B) DEMONSTRATION.—The certification
13 shall include a demonstration of whether the
14 energy savings for the code provisions that are
15 in effect throughout the territory of the State
16 or Indian tribe meet or exceed the energy sav-
17 ings of the updated model building energy code.

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

1 or Indian tribe, respectively, to meet or exceed
2 the target in section 307(b)(2).

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

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

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

12 “(d) IMPROVEMENTS IN COMPLIANCE WITH BUILD-
13 ING ENERGY CODES.—

14 “(1) REQUIREMENT.—

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

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

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

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

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

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

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

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

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

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

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

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

17 “(A) has developed and is implementing a
18 plan for achieving compliance during the 8-
19 year-period beginning on the date of enactment
20 of the Energy Savings and Industrial Competi-
21 tiveness Act of 2019, including annual targets
22 for compliance and active training and enforce-
23 ment programs; and

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

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

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

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

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

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

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

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

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

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

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

9 “(4) REPORTS BY SECRETARY.—

10 “(A) IN GENERAL.—Not later than De-
11 cember 31, 2020, and not less frequently than
12 once every 3 years thereafter, the Secretary
13 shall submit to Congress and publish a report
14 describing—

15 “(i) the status of model building en-
16 ergy codes;

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

19 “(iii) implementation of this section;
20 and

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

24 “(B) IMPACTS.—The report shall include
25 estimates of impacts of past action under this

1 section, and potential impacts of further action,
2 on—

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

7 “(ii) resulting energy costs to individ-
8 uals and businesses; and

9 “(iii) resulting overall annual building
10 ownership and operating costs.

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

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

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

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

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

1 “(g) AVAILABILITY OF INCENTIVE FUNDING.—

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

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

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

12 “(C) to promote building energy and water
13 efficiency through the use of the codes and
14 standards.

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

20 “(A) to a State or Indian tribe for which
21 the Secretary has validated a certification under
22 subsection (c) or (d); and

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

1 “(3) TRAINING.—Of the amounts made avail-
2 able under this subsection, the State or Indian tribe
3 may use amounts required, but not to exceed
4 \$750,000 for a State, to train State and local build-
5 ing code officials to implement and enforce codes de-
6 scribed in paragraph (2).

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

10 “(h) STRETCH CODES AND ADVANCED STAND-
11 ARDS.—

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

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

19 “(B) guidelines for energy-efficient build-
20 ing design.

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

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

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

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

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

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

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

1 “(4) code and standards improvements that
2 consider energy efficiency and water efficiency and,
3 to the maximum extent practicable, consider energy
4 efficiency and water efficiency in an integrated man-
5 ner.

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

10 “(k) AUTHORIZATION OF APPROPRIATIONS.—There
11 is authorized to be appropriated to carry out this section
12 and section 307 \$200,000,000, to remain available until
13 expended.”.

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

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

1 **“SEC. 307. SUPPORT FOR MODEL BUILDING ENERGY**
2 **CODES.**

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

5 “(b) TARGETS.—

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

10 “(2) TARGETS.—

11 “(A) IN GENERAL.—The Secretary shall
12 work with State, Indian tribes, local govern-
13 ments, code and standards developers (such as
14 the entities described in section 303(14)), and
15 other interested parties to support the updating
16 of model building energy codes by establishing
17 1 or more national aggregate energy savings
18 targets to achieve the purposes of this section.

19 “(B) SEPARATE TARGETS.—The Secretary
20 shall establish separate targets for commercial
21 and residential buildings.

22 “(C) BASELINES.—The baseline for updat-
23 ing model building energy codes shall be the
24 2009 IECC for residential buildings and
25 ASHRAE Standard 90.1–2010 for commercial
26 buildings.

1 “(D) CODE CYCLES.—The targets estab-
2 lished under subparagraph (A) shall align with
3 the respective code development cycles deter-
4 mined by the model building energy code-setting
5 and standards development organizations de-
6 scribed in section 303(14).

7 “(E) SPECIFIC YEARS.—

8 “(i) IN GENERAL.—Targets for spe-
9 cific years shall be established and revised
10 by the Secretary through rulemaking and
11 coordinated with code and standards devel-
12 opers (such as the entities described in sec-
13 tion 303(14)) at a level that—

14 “(I) is at the maximum level of
15 energy efficiency that is techno-
16 logically feasible and lifecycle cost ef-
17 fective, while accounting for the eco-
18 nomic considerations under paragraph
19 (4);

20 “(II) is higher than the preceding
21 target;

22 “(III) promotes the achievement
23 of commercial and residential high-
24 performance buildings (as defined in
25 section 401 of the Energy Independ-

1 ence and Security Act of 2007 (42
2 U.S.C. 17061)) through high perform-
3 ance energy efficiency; and

4 “(IV) takes into consideration
5 the variations in climate zones used in
6 model building energy codes.

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

11 “(iii) DIFFERENT TARGET YEARS.—
12 Subject to clause (i), prior to the applica-
13 ble year, the Secretary may set a later tar-
14 get year for any of the model building en-
15 ergy codes described in subparagraph (A)
16 if the Secretary determines that a target
17 cannot be met.

18 “(iv) SMALL BUSINESS.—When estab-
19 lishing targets under this paragraph
20 through rulemaking, the Secretary shall
21 ensure compliance with the Small Business
22 Regulatory Enforcement Fairness Act of
23 1996 (5 U.S.C. 601 note; Public Law 104–
24 121).

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

7 “(A) efficiency gains made in appliances,
8 lighting, windows, insulation, and building enve-
9 lope sealing;

10 “(B) advancement of distributed genera-
11 tion and on-site renewable power generation
12 technologies;

13 “(C) equipment improvements for heating,
14 cooling, and ventilation systems;

15 “(D) building management systems and
16 smart technologies to reduce energy use; and

17 “(E) other technologies, practices, and
18 building systems that the Secretary considers
19 appropriate regarding building plug load and
20 other energy uses.

21 “(4) ECONOMIC CONSIDERATIONS.—In estab-
22 lishing and revising building code targets under
23 paragraph (2), the Secretary shall consider the eco-
24 nomic feasibility of achieving the proposed targets
25 established under this section and the potential costs

1 and savings for consumers and building owners, in-
2 cluding a return on investment analysis.

3 “(c) TECHNICAL ASSISTANCE TO MODEL BUILDING
4 ENERGY CODE-SETTING AND STANDARDS DEVELOPMENT
5 ORGANIZATIONS.—

6 “(1) IN GENERAL.—The Secretary shall, on a
7 timely basis, provide technical assistance to model
8 building energy code-setting and standards develop-
9 ment organizations consistent with the goals of this
10 section.

11 “(2) ASSISTANCE.—The assistance shall in-
12 clude, as requested by the organizations, technical
13 assistance in—

14 “(A) evaluating code or standards pro-
15 posals or revisions;

16 “(B) building energy and water analysis
17 and design tools;

18 “(C) building demonstrations;

19 “(D) developing definitions of energy use
20 intensity and building types for use in model
21 building energy codes to evaluate the efficiency
22 impacts of the model building energy codes;

23 “(E) performance-based standards;

24 “(F) evaluating economic considerations
25 under subsection (b)(4); and

1 “(G) developing model building energy
2 codes by Indian tribes in accordance with tribal
3 law.

4 “(3) AMENDMENT PROPOSALS.—The Secretary
5 may submit timely model building energy code
6 amendment proposals to the model building energy
7 code-setting and standards development organiza-
8 tions, with supporting evidence, sufficient to enable
9 the model building energy codes to meet the targets
10 established under subsection (b)(2).

