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

## IN THE SENATE OF THE UNITED STATES

Mrs. Shaheen (for herself and Mr. Portman) 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 2014".
- 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.

### Subtitle A—Building Energy Codes

Sec. 101. Greater energy efficiency in building codes.

Subtitle B—Worker Training and Capacity Building

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

#### Subtitle C—School Buildings

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

#### Subtitle D—Better Buildings

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

#### Subtitle E—Energy Information for Commercial Buildings

Sec. 141. Energy information for commercial buildings.

## TITLE II—INDUSTRIAL EFFICIENCY AND COMPETITIVENESS

## Subtitle A—Manufacturing Energy Efficiency

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

### Subtitle B—Supply Star

Sec. 211. Supply Star.

## Subtitle C—Electric Motor Rebate Program

Sec. 221. Energy saving motor control, electric motor, and advanced motor systems rebate program.

#### Subtitle D—Transformer Rebate Program

Sec. 231. Energy efficient transformer rebate program.

## TITLE III—FEDERAL AGENCY ENERGY EFFICIENCY

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

## TITLE IV—REGULATORY PROVISIONS

## Subtitle A—Third-party Certification Under Energy Star Program

Sec. 401. Third-party certification under Energy Star program.

### Subtitle B—Federal Green Buildings

Sec. 411. High-performance green Federal buildings.

### Subtitle C—Water Heaters

Sec. 421. Grid-enabled water heaters.

Subtitle D—Energy Performance Requirement for Federal Buildings

Sec. 431. Energy performance requirement for Federal buildings.

Sec. 432. Federal building energy efficiency performance standards; certification system and level for green buildings.

Sec. 433. Enhanced energy efficiency underwriting.

## Subtitle E—Third Party Testing

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

### TITLE V—MISCELLANEOUS

Sec. 501. Offset.

Sec. 502. Budgetary effects.

Sec. 503. 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
- the following:
- "(14) Model building energy code.—The
- term 'model building energy code' means a voluntary
- building energy code and standards developed and

1	updated through a consensus process among inter-
2	ested persons, such as the IECC or the code used
3	by—
4	"(A) the Council of American Building Of-
5	ficials, or its legal successor, International Code
6	Council, Inc.;
7	"(B) the American Society of Heating, Re-
8	frigerating, and Air-Conditioning Engineers; or
9	"(C) other appropriate organizations.";
10	and
11	(2) by adding at the end the following:
12	"(17) IECC.—The term 'IECC' means the
13	International Energy Conservation Code.
14	"(18) Indian tribe.—The term 'Indian tribe'
15	has the meaning given the term in section 4 of the
16	Native American Housing Assistance and Self-De-
17	termination Act of 1996 (25 U.S.C. 4103).".
18	(b) STATE BUILDING ENERGY EFFICIENCY
19	Codes.—Section 304 of the Energy Conservation and
20	Production Act (42 U.S.C. 6833) is amended to read as
21	follows:
22	"SEC. 304. UPDATING STATE BUILDING ENERGY EFFI-
23	CIENCY CODES.
24	"(a) In General.—The Secretary shall—

1	"(1) encourage and support the adoption of
2	building energy codes by States, Indian tribes, and,
3	as appropriate, by local governments that meet or
4	exceed the model building energy codes, or achieve
5	equivalent or greater energy savings; and
6	"(2) support full compliance with the State and
7	local codes.
8	"(b) STATE AND INDIAN TRIBE CERTIFICATION OF
9	BUILDING ENERGY CODE UPDATES.—
10	"(1) REVIEW AND UPDATING OF CODES BY
11	EACH STATE AND INDIAN TRIBE.—
12	"(A) In general.—Not later than 2 years
13	after the date on which a model building energy
14	code is updated, each State or Indian tribe shall
15	certify whether or not the State or Indian tribe,
16	respectively, has reviewed and updated the en-
17	ergy provisions of the building code of the State
18	or Indian tribe, respectively.
19	"(B) Demonstration.—The certification
20	shall include a demonstration of whether or not
21	the energy savings for the code provisions that
22	are in effect throughout the State or Indian
23	tribal territory meet or exceed—
24	"(i) the energy savings of the updated
25	model building energy code; or