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

16 “(d) DETERMINATION.—

17 “(1) REVISION OF MODEL BUILDING ENERGY
18 CODES.—If the provisions of the IECC or ASHRAE
19 Standard 90.1 regarding building energy use are
20 proposed to be revised, the Secretary shall make a
21 preliminary determination, by not later than 90 days
22 after the date of receipt of the proposed revision,
23 and a final determination by not later than 15
24 months after the date of publication of the revision,
25 regarding whether the revision will—

1 “(A) improve energy efficiency in build-
2 ings, as compared to the existing model build-
3 ing energy code; and

4 “(B) meet the applicable targets under
5 subsection (b)(2).

6 “(2) CODES OR STANDARDS NOT MEETING TAR-
7 GETS.—

8 “(A) PRELIMINARY DETERMINATION BY
9 SECRETARY.—If the Secretary makes a prelimi-
10 nary determination under paragraph (1)(B)
11 that a code or standard does not meet an appli-
12 cable target under subsection (b)(2), the Sec-
13 retary shall contemporaneously provide to the
14 developer of the model building energy code or
15 standard not fewer than 2 proposed changes
16 that would result in a model building energy
17 code that meets the applicable target, together
18 with supporting evidence, taking into consider-
19 ation—

20 “(i) whether the modified code is tech-
21 nically feasible and lifecycle cost effective;

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

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

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

6 “(i) determine whether—

7 “(I) to publish a new revised
8 code accepting the proposed changes;
9 or

10 “(II) to reject the proposed
11 changes; or

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

16 “(C) FINAL DETERMINATION BY SEC-
17 RETARY.—

18 “(i) IN GENERAL.—A final determina-
19 tion by the Secretary shall be made on the
20 model building energy code or standard, as
21 modified by the changes proposed by the
22 Secretary under subparagraph (A).

23 “(ii) ADDITIONAL DETERMINA-
24 TIONS.—If a model building energy code or
25 standards developer makes an election pur-

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

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

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

12 **SEC. 102. COST-EFFECTIVE CODES IMPLEMENTATION FOR**
13 **EFFICIENCY AND RESILIENCE.**

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

17 **“SEC. 309. COST-EFFECTIVE CODES IMPLEMENTATION FOR**
18 **EFFICIENCY AND RESILIENCE.**

19 “(a) DEFINITIONS.—In this section:

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

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

25 “(B) a partnership.

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

5 “(A) Local building code agencies.

6 “(B) Codes and standards developers.

7 “(C) Associations of builders and design
8 and construction professionals.

9 “(D) Local and utility energy efficiency
10 programs.

11 “(E) Consumer, energy efficiency, and en-
12 vironmental advocates.

13 “(F) Other entities, as determined by the
14 Secretary.

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

17 “(b) ESTABLISHMENT.—

18 “(1) IN GENERAL.—The Secretary shall estab-
19 lish within the Building Technologies Office of the
20 Department of Energy a program under which the
21 Secretary shall award grants on a competitive basis
22 to eligible entities to enable sustained cost-effective
23 implementation of updated building energy codes.

24 “(2) UPDATED BUILDING ENERGY CODE.—An
25 update to a building energy code under this section

1 shall include any update made available after the ex-
2 isting building energy code, even if it is not the most
3 recent updated code available.

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

6 “(1) consider—

7 “(A) prospective energy savings and plans
8 to measure the savings;

9 “(B) the long-term sustainability of those
10 measures and savings;

11 “(C) prospective benefits, and plans to as-
12 sess the benefits, including benefits relating
13 to—

14 “(i) resilience and peak load reduc-
15 tion;

16 “(ii) occupant safety and health; and

17 “(iii) environmental performance;

18 “(D) the demonstrated capacity of the eli-
19 gible entity to carry out the proposed project;
20 and

21 “(E) the need of the eligible entity for as-
22 sistance; and

23 “(2) give priority to applications from partner-
24 ships.

25 “(d) ELIGIBLE ACTIVITIES.—

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

4 “(A) to create or enable State or regional
5 partnerships to provide training and materials
6 to—

7 “(i) builders, contractors and sub-
8 contractors, architects, and other design
9 and construction professionals, relating to
10 meeting updated building energy codes in a
11 cost-effective manner; and

12 “(ii) building code officials, relating to
13 improving implementation of and compli-
14 ance with building energy codes;

15 “(B) to collect and disseminate quan-
16 titative data on construction and codes imple-
17 mentation, including code pathways, perform-
18 ance metrics, and technologies used;

19 “(C) to develop and implement a plan for
20 highly effective codes implementation, including
21 measuring compliance;

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

24 “(E) to implement updates in energy codes
25 for—

1 “(i) new residential and commercial
2 buildings (including multifamily buildings);
3 and

4 “(ii) additions and alterations to ex-
5 isting residential and commercial buildings
6 (including multifamily buildings).

7 “(2) RELATED TOPICS.—Training and mate-
8 rials provided using a grant under this section may
9 include information on the relationship between en-
10 ergy codes and—

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

13 “(B) improving resilience, health, and safe-
14 ty;

15 “(C) water savings and other environ-
16 mental impacts; and

17 “(D) the economic impacts of energy
18 codes.

19 “(e) AUTHORIZATION OF APPROPRIATIONS.—There
20 are authorized to be appropriated to the Secretary to carry
21 out this section—

22 “(1) \$25,000,000 for each of fiscal years 2020
23 through 2029; and

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

1 (b) CONFORMING AMENDMENT.—Section 303 of the
2 Energy Conservation and Production Act (42 U.S.C.
3 6832) is amended, in the matter preceding paragraph (1),
4 by striking “As used in” and inserting “Except as other-
5 wise provided, in”.

6 **SEC. 103. COMMERCIAL BUILDING ENERGY CONSUMPTION**
7 **INFORMATION SHARING.**

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

16 (b) CONTENT OF AGREEMENT.—The agreement
17 shall—

18 (1) provide that the Administrator shall have
19 access to building-specific data in the Portfolio Man-
20 ager database of the Environmental Protection
21 Agency;

22 (2) describe the manner in which the Adminis-
23 trator shall incorporate appropriate data (including
24 the data described in subsection (c)) into any Com-
25 mercial Buildings Energy Consumption Survey (re-

1 ferred to in this section as “CBECS”) published
2 after the date of enactment of this Act for the pur-
3 pose of analyzing and estimating building popu-
4 lation, size, location, activity, energy usage, and any
5 other relevant building characteristic; and

6 (3) describe and compare—

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

18 (B) consistencies and variations in data for
19 buildings that were captured in the 2012
20 CBECS cycle and in the Portfolio Manager
21 database of the Environmental Protection
22 Agency.

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

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

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

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

8 (d) PROTECTION OF INFORMATION.—In carrying out
9 the agreement, the Administrator and the Administrator
10 of the Environmental Protection Agency shall protect in-
11 formation in accordance with—

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

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

17 (3) any other applicable law (including regula-
18 tions).

19 **Subtitle B—Worker Training and** 20 **Capacity Building**

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

22 (a) IN GENERAL.—The Secretary shall provide
23 grants to institutions of higher education (as defined in
24 section 101 of the Higher Education Act of 1965 (20
25 U.S.C. 1001)) and Tribal Colleges or Universities (as de-

1 fined in section 316(b) of that Act (20 U.S.C. 1059c(b)))

2 to establish building training and assessment centers—

3 (1) to identify opportunities for optimizing en-
4 ergy efficiency and environmental performance in
5 buildings;

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

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

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

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

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

1 (b) COORDINATION AND NONDUPLICATION.—

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

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

10 (c) AUTHORIZATION OF APPROPRIATIONS.—There is
11 authorized to be appropriated to carry out this section
12 \$10,000,000, to remain available until expended.

13 **SEC. 112. CAREER SKILLS TRAINING.**

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

17 (1) includes the equal participation of industry,
18 including public or private employers, and labor or-
19 ganizations, including joint labor-management train-
20 ing programs;

21 (2) may include workforce investment boards,
22 community-based organizations, qualified service and
23 conservation corps, educational institutions, small
24 businesses, cooperatives, State and local veterans
25 agencies, and veterans service organizations; and

1 (3) demonstrates—

2 (A) experience in implementing and oper-
3 ating worker skills training and education pro-
4 grams;

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

11 (C) the ability to help individuals achieve
12 economic self-sufficiency.

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

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

1 (d) AUTHORIZATION OF APPROPRIATIONS.—There is
2 authorized to be appropriated to carry out this section
3 \$10,000,000, to remain available until expended.

4 **Subtitle C—School Buildings**

5 **SEC. 121. COORDINATION OF ENERGY RETROFITTING AS-** 6 **SISTANCE FOR SCHOOLS.**

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

9 (1) an elementary school or secondary school
10 (as defined in section 8101 of the Elementary and
11 Secondary Education Act of 1965 (20 U.S.C.
12 7801));

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

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

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

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

1 (6) a Tribal College or University (as defined in
2 section 316(b) of the Higher Education Act of 1965
3 (20 U.S.C. 1059c(b))).

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

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

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

1 able energy, and energy retrofitting projects for
2 schools;

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

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

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

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

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

1 (B) to install systems that individually
2 generate energy from renewable energy re-
3 sources;

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

8 (D) to promote—

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

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

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

1 energy efficiency, renewable energy, and energy retro-
2 fitting projects; and

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

5 (A) have successfully implemented energy
6 efficiency, renewable energy, and energy retro-
7 fitting projects; and

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

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

15 **TITLE II—INDUSTRIAL EFFI-**
16 **CIENCY AND COMPETITIVE-**
17 **NESS**

18 **Subtitle A—Manufacturing Energy**
19 **Efficiency**

20 **SEC. 201. PURPOSES.**

21 The purposes of this subtitle are—

22 (1) to establish a clear and consistent authority
23 for industrial efficiency programs of the Department
24 of Energy;

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

4 (3) to accelerate the development and dem-
5 onstration of technologies that will assist the deploy-
6 ment goals of the industrial efficiency programs of
7 the Department of Energy and increase manufac-
8 turing efficiency;

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

11 (5) to meet the future workforce needs of in-
12 dustry; and

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

16 **SEC. 202. FUTURE OF INDUSTRY PROGRAM AND INDUS-**
17 **TRIAL RESEARCH AND ASSESSMENT CEN-**
18 **TERS.**

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

22 (1) by striking the section heading and insert-
23 ing the following: “**FUTURE OF INDUSTRY PRO-**
24 **GRAM**”;

25 (2) in subsection (a)(2)—

1 (A) by redesignating subparagraph (E) as
2 subparagraph (F); and

3 (B) by inserting after subparagraph (D)
4 the following:

5 “(E) water and wastewater treatment fa-
6 cilities, including systems that treat municipal,
7 industrial, and agricultural waste; and”;

8 (3) by striking subsection (e); and

9 (4) by redesignating subsection (f) as sub-
10 section (e).

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

15 **“SEC. 454. INDUSTRIAL RESEARCH AND ASSESSMENT CEN-**
16 **TERS.**

17 “(a) DEFINITIONS.—In this section:

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

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

1 “(B) any utility operating under a utility
2 energy service project.

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

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

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

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

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

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

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

25 “(i) smart manufacturing;

1 “(ii) energy management systems;

2 “(iii) sustainable manufacturing; and

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

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

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

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

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

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

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

4 “(1) coordinate with Manufacturing Extension
5 Partnership Centers of the National Institute of
6 Standards and Technology;

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

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

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

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

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

1 “(d) OUTREACH.—The Secretary shall provide fund-
2 ing for—

3 “(1) outreach activities by the industrial re-
4 search and assessment centers to inform small- and
5 medium-sized manufacturers of the information,
6 technologies, and services available; and

7 “(2) coordination activities by each industrial
8 research and assessment center to leverage efforts
9 with—

10 “(A) Federal and State efforts;

11 “(B) the efforts of utilities and energy
12 service providers;

13 “(C) the efforts of regional energy effi-
14 ciency organizations; and

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

17 “(e) CENTERS OF EXCELLENCE.—

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

22 “(2) DUTIES.—A Center of Excellence shall co-
23 ordinate with and advise the industrial research and
24 assessment centers located in the region of the Cen-
25 ter of Excellence, including—

1 “(A) by mentoring new directors and staff
2 of the industrial research and assessment cen-
3 ters with respect to—

4 “(i) the availability of resources; and

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

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

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

21 “(D) by identifying and coordinating with
22 regional, State, local, and utility energy effi-
23 ciency programs for the purpose of facilitating
24 efforts by industrial research and assessment
25 centers to connect industrial facilities receiving

1 assessments from those centers with regional,
2 State, local, and utility energy efficiency pro-
3 grams that could aid the industrial facilities in
4 implementing any recommendations resulting
5 from the assessments;

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

10 “(F) by coordinating the outreach activi-
11 ties of the industrial research and assessment
12 centers under subsection (d)(1).

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

18 “(f) EXPANSION OF INDUSTRIAL RESEARCH AND AS-
19 SESSMENT CENTERS.—

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

24 “(2) PURPOSE.—

1 “(A) IN GENERAL.—Subject to subpara-
2 graph (B), to the maximum extent practicable,
3 an industrial research and assessment center
4 established under paragraph (1) shall have the
5 same purpose as an institution of higher edu-
6 cation-based industrial research center that is
7 funded by the Secretary under subsection
8 (b)(1).

9 “(B) CONSIDERATION OF CAPABILITIES.—
10 In evaluating or establishing the purpose of an
11 industrial research and assessment center es-
12 tablished under paragraph (1), the Secretary
13 shall take into consideration the varying capa-
14 bilities of trade schools, community colleges,
15 and union training programs.

16 “(g) WORKFORCE TRAINING.—

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

23 “(2) APPRENTICESHIPS.—The Secretary shall
24 pay the Federal share of associated apprenticeship
25 programs under which—

1 “(A) students work with or for industries,
2 manufacturers, and energy service providers to
3 implement the recommendations of industrial
4 research and assessment centers; and

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

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

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

24 “(i) FUNDING.—There is authorized to be appro-
25 priated to the Secretary to carry out this section

1 \$30,000,000 for each fiscal year, to remain available until
2 expended.”.

3 (c) CLERICAL AMENDMENT.—The table of contents
4 of the Energy Independence and Security Act of 2007 (42
5 U.S.C. prec. 17001) is amended by adding at the end of
6 the items relating to subtitle D of title IV the following:

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

7 **SEC. 203. SUSTAINABLE MANUFACTURING INITIATIVE.**

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

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

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

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

19 “(2) preventing pollution and minimizing waste;

20 “(3) improving efficient use of water in manu-
21 facturing processes;

22 “(4) conserving natural resources; and

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

1 “(b) COORDINATION.—To implement any rec-
2 ommendations resulting from an onsite technical assess-
3 ment carried out under subsection (a) and to accelerate
4 the adoption of new and existing technologies and proc-
5 esses that improve energy efficiency, the Secretary shall
6 coordinate with—

7 “(1) the Advanced Manufacturing Office of the
8 Department of Energy;

9 “(2) the Building Technologies Office of the
10 Department of Energy;

11 “(3) the Federal Energy Management Program
12 of the Department of Energy; and

13 “(4) the private sector and other appropriate
14 agencies, including the National Institute of Stand-
15 ards and Technology.

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

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

“Sec. 376. Sustainable manufacturing initiative.”.

5 **SEC. 204. CONFORMING AMENDMENTS.**

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

8 (b) Sections 131, 132, 133, 2103, and 2107 of the
9 Energy Policy Act of 1992 (42 U.S.C. 6348, 6349, 6350,
10 13453, 13456) are repealed.