not updated by a target date established under section 307(b)(2)(D), each State or Indian tribe. Shall, not later than 2 years after the specific date, certify whether or not the State or Indian tribe, respectively, has reviewed and updated the energy provisions of the building code of the State or Indian tribe, respectively, to meet decreased the target in section 307(b)(2).  "(2) VALIDATION BY SECRETARY.—Not late than 90 days after a State or Indian tribe certification under paragraph (1), the Secretary shall—  "(A) determine whether the code provisions of the State or Indian tribe, respectively meet the criteria specified in paragraph (1) and  "(B) if the determination is positive, validate the certification.	1	"(ii) the targets established under sec-
15 not updated by a target date established under section 307(b)(2)(D), each State or Indian trib. 16 shall, not later than 2 years after the specified date, certify whether or not the State or Indian tribe, respectively, has reviewed and updated the energy provisions of the building code of the State or Indian tribe, respectively, to meet of exceed the target in section 307(b)(2). 17 (2) Validation by secretary.—Not late than 90 days after a State or Indian tribe certification under paragraph (1), the Secretary shall— 18 (A) determine whether the code provisions of the State or Indian tribe, respectively meet the criteria specified in paragraph (1) and 19 (B) if the determination is positive, validate the certification. 20 (C) Improvements in Compliance With Building Energy Codes.—	2	tion $307(b)(2)$ .
not updated by a target date established under section 307(b)(2)(D), each State or Indian trib shall, not later than 2 years after the specific date, certify whether or not the State or India tribe, respectively, has reviewed and update the energy provisions of the building code of the State or Indian tribe, respectively, to meet of exceed the target in section 307(b)(2).  "(2) VALIDATION BY SECRETARY.—Not late than 90 days after a State or Indian tribe certif cation under paragraph (1), the Secretary shall—  "(A) determine whether the code prov sions of the State or Indian tribe, respectively meet the criteria specified in paragraph (1) and  "(B) if the determination is positive, val date the certification.  "(c) IMPROVEMENTS IN COMPLIANCE WITH BUILD ING ENERGY CODES.—	3	"(C) No model building energy code
section 307(b)(2)(D), each State or Indian tribe shall, not later than 2 years after the specified date, certify whether or not the State or Indian tribe, respectively, has reviewed and update the energy provisions of the building code of the State or Indian tribe, respectively, to meet of exceed the target in section 307(b)(2).  "(2) VALIDATION BY SECRETARY.—Not late than 90 days after a State or Indian tribe certification under paragraph (1), the Secretary shall—  "(A) determine whether the code provisions of the State or Indian tribe, respectively meet the criteria specified in paragraph (1) and  "(B) if the determination is positive, validate the certification.  "(c) Improvements in Compliance With Build Ing Energy Codes.—	4	UPDATE.—If a model building energy code is
shall, not later than 2 years after the specification.  shall, not later than 2 years after the specification.  shall, not later than 2 years after the specification.  shall, not later than 2 years after the specification.  shall, not later than 2 years after the specification.  shall, not later than 2 years after the specification in the specification.  shall, not later than 2 years after the specification in the state or Indian tribe or the energy provisions of the building code of the state or Indian tribe certification.  shall, not later than 2 years after the specified in the state of the state of the state of the secretary shall—  "(A) determine whether the code provisions of the State or Indian tribe, respectively meet the criteria specified in paragraph (1 and  "(B) if the determination is positive, valuate the certification.  "(C) IMPROVEMENTS IN COMPLIANCE WITH BUILD ING ENERGY CODES.—	5	not updated by a target date established under
date, certify whether or not the State or India tribe, respectively, has reviewed and update the energy provisions of the building code of the State or Indian tribe, respectively, to meet of exceed the target in section 307(b)(2).  "(2) Validation by secretary.—Not late than 90 days after a State or Indian tribe certification under paragraph (1), the Secretary shall—  "(A) determine whether the code provisions of the State or Indian tribe, respectively meet the criteria specified in paragraph (1) and  "(B) if the determination is positive, validate the certification.  "(c) Improvements in Compliance With Building Ing Energy Codes.—	6	section 307(b)(2)(D), each State or Indian tribe