11 (c) Section 2101(a) of the Energy Policy Act of 1992
12 (42 U.S.C. 13451(a)) is amended in the third sentence
13 by striking “sections 2102, 2103, 2104, 2105, 2106,
14 2107, and 2108” and inserting “sections 2102, 2104,
15 2105, 2106, and 2108 of this Act and section 376 of the
16 Energy Policy and Conservation Act,”.

17 **Subtitle B—Extended Product**
18 **System Rebate Program**

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

20 (a) DEFINITIONS.—In this section:

21 (1) ELECTRIC MOTOR.—The term “electric
22 motor” has the meaning given the term in section
23 431.12 of title 10, Code of Federal Regulations (as
24 in effect on the date of enactment of this Act).

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

3 (A) a power converter; or

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

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

10 (A) offers variable speed or multispeed op-
11 eration;

12 (B) offers partial load control that reduces
13 input energy requirements (as measured in kilo-
14 watt-hours) as compared to identified base lev-
15 els set by the Secretary; and

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

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

19 (4) QUALIFIED EXTENDED PRODUCT SYS-
20 TEM.—

21 (A) IN GENERAL.—The term “qualified ex-
22 tended product system” means an extended
23 product system that—

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

1 (ii) reduces the input energy (as
2 measured in kilowatt-hours) required to
3 operate the extended product system by
4 not less than 5 percent, as compared to
5 identified base levels set by the Secretary.

6 (B) INCLUSIONS.—The term “qualified ex-
7 tended product system” includes commercial or
8 industrial machinery or equipment that—

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

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

16 (ii) was previously used prior to, and
17 was placed back into service during, cal-
18 endar year 2020 or 2021.

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

24 (c) QUALIFIED ENTITIES.—

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

3 (A) in the case of a qualified extended
4 product system described in subsection
5 (a)(4)(A), the purchaser of the qualified ex-
6 tended product that is installed; and

7 (B) in the case of a qualified extended
8 product system described in subsection
9 (a)(4)(B), the manufacturer of the commercial
10 or industrial machinery or equipment that in-
11 corporated the extended product system into
12 that machinery or equipment.

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

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

19 (B) a certification that includes dem-
20 onstrated evidence—

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

22 and

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

1 (aa) that the qualified entity in-
2 stalled the qualified extended product
3 system during the 2 fiscal years fol-
4 lowing the date of enactment of this
5 Act;

6 (bb) that the qualified extended
7 product system meets the require-
8 ments of subsection (a)(4)(A); and

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

15 (II) in the case of a qualified entity
16 described in paragraph (1)(B), dem-
17 onstrated evidence—

18 (aa) that the qualified extended
19 product system meets the require-
20 ments of subsection (a)(4)(B); and

21 (bb) showing the serial number,
22 manufacturer, and model number
23 from the nameplate of the installed
24 motor of the qualified entity with

1 which the extended product system is
2 integrated.

3 (d) AUTHORIZED AMOUNT OF REBATE.—

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

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

9 (i) the electric motor to which the
10 qualified extended product system is at-
11 tached; and

12 (ii) the electronic control; and

13 (B) \$25.

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

18 (e) AUTHORIZATION OF APPROPRIATIONS.—There is
19 authorized to be appropriated to carry out this section
20 \$5,000,000 for each of the first 2 full fiscal years following
21 the date of enactment of this Act, to remain available until
22 expended.

1 **Subtitle C—Transformer Rebate**
2 **Program**

3 **SEC. 221. ENERGY EFFICIENT TRANSFORMER REBATE PRO-**
4 **GRAM.**

5 (a) DEFINITIONS.—In this section:

6 (1) QUALIFIED ENERGY EFFICIENT TRANS-
7 FORMER.—The term “qualified energy efficient
8 transformer” means a transformer that meets or ex-
9 ceeds the applicable energy conservation standards
10 described in the tables in subsection (b)(2) and
11 paragraphs (1) and (2) of subsection (c) of section
12 431.196 of title 10, Code of Federal Regulations (as
13 in effect on the date of enactment of this Act).

14 (2) QUALIFIED ENERGY INEFFICIENT TRANS-
15 FORMER.—The term “qualified energy inefficient
16 transformer” means a transformer with an equal
17 number of phases and capacity to a transformer de-
18 scribed in any of the tables in subsection (b)(2) and
19 paragraphs (1) and (2) of subsection (c) of section
20 431.196 of title 10, Code of Federal Regulations (as
21 in effect on the date of enactment of this Act)
22 that—

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

1 (B)(i) was manufactured between January
2 1, 1987, and December 31, 2008, for a trans-
3 former with an equal number of phases and ca-
4 pacity as a transformer described in the table
5 in subsection (b)(2) of section 431.196 of title
6 10, Code of Federal Regulations (as in effect on
7 the date of enactment of this Act); or

8 (ii) was manufactured between January 1,
9 1992, and December 31, 2011, for a trans-
10 former with an equal number of phases and ca-
11 pacity as a transformer described in the table
12 in paragraph (1) or (2) of subsection (c) of that
13 section (as in effect on the date of enactment
14 of this Act).

15 (3) QUALIFIED ENTITY.—The term “qualified
16 entity” means an owner of industrial or manufac-
17 turing facilities, commercial buildings, or multifamily
18 residential buildings, a utility, or an energy service
19 company that fulfills the requirements of subsection
20 (d).

21 (b) ESTABLISHMENT.—Not later than 90 days after
22 the date of enactment of this Act, the Secretary shall es-
23 tablish a program to provide rebates to qualified entities
24 for expenditures made by the qualified entity for the re-

1 placement of a qualified energy inefficient transformer
2 with a qualified energy efficient transformer.

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

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

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

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

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

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

19 (B) for transformers described in sub-
20 section (a)(2)(B)(i), as selected from a table of
21 default values as determined by the Secretary
22 in consultation with applicable industry; and

23 (5) that the qualified energy inefficient trans-
24 former has been permanently decommissioned and
25 scrapped.

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

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

9 (A) the qualified energy inefficient trans-
10 former; and

11 (B) the qualified energy efficient trans-
12 former; or

13 (2) for a transformer described in subsection
14 (a)(2)(B)(i), the amount determined using a table of
15 default rebate values by rated transformer output,
16 as measured in kilovolt-amperes, as determined by
17 the Secretary in consultation with applicable indus-
18 try.

19 (e) AUTHORIZATION OF APPROPRIATIONS.—There is
20 authorized to be appropriated to carry out this section
21 \$5,000,000 for each of fiscal years 2020 and 2021, to re-
22 main available until expended.

23 (f) TERMINATION OF EFFECTIVENESS.—The author-
24 ity provided by this section terminates on December 31,
25 2021.

1 **TITLE III—FEDERAL AGENCY**
2 **ENERGY EFFICIENCY**

3 **SEC. 301. ENERGY-EFFICIENT AND ENERGY-SAVING INFOR-**
4 **MATION TECHNOLOGIES.**

5 Section 543 of the National Energy Conservation
6 Policy Act (42 U.S.C. 8253) is amended by adding at the
7 end the following:

8 “(h) FEDERAL IMPLEMENTATION STRATEGY FOR
9 ENERGY-EFFICIENT AND ENERGY-SAVING INFORMATION
10 TECHNOLOGIES.—

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

12 “(A) DIRECTOR.—The term ‘Director’
13 means the Director of the Office of Manage-
14 ment and Budget.

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

19 “(2) DEVELOPMENT OF IMPLEMENTATION
20 STRATEGY.—Not later than 1 year after the date of
21 enactment of the Energy Savings and Industrial
22 Competitiveness Act of 2019, each Federal agency
23 shall coordinate with the Director, the Secretary,
24 and the Administrator of the Environmental Protec-
25 tion Agency to develop an implementation strategy

1 (including best-practices and measurement and
2 verification techniques) for the maintenance, pur-
3 chase, and use by the Federal agency of energy-effi-
4 cient and energy-saving information technologies at
5 or for facilities owned and operated by the Federal
6 agency, taking into consideration the performance
7 goals established under paragraph (4).

8 “(3) ADMINISTRATION.—In developing an im-
9 plementation strategy under paragraph (2), each
10 Federal agency shall consider—

11 “(A) advanced metering infrastructure;

12 “(B) energy efficient data center strategies
13 and methods of increasing asset and infrastruc-
14 ture utilization;

15 “(C) advanced power management tools;

16 “(D) building information modeling, in-
17 cluding building energy management;

18 “(E) secure telework and travel substi-
19 tution tools; and

20 “(F) mechanisms to ensure that the agen-
21 cy realizes the energy cost savings of increased
22 efficiency and utilization.

23 “(4) PERFORMANCE GOALS.—

24 “(A) IN GENERAL.—Not later than 180
25 days after the date of enactment of the Energy

1 Savings and Industrial Competitiveness Act of
2 2019, the Director, in consultation with the
3 Secretary, shall establish performance goals for
4 evaluating the efforts of Federal agencies in im-
5 proving the maintenance, purchase, and use of
6 energy-efficient and energy-saving information
7 technology at or for facilities owned and oper-
8 ated by the Federal agencies.

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

17 “(i) energy savings performance con-
18 tracting; and

19 “(ii) utility energy services con-
20 tracting.

21 “(5) REPORTS.—

22 “(A) AGENCY REPORTS.—Each Federal
23 agency shall include in the report of the agency
24 under section 527 of the Energy Independence
25 and Security Act of 2007 (42 U.S.C. 17143) a

1 description of the efforts and results of the
2 agency under this subsection.

3 “(B) OMB GOVERNMENT EFFICIENCY RE-
4 PORTS AND SCORECARDS.—Effective beginning
5 not later than October 1, 2019, the Director
6 shall include in the annual report and scorecard
7 of the Director required under section 528 of
8 the Energy Independence and Security Act of
9 2007 (42 U.S.C. 17144) a description of the ef-
10 forts and results of Federal agencies under this
11 subsection.

12 “(C) USE OF EXISTING REPORTING STRUC-
13 TURES.—The Director may require Federal
14 agencies to submit any information required to
15 be submitted under this subsection though re-
16 porting structures in use as of the date of en-
17 actment of the Energy Savings and Industrial
18 Competitiveness Act of 2019.”.

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

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

22 (1) in subsection (b)—

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

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

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

4 “(c) STAKEHOLDER INVOLVEMENT.—

5 “(1) IN GENERAL.—The Secretary and the Ad-
6 ministrator shall carry out subsection (b) in collabo-
7 ration with the information technology industry and
8 other key stakeholders, with the goal of producing
9 results that accurately reflect the most relevant and
10 useful information.

11 “(2) CONSIDERATIONS.—In carrying out the
12 collaboration described in paragraph (1), the Sec-
13 retary and the Administrator shall pay particular at-
14 tention to organizations that—

15 “(A) have members with expertise in en-
16 ergy efficiency and in the development, oper-
17 ation, and functionality of data centers, infor-
18 mation technology equipment, and software, in-
19 cluding representatives of hardware manufac-
20 turers, data center operators, and facility man-
21 agers;

22 “(B) obtain and address input from the
23 National Laboratories (as that term is defined
24 in section 2 of the Energy Policy Act of 2005
25 (42 U.S.C. 15801)) or any institution of higher

1 education, research institution, industry asso-
2 ciation, company, or public interest group with
3 applicable expertise;

4 “(C) follow—

5 “(i) commonly accepted procedures
6 for the development of specifications; and

7 “(ii) accredited standards development
8 processes; or

9 “(D) have a mission to promote energy ef-
10 ficiency for data centers and information tech-
11 nology.

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

20 “(e) STUDY.—

21 “(1) DEFINITION OF REPORT.—In this sub-
22 section, the term ‘report’ means the report of the
23 Lawrence Berkeley National Laboratory entitled
24 ‘United States Data Center Energy Usage Report’
25 and dated June 2016, which was prepared as an up-

1 date to the ‘Report to Congress on Server and Data
2 Center Energy Efficiency’, published on August 2,
3 2007, pursuant to section 1 of Public Law 109–431
4 (120 Stat. 2920).

5 “(2) STUDY.—Not later than 4 years after the
6 date of enactment of the Energy Savings and Indus-
7 trial Competitiveness Act of 2019, the Secretary, in
8 collaboration with the Administrator, shall make
9 available to the public an update to the report that
10 provides—

11 “(A) a comparison and gap analysis of the
12 estimates and projections contained in the re-
13 port with new data regarding the period from
14 2015 through 2019;

15 “(B) an analysis considering the impact of
16 information technologies, including
17 virtualization and cloud computing, in the pub-
18 lic and private sectors;

19 “(C) an evaluation of the impact of the
20 combination of cloud platforms, mobile devices,
21 social media, and big data on data center en-
22 ergy usage;

23 “(D) an evaluation of water usage in data
24 centers and recommendations for reductions in
25 that water usage; and

1 “(E) updated projections and recommenda-
2 tions for best practices through fiscal year
3 2025.

4 “(f) DATA CENTER ENERGY PRACTITIONER PRO-
5 GRAM.—

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

14 “(2) EVALUATIONS.—Each Federal agency
15 shall consider having the data centers of the agency
16 evaluated once every 4 years by energy practitioners
17 certified pursuant to the program, whenever prac-
18 ticable using certified practitioners employed by the
19 agency.

20 “(g) OPEN DATA INITIATIVE.—

21 “(1) IN GENERAL.—The Secretary, in collabo-
22 ration with key stakeholders and the Director of the
23 Office of Management and Budget, shall establish
24 an open data initiative relating to energy usage at
25 federally owned and operated data centers, with the

1 purpose of making the data available and accessible
2 in a manner that encourages further data center in-
3 novation, optimization, and consolidation.

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

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

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

17 “(j) PROTECTION OF PROPRIETARY INFORMATION.—
18 The Secretary and the Administrator shall not disclose
19 any proprietary information or trade secrets provided by
20 any individual or company for the purposes of carrying
21 out this section or the programs and initiatives established
22 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.”.

1 **Subtitle B—Federal Green**
2 **Buildings**

3 **SEC. 411. HIGH-PERFORMANCE GREEN FEDERAL BUILD-**
4 **INGS.**

5 Section 436(h) of the Energy Independence and Se-
6 curity Act of 2007 (42 U.S.C. 17092(h)) is amended—

7 (1) in the subsection heading, by striking “SYS-
8 TEM” and inserting “SYSTEMS”;

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

11 “(1) IN GENERAL.—Based on an ongoing re-
12 view, the Federal Director shall identify and shall
13 provide to the Secretary pursuant to section
14 305(a)(3)(D) of the Energy Conservation and Pro-
15 duction Act (42 U.S.C. 6834(a)(3)(D)) a list of
16 those certification systems that the Director identi-
17 fies as the most likely to encourage a comprehensive
18 and environmentally sound approach to certification
19 of green buildings.”; and

20 (3) in paragraph (2)—

21 (A) in the matter preceding subparagraph
22 (A), by striking “system” and inserting “sys-
23 tems”;

24 (B) by striking subparagraph (A) and in-
25 serting 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 consideration

8 —

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 comissioning 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
14 retrocommissioning 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-

1 tion and recommissioning or
2 retrocommissioning;

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

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

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

13 “(bb) the date—

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

17 “(BB) on which ongoing
18 commissioning began; or

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

23 “(4) IMPLEMENTATION OF IDENTIFIED ENERGY
24 AND WATER EFFICIENCY MEASURES.—Not later
25 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) is amended by adding at the
22 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 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 (b) FEDERAL BUILDING EFFICIENCY STANDARDS.—
15 Section 305 of the Energy Conservation and Production
16 Act (42 U.S.C. 6834) is amended—