tribe, respectively, has reviewed and update the energy provisions of the building code of the State or Indian tribe, respectively, to meet of exceed the target in section 307(b)(2).  "(2) VALIDATION BY SECRETARY.—Not late than 90 days after a State or Indian tribe certification under paragraph (1), the Secretary shall—  "(A) determine whether the code provisions of the State or Indian tribe, respectively meet the criteria specified in paragraph (1) meet the criteria specified in paragraph (1) and  "(B) if the determination is positive, validate the certification.  "(c) IMPROVEMENTS IN COMPLIANCE WITH BUILD ING ENERGY CODES.—	7	shall, not later than 2 years after the specified
the energy provisions of the building code of the State or Indian tribe, respectively, to meet of exceed the target in section 307(b)(2).  "(2) VALIDATION BY SECRETARY.—Not late than 90 days after a State or Indian tribe certification under paragraph (1), the Secretary shall—  "(A) determine whether the code provisions of the State or Indian tribe, respectively meet the criteria specified in paragraph (1) and  "(B) if the determination is positive, validate the certification.  "(c) Improvements in Compliance With Building Energy Codes.—	8	date, certify whether or not the State or Indian
State or Indian tribe, respectively, to meet of exceed the target in section 307(b)(2).  "(2) VALIDATION BY SECRETARY.—Not lated than 90 days after a State or Indian tribe certification under paragraph (1), the Secretary shall—  "(A) determine whether the code provisions of the State or Indian tribe, respectively meet the criteria specified in paragraph (1) and  "(B) if the determination is positive, validate the certification.  "(c) Improvements in Compliance With Build in Energy Codes.—	9	tribe, respectively, has reviewed and updated
exceed the target in section 307(b)(2).  "(2) Validation by Secretary.—Not late than 90 days after a State or Indian tribe certification under paragraph (1), the Secretary shall—  "(A) determine whether the code provisions of the State or Indian tribe, respectively meet the criteria specified in paragraph (1 and  "(B) if the determination is positive, validate the certification.  "(E) Improvements in Compliance With Building Energy Codes.—	10	the energy provisions of the building code of the
13 "(2) Validation by Secretary.—Not late 14 than 90 days after a State or Indian tribe certification under paragraph (1), the Secretary shall— 16 "(A) determine whether the code provisions of the State or Indian tribe, respectively 18 meet the criteria specified in paragraph (1) 19 and 20 "(B) if the determination is positive, validate the certification. 21 date the certification. 22 "(c) Improvements in Compliance With Building Ing Energy Codes.—	11	State or Indian tribe, respectively, to meet or
than 90 days after a State or Indian tribe certification under paragraph (1), the Secretary shall—  (A) determine whether the code provisions of the State or Indian tribe, respectively meet the criteria specified in paragraph (1) and  (B) if the determination is positive, validate the certification.  (c) Improvements in Compliance With Build in Energy Codes.—	12	exceed the target in section 307(b)(2).
cation under paragraph (1), the Secretary shall—  "(A) determine whether the code prov  sions of the State or Indian tribe, respectively meet the criteria specified in paragraph (1)  and  "(B) if the determination is positive, val date the certification.  "(c) IMPROVEMENTS IN COMPLIANCE WITH BUILD ING ENERGY CODES.—	13	"(2) Validation by secretary.—Not later
16 "(A) determine whether the code prov 17 sions of the State or Indian tribe, respectively 18 meet the criteria specified in paragraph (1 19 and 20 "(B) if the determination is positive, valued 21 date the certification. 22 "(c) Improvements in Compliance With Build 23 ing Energy Codes.—	14	than 90 days after a State or Indian tribe certifi-
sions of the State or Indian tribe, respectively meet the criteria specified in paragraph (1 meet the criteria	15	cation under paragraph (1), the Secretary shall—
meet the criteria specified in paragraph (1) and "(B) if the determination is positive, valuate the certification.  "(c) Improvements in Compliance With Building Ing Energy Codes.—	16	"(A) determine whether the code provi-
19 and 20 "(B) if the determination is positive, val 21 date the certification. 22 "(c) Improvements in Compliance With Buill 23 ing Energy Codes.—	17	sions of the State or Indian tribe, respectively,
<ul> <li>"(B) if the determination is positive, valuate the certification.</li> <li>"(c) Improvements in Compliance With Building Energy Codes.—</li> </ul>	18	meet the criteria specified in paragraph (1);
date the certification.  "(c) Improvements in Compliance With Buili Ing Energy Codes.—	19	and
22 "(c) Improvements in Compliance With Buill 23 ing Energy Codes.—	20	"(B) if the determination is positive, vali-
23 ING ENERGY CODES.—	21	date the certification.
	22	"(c) Improvements in Compliance With Build-
24 "(1) Requirement.—	23	ING ENERGY CODES.—
•	24	"(1) Requirement.—