17 (1) in subsection (a)(3)—

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

21 “(3) REVISED FEDERAL BUILDING ENERGY EF-
22 FICIENCY PERFORMANCE STANDARDS; CERTIFI-
23 CATION FOR GREEN BUILDINGS.—

1 “(A) REVISED FEDERAL BUILDING EN-
2 ERGY EFFICIENCY PERFORMANCE STAND-
3 ARDS.—

4 “(i) IN GENERAL.—Not later than 1
5 year after the date of enactment of the En-
6 ergy Savings and Industrial Competitive-
7 ness Act of 2019, the Secretary shall es-
8 tablish, by regulation, revised Federal
9 building energy efficiency performance
10 standards that require that—

11 “(I) subject to clause (ii), new
12 Federal buildings and Federal build-
13 ings with major renovations—

14 “(aa) meet or exceed the
15 most recently published version
16 of the International Energy Con-
17 servation Code (in the case of
18 residential buildings) or
19 ASHRAE Standard 90.1 (in the
20 case of commercial buildings) as
21 of the date of enactment of the
22 Energy Savings and Industrial
23 Competitiveness Act of 2019; and

24 “(bb) meet or exceed the en-
25 ergy provisions of the State and

1 local building codes applicable to
2 the building if the codes are more
3 stringent than the most recently
4 published version of the Inter-
5 national Energy Conservation
6 Code or ASHRAE Standard 90.1
7 as of the date of enactment of
8 the Energy Savings and Indus-
9 trial Competitiveness Act of
10 2019, as applicable;

11 “(II) unless demonstrated not to
12 be life cycle cost-effective for new
13 Federal buildings and Federal build-
14 ings with major renovations—

15 “(aa) the buildings shall be
16 designed to achieve energy con-
17 sumption levels that are not less
18 than 30 percent below the levels
19 established in the most recently
20 published version of the Inter-
21 national Energy Conservation
22 Code or the ASHRAE Standard,
23 as of the date of enactment of
24 the Energy Savings and Indus-

1 trial Competitiveness Act of
2 2019, as appropriate; and

3 “(bb) sustainable design
4 principles are applied to the loca-
5 tion, siting, design, and construc-
6 tion of all new Federal buildings
7 and replacement Federal build-
8 ings;

9 “(III) if water is used to achieve
10 energy efficiency, water conservation
11 technologies shall be applied to the ex-
12 tent that the technologies are life-
13 cycle cost effective; and

14 “(IV) if life-cycle cost effective,
15 as compared to other reasonably avail-
16 able technologies, not less than 30
17 percent of the hot water demand for
18 each new Federal building or Federal
19 building undergoing a major renova-
20 tion be met through the installation
21 and use of solar hot water heaters.

22 “(ii) EXCEPTION.—Clause (i)(I) shall
23 not apply to the unaltered portions of Fed-
24 eral buildings and systems that have un-
25 dergone major renovations.

1 “(B) UPDATES.—Not later than 1 year
2 after the date of approval of each subsequent
3 revision of the ASHRAE Standard or the Inter-
4 national Energy Conservation Code, as appro-
5 priate, the Secretary shall determine whether
6 the revised standards established under sub-
7 clauses (I) and (II) of subparagraph (A)(i)
8 should be updated to reflect the revisions, based
9 on the energy savings and life cycle cost-effec-
10 tiveness of the revisions.”;

11 (B) in subparagraph (C), by striking “(C)
12 In the budget request” and inserting the fol-
13 lowing:

14 “(C) BUDGET REQUEST.—In the budget
15 request”; and

16 (C) by striking subparagraph (D) and in-
17 serting the following:

18 “(D) CERTIFICATION FOR GREEN BUILD-
19 INGS.—

20 “(i) SUSTAINABLE DESIGN PRIN-
21 CIPLES.—Sustainable design principles
22 shall be applied to the siting, design, and
23 construction of buildings covered by this
24 subparagraph.

1 “(ii) SELECTION OF CERTIFICATION
2 SYSTEMS.—The Secretary, after reviewing
3 the findings of the Federal Director under
4 section 436(h) of the Energy Independence
5 and Security Act of 2007 (42 U.S.C.
6 17092(h)), in consultation with the Admin-
7 istrator of General Services, and in con-
8 sultation with the Secretary of Defense re-
9 lating to those facilities under the custody
10 and control of the Department of Defense,
11 shall determine those certification systems
12 for green commercial and residential build-
13 ings that the Secretary determines to be
14 the most likely to encourage a comprehen-
15 sive and environmentally sound approach
16 to certification of green buildings.

17 “(iii) BASIS FOR SELECTION.—The
18 determination of the certification systems
19 under clause (ii) shall be based on ongoing
20 review of the findings of the Federal Direc-
21 tor under section 436(h) of the Energy
22 Independence and Security Act of 2007
23 (42 U.S.C. 17092(h)) and the criteria de-
24 scribed in clause (v).

1 “(iv) ADMINISTRATION.—In deter-
2 mining certification systems under this
3 subparagraph, the Secretary shall—

4 “(I) make a separate determina-
5 tion for all or part of each system;
6 and

7 “(II) confirm that the criteria
8 used to support the selection of build-
9 ing products, materials, brands, and
10 technologies—

11 “(aa) are based on relevant
12 technical data;

13 “(bb) use and reward eval-
14 uation of health, safety, and envi-
15 ronmental risks and impacts
16 across the lifecycle of the build-
17 ing product, material, brand, or
18 technology, including methodolo-
19 gies generally accepted by the ap-
20 plicable scientific disciplines;

21 “(cc) as practicable, give
22 preference to performance stand-
23 ards instead of prescriptive meas-
24 ures; and

1 “(dd) reward continual im-
2 provements in the lifecycle man-
3 agement of health, safety, and
4 environmental risks and impacts.

5 “(v) CONSIDERATIONS.—In deter-
6 mining the green building certification sys-
7 tems under this subparagraph, the Sec-
8 retary shall take into consideration—

9 “(I) the ability and availability of
10 assessors and auditors to independ-
11 ently verify the criteria and measure-
12 ment of metrics at the scale necessary
13 to implement this subparagraph;

14 “(II) the ability of the applicable
15 certification organization to collect
16 and reflect public comment;

17 “(III) the ability of the standard
18 to be developed and revised through a
19 consensus-based process;

20 “(IV) an evaluation of the
21 robustness of the criteria for a high-
22 performance green building, which
23 shall give credit for promoting—

1 “(aa) efficient and sustain-
2 able use of water, energy, and
3 other natural resources;

4 “(bb) use of renewable en-
5 ergy sources;

6 “(cc) improved indoor envi-
7 ronmental quality through en-
8 hanced indoor air quality, ther-
9 mal comfort, acoustics, day light-
10 ing, pollutant source control, and
11 use of low-emission materials and
12 building system controls;

13 “(dd)(AA) the sourcing of
14 grown, harvested, or mined mate-
15 rials; and

16 “(BB) certifications of re-
17 sponsible sourcing, such as cer-
18 tifications provided by the Forest
19 Stewardship Council, the Sus-
20 tainable Forestry Initiative, the
21 American Tree Farm System, or
22 the Programme for the Endorse-
23 ment of Forest Certification; and

1 “(ee) such other criteria as
2 the Secretary determines to be
3 appropriate; and

4 “(V) national recognition within
5 the building industry.

6 “(vi) REVIEW.—The Secretary, in
7 consultation with the Administrator of
8 General Services and the Secretary of De-
9 fense, shall conduct an ongoing review to
10 evaluate and compare private sector green
11 building certification systems, taking into
12 account—

13 “(I) the criteria described in
14 clause (v); and

15 “(II) the identification made by
16 the Federal Director under section
17 436(h) of the Energy Independence
18 and Security Act of 2007 (42 U.S.C.
19 17092(h)).

20 “(vii) EXCLUSIONS.—

21 “(I) IN GENERAL.—Subject to
22 subclause (II), if a certification sys-
23 tem fails to meet the review require-
24 ments of clause (v), the Secretary
25 shall—

1 “(aa) identify the portions
2 of the system, whether pre-
3 requisites, credits, points, or oth-
4 erwise, that meet the review cri-
5 teria of clause (v);

6 “(bb) determine the portions
7 of the system that are suitable
8 for use; and

9 “(cc) exclude all other por-
10 tions of the system from identi-
11 fication and use.

12 “(II) ENTIRE SYSTEMS.—The
13 Secretary shall exclude an entire sys-
14 tem from use if an exclusion under
15 subclause (I)—

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

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

21 “(cc) increases agency costs
22 of the use.

23 “(viii) INTERNAL CERTIFICATION
24 PROCESSES.—The Secretary may by rule
25 allow Federal agencies to develop internal

1 certification processes, using certified pro-
2 fessionals, in lieu of certification by certifi-
3 cation entities identified under clause (ii).

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

14 “(x) WATER CONSERVATION TECH-
15 NOLOGIES.—In addition to any use of
16 water conservation technologies otherwise
17 required by this section, water conservation
18 technologies shall be applied to the extent
19 that the technologies are life-cycle cost-ef-
20 fective.

21 “(xi) EFFECTIVE DATE.—

22 “(I) DETERMINATIONS MADE
23 AFTER DECEMBER 31, 2019.—The
24 amendments made by section
25 422(b)(1)(C) of the Energy Savings

1 and Industrial Competitiveness Act of
2 2019 shall apply to any determination
3 made by a Federal agency after De-
4 cember 31, 2019.

5 “(II) DETERMINATIONS MADE ON
6 OR BEFORE DECEMBER 31, 2019.—
7 This subparagraph (as in effect on the
8 day before the date of enactment of
9 the Energy Savings and Industrial
10 Competitiveness Act of 2019) shall
11 apply to any use of a certification sys-
12 tem for green commercial and residen-
13 tial buildings by a Federal agency on
14 or before December 31, 2019.”; and

15 (2) by striking subsections (c) and (d) and in-
16 serting the following:

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

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

21 “(2) on completion of a review under paragraph
22 (1), if the Secretary determines that significant en-
23 ergy savings would result, upgrade the standards to
24 include all new energy efficiency and renewable en-

1 (I) by inserting “and Federal
2 buildings with major renovations”
3 after “new buildings”; and

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

6 “(2) APPLICABILITY.—

7 “(A) IN GENERAL.—The Federal”; and

8 (2) in subsection (b)—

9 (A) by striking the subsection heading and
10 inserting “EXPENDITURES”; and

11 (B) by inserting “or a Federal building
12 with major renovations” after “new Federal
13 building”.

14 **SEC. 424. ENHANCED ENERGY EFFICIENCY UNDER-**
15 **WRITING.**

16 (a) DEFINITIONS.—In this section:

17 (1) COVERED AGENCY.—The term “covered
18 agency”—

19 (A) means—

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

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

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

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

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

10 (4) MORTGAGEE.—The term “mortgagee”
11 means—

12 (A) an original lender under a covered loan
13 or the holder of a covered loan at the time at
14 which that mortgage transaction is con-
15 summated;

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

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

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

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

3 (6) SERVICER.—The term “servicer” means the
4 person or entity responsible for the servicing of a
5 covered loan, including the person or entity who
6 makes or holds a covered loan if that person or enti-
7 ty also services the covered loan.

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

12 (b) FINDINGS AND PURPOSES.—

13 (1) FINDINGS.—Congress finds that—

14 (A) energy costs for homeowners are a sig-
15 nificant and increasing portion of their house-
16 hold budgets;

17 (B) household energy use can vary sub-
18 stantially depending on the efficiency and char-
19 acteristics of the house;

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

22 (D) the current test for loan affordability
23 used by most covered agencies, commonly
24 known as the “debt-to-income” test, is inad-
25 equate because it does not take into account the

1 expected energy cost savings for the homeowner
2 of an energy efficient home; and

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

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

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

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

23 (C) require a covered agency to include the
24 value home buyers place on the energy effi-
25 ciency of a house in tests used to compare the

1 mortgage amount to home value, taking pre-
2 cautions to avoid double-counting and to sup-
3 port safe and sound lending.

4 (c) ENHANCED ENERGY EFFICIENCY UNDER-
5 WRITING CRITERIA.—

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

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

18 (A) IN GENERAL.—The enhanced loan eli-
19 gibility requirements under paragraph (1) shall
20 require that, for all covered loans for which an
21 energy efficiency report is voluntarily provided
22 to the mortgagee by the mortgagor, the covered
23 agency and the mortgagee shall take into con-
24 sideration the estimated energy cost savings ex-
25 pected for the owner of the subject property in

1 determining whether the loan applicant has suf-
2 ficient income to service the mortgage debt plus
3 other regular expenses.

4 (B) EXPENSES AS OFFSETS.—To the ex-
5 tent that a covered agency uses a test such as
6 a debt-to-income test that includes certain reg-
7 ular expenses, such as hazard insurance and
8 property taxes, the expected energy cost savings
9 shall be included as an offset to these expenses.

10 (C) ASSESSED ENERGY COSTS.—Energy
11 costs to be assessed include the cost of elec-
12 tricity, natural gas, oil, and any other fuel regu-
13 larly used to supply energy to the subject prop-
14 erty.

15 (3) DETERMINATION OF ESTIMATED ENERGY
16 COST SAVINGS.—

17 (A) IN GENERAL.—The guidelines to be
18 issued under paragraph (1) shall include in-
19 structions for the covered agency to calculate
20 estimated energy cost savings using—

- 21 (i) the energy efficiency report;
- 22 (ii) an estimate of baseline average
23 energy costs; and
- 24 (iii) additional sources of information
25 as determined by the Secretary.

1 (B) REPORT REQUIREMENTS.—For the
2 purposes of subparagraph (A), an energy effi-
3 ciency report shall—

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

8 (ii) be prepared in accordance with
9 the guidelines to be issued under para-
10 graph (1); and

11 (iii) be prepared—

12 (I) in accordance with the Resi-
13 dential Energy Service Network’s
14 Home Energy Rating System (com-
15 monly known as “HERS”) by an indi-
16 vidual certified by the Residential En-
17 ergy Service Network, unless the Sec-
18 retary finds that the use of HERS
19 does not further the purposes of this
20 section; or

21 (II) by other methods approved
22 by the Secretary, in consultation with
23 the Secretary of Energy and the advi-
24 sory group established in subsection
25 (f)(2), for use under this section,

1 which shall include a third-party qual-
2 ity assurance procedure.

3 (C) USE BY APPRAISER.—If an energy ef-
4 ficiency report is used under paragraph (2), the
5 energy efficiency report shall be provided to the
6 appraiser to estimate the energy efficiency of
7 the subject property and for potential adjust-
8 ments for energy efficiency.

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

14 (A) inform the loan applicant of the ex-
15 pected energy costs as estimated in the energy
16 efficiency report, in a manner and at a time as
17 prescribed by the Secretary, and if practicable,
18 in the documents delivered at the time of loan
19 application; and

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

23 (5) REQUIRED DISCLOSURE TO CONSUMER FOR
24 A HOME WITHOUT AN ENERGY EFFICIENCY RE-
25 PORT.—If an energy efficiency report is not used

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

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

11 (B) the impact the typical energy cost sav-
12 ings would have on monthly ownership costs of
13 a typical home;

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

18 (D) resources for improving the energy ef-
19 ficiency of a home.

20 (6) PRICING OF LOANS.—

21 (A) IN GENERAL.—A covered agency may
22 price covered loans originated under the en-
23 hanced loan eligibility requirements required
24 under this section in accordance with the esti-
25 mated risk of the loans.

1 (B) IMPOSITION OF CERTAIN MATERIAL
2 COSTS, IMPEDIMENTS, OR PENALTIES.—In the
3 absence of a publicly disclosed analysis that
4 demonstrates significant additional default risk
5 or prepayment risk associated with the loans, a
6 covered agency shall not impose material costs,
7 impediments, or penalties on covered loans
8 merely because the loan uses an energy effi-
9 ciency report or the enhanced loan eligibility re-
10 quirements required under this section.

11 (7) LIMITATIONS.—

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

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

19 (i) modify existing underwriting cri-
20 teria or adopt new underwriting criteria
21 that intentionally negate or reduce the im-
22 pact of the requirements or resulting bene-
23 fits that are set forth or otherwise derived
24 from the enhanced loan eligibility require-
25 ments required under this subsection; or

1 (ii) impose greater buy back require-
2 ments, credit overlays, or insurance re-
3 quirements, including private mortgage in-
4 surance, on covered loans merely because
5 the loan uses an energy efficiency report or
6 the enhanced loan eligibility requirements
7 required under this subsection.

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

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

17 (B) be available on any residential real
18 property (including individual units of con-
19 dominiums and cooperatives) that qualifies for
20 a covered loan; and

21 (C) provide prospective mortgagees with
22 sufficient guidance and applicable tools to im-
23 plement the required underwriting methods.

24 (d) ENHANCED ENERGY EFFICIENCY UNDER-
25 WRITING VALUATION GUIDELINES.—

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

4 (A) in consultation with the Federal Fi-
5 nancial Institutions Examination Council and
6 the advisory group established in subsection
7 (f)(2), develop and issue guidelines for a cov-
8 ered agency to determine the maximum per-
9 mitted loan amount based on the value of the
10 property for all covered loans made on prop-
11 erties with an energy efficiency report that
12 meets the requirements of subsection (c)(3)(B);
13 and

14 (B) in consultation with the Secretary of
15 Energy, issue guidelines for a covered agency to
16 determine the estimated energy savings under
17 paragraph (3) for properties with an energy ef-
18 ficiency report.

19 (2) REQUIREMENTS.—The enhanced energy ef-
20 ficiency underwriting valuation guidelines required
21 under paragraph (1) shall include—

22 (A) a requirement that if an energy effi-
23 ciency report that meets the requirements of
24 subsection (c)(3)(B) is voluntarily provided to
25 the mortgagee, such report shall be used by the

1 mortgagee or covered agency to determine the
2 estimated energy savings of the subject prop-
3 erty; and

4 (B) a requirement that the estimated en-
5 ergy savings of the subject property be added to
6 the appraised value of the subject property by
7 a mortgagee or covered agency for the purpose
8 of determining the loan-to-value ratio of the
9 subject property, unless the appraisal includes
10 the value of the overall energy efficiency of the
11 subject property, using methods to be estab-
12 lished under the guidelines issued under para-
13 graph (1).

14 (3) DETERMINATION OF ESTIMATED ENERGY
15 SAVINGS.—

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

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

1 be based upon the estimated life of the applica-
2 ble equipment, consistent with the rating sys-
3 tem used to produce the energy efficiency re-
4 port.

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

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

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

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

19 (C) by inserting after paragraph (3) the
20 following:

21 “(4) that State certified and licensed appraisers
22 have timely access, whenever practicable, to informa-
23 tion from the property owner and the lender that
24 may be relevant in developing an opinion of value re-

1 regarding the energy- and water-saving improvements
2 or features of a property, such as—

3 “(A) labels or ratings of buildings;

4 “(B) installed appliances, measures, sys-
5 tems or technologies;

6 “(C) blueprints;

7 “(D) construction costs;

8 “(E) financial or other incentives regard-
9 ing energy- and water-efficient components and
10 systems installed in a property;

11 “(F) utility bills;

12 “(G) energy consumption and
13 benchmarking data; and

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

20 Unless a property owner consents to a lender, an ap-
21 praiser, in carrying out the requirements of para-
22 graph (4), shall not have access to the commercial
23 or financial information of the owner that is privi-
24 leged or confidential.”.

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

5 (A) in paragraph (1), by inserting before
6 the semicolon the following: “, or any real prop-
7 erty on which the appraiser makes adjustments
8 using an energy efficiency report”; and

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

13 (6) PROTECTIONS.—

14 (A) AUTHORITY TO IMPOSE LIMITA-
15 TIONS.—The guidelines to be issued under
16 paragraph (1) shall include such limitations and
17 conditions as determined by the Secretary to be
18 necessary to protect against meaningful under
19 or over valuation of energy cost savings or du-
20 plicative counting of energy efficiency features
21 or energy cost savings in the valuation of any
22 subject property that is used to determine a
23 loan amount.

24 (B) ADDITIONAL AUTHORITY.—At the end
25 of the 7-year period following the implementa-

1 tion of enhanced eligibility and underwriting
2 valuation requirements under this section, the
3 Secretary may modify or apply additional ex-
4 ceptions to the approach described in paragraph
5 (2), where the Secretary finds that the
6 unadjusted appraisal will reflect an accurate
7 market value of the efficiency of the subject
8 property or that a modified approach will better
9 reflect an accurate market value.

10 (7) APPLICABILITY AND IMPLEMENTATION
11 DATE.—Not later than 3 years after the date of en-
12 actment of this Act, and before December 31, 2023,
13 each covered agency shall implement the guidelines
14 required under this subsection, which shall—

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

18 (B) be available on any residential real
19 property, including individual units of con-
20 dominiums and cooperatives, that qualifies for a
21 covered loan.

22 (e) MONITORING.—Not later than 1 year after the
23 date on which the enhanced eligibility and underwriting
24 valuation requirements are implemented under this sec-
25 tion, and every year thereafter, each covered agency with

1 relevant activity shall issue and make available to the pub-
2 lic a report that—

3 (1) enumerates the number of covered loans of
4 the agency for which there was an energy efficiency
5 report, and that used energy efficiency appraisal
6 guidelines and enhanced loan eligibility require-
7 ments;

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

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

13 (f) RULEMAKING.—

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

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

5 (A) mortgage lenders;

6 (B) appraisers;

7 (C) energy raters and residential energy
8 consumption experts;

9 (D) energy efficiency organizations;

10 (E) real estate agents;

11 (F) home builders and remodelers;

12 (G) State energy officials; and

13 (H) others as determined by the Secretary.

14 (g) ADDITIONAL STUDY.—

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

23 (2) RECOMMENDATIONS.—

24 (A) IN GENERAL.—The advisory group es-
25 tablished in subsection (f)(2) shall provide rec-

1 ommendations to the Secretary on any revisions
2 or additions to the enhanced energy efficiency
3 underwriting criteria deemed necessary by the
4 group, which may include alternate methods to
5 better account for home energy costs and addi-
6 tional factors to account for substantial and
7 regular costs of homeownership such as loca-
8 tion-based transportation costs and water costs.

9 (B) LEGISLATIVE RECOMMENDATIONS.—
10 The Secretary shall forward any legislative rec-
11 ommendations from the advisory group to Con-
12 gress for consideration.

13 **TITLE V—MISCELLANEOUS**

14 **SEC. 501. BUDGETARY EFFECTS.**

15 The budgetary effects of this Act, for the purpose of
16 complying with the Statutory Pay-As-You-Go Act of 2010,
17 shall be determined by reference to the latest statement
18 titled “Budgetary Effects of PAYGO Legislation” for this
19 Act, submitted for printing in the Congressional Record
20 by the Chairman of the Senate Budget Committee, pro-
21 vided that such statement has been submitted prior to the
22 vote on passage.

23 **SEC. 502. ADVANCE APPROPRIATIONS REQUIRED.**

24 The authorization of amounts under this Act and the
25 amendments made by this Act shall be effective for any

- 1 fiscal year only to the extent and in the amount provided
- 2 in advance in appropriations Acts.