1	"(A) IN GENERAL.—Not later than 3 years
2	after the date of a certification under sub-
3	section (b), each State and Indian tribe shall
4	certify whether or not the State and Indian
5	tribe, respectively, has—
6	"(i) achieved full compliance under
7	paragraph (3) with the applicable certified
8	State and Indian tribe building energy
9	code or with the associated model building
10	energy code; or
11	"(ii) made significant progress under
12	paragraph (4) toward achieving compliance
13	with the applicable certified State and In-
14	dian tribe building energy code or with the
15	associated model building energy code.
16	"(B) Repeat certifications.—If the
17	State or Indian tribe certifies progress toward
18	achieving compliance, the State or Indian tribe
19	shall repeat the certification until the State or
20	Indian tribe certifies that the State or Indian
21	tribe has achieved full compliance, respectively.
22	"(2) Measurement of compliance.—A cer-
23	tification under paragraph (1) shall include docu-
24	mentation of the rate of compliance based on—

1	(A) independent inspections of a random
2	sample of the buildings covered by the code in
3	the preceding year; or
4	"(B) an alternative method that yields an
5	accurate measure of compliance.
6	"(3) ACHIEVEMENT OF COMPLIANCE.—A State
7	or Indian tribe shall be considered to achieve ful
8	compliance under paragraph (1) if—
9	"(A) at least 90 percent of building space
10	covered by the code in the preceding year sub-
11	stantially meets all the requirements of the ap-
12	plicable code specified in paragraph (1), or
13	achieves equivalent or greater energy savings
14	level; or
15	"(B) the estimated excess energy use of
16	buildings that did not meet the applicable code
17	specified in paragraph (1) in the preceding
18	year, compared to a baseline of comparable
19	buildings that meet this code, is not more than
20	5 percent of the estimated energy use of all
21	buildings covered by this code during the pre-
22	ceding year.
23	"(4) Significant progress toward
24	ACHIEVEMENT OF COMPLIANCE.—A State or Indian
25	tribe shall be considered to have made significant

1	progress toward achieving compliance for purposes
2	of paragraph (1) if the State or Indian tribe—
3	"(A) has developed and is implementing a
4	plan for achieving compliance during the 8-
5	year-period beginning on the date of enactment
6	of this paragraph, including annual targets for
7	compliance and active training and enforcement
8	programs; and
9	"(B) has met the most recent target under
10	subparagraph (A).
11	"(5) Validation by secretary.—Not later
12	than 90 days after a State or Indian tribe certifi-
13	cation under paragraph (1), the Secretary shall—
14	"(A) determine whether the State or In-
15	dian tribe has demonstrated meeting the cri-
16	teria of this subsection, including accurate
17	measurement of compliance; and
18	"(B) if the determination is positive, valid
19	date the certification.
20	"(d) States or Indian Tribes That Do Not
21	ACHIEVE COMPLIANCE.—
22	"(1) Reporting.—A State or Indian tribe that
23	has not made a certification required under sub-
24	section (b) or (c) by the applicable deadline shall
25	submit to the Secretary a report on—

1	(A) the status of the State or Indian tribe
2	with respect to meeting the requirements and
3	submitting the certification; and
4	"(B) a plan for meeting the requirements
5	and submitting the certification.
6	"(2) Federal support.—For any State or In-
7	dian tribe for which the Secretary has not validated
8	a certification by a deadline under subsection (b) or
9	(c), the lack of the certification may be a consider-
10	ation for Federal support authorized under this sec-
11	tion for code adoption and compliance activities.
12	"(3) Local Government.—In any State or
13	Indian tribe for which the Secretary has not vali-
14	dated a certification under subsection (b) or (c), a
15	local government may be eligible for Federal support
16	by meeting the certification requirements of sub-
17	sections (b) and (c).
18	"(4) Annual reports by secretary.—
19	"(A) IN GENERAL.—The Secretary shall
20	annually submit to Congress, and publish in the
21	Federal Register, a report on—
22	"(i) the status of model building en-
23	ergy codes;
24	"(ii) the status of code adoption and
25	compliance in the States and Indian tribes;

1	"(iii) implementation of this section;
2	and
3	"(iv) improvements in energy savings
4	over time as result of the targets estab-
5	lished under section 307(b)(2).
6	"(B) Impacts.—The report shall include
7	estimates of impacts of past action under this
8	section, and potential impacts of further action,
9	on—
10	"(i) upfront financial and construction
11	costs, cost benefits and returns (using in-
12	vestment analysis), and lifetime energy use
13	for buildings;
14	"(ii) resulting energy costs to individ-
15	uals and businesses; and
16	"(iii) resulting overall annual building
17	ownership and operating costs.
18	"(e) Technical Assistance to States and In-
19	DIAN TRIBES.—The Secretary shall provide technical as-
20	sistance to States and Indian tribes to implement the goals
21	and requirements of this section, including procedures and
22	technical analysis for States and Indian tribes—
23	"(1) to improve and implement State residential
24	and commercial building energy codes;

1	"(2) to demonstrate that the code provisions of
2	the States and Indian tribes achieve equivalent or
3	greater energy savings than the model building en-
4	ergy codes and targets;
5	"(3) to document the rate of compliance with a
6	building energy code; and
7	"(4) to otherwise promote the design and con-
8	struction of energy efficient buildings.
9	"(f) AVAILABILITY OF INCENTIVE FUNDING.—
10	"(1) IN GENERAL.—The Secretary shall provide
11	incentive funding to States and Indian tribes—
12	"(A) to implement the requirements of this
13	section;
14	"(B) to improve and implement residential
15	and commercial building energy codes, including
16	increasing and verifying compliance with the
17	codes and training of State, tribal, and local
18	building code officials to implement and enforce
19	the codes; and
20	"(C) to promote building energy efficiency
21	through the use of the codes.
22	"(2) Additional funding.—Additional fund-
23	ing shall be provided under this subsection for im-
24	plementation of a plan to achieve and document full

1	compliance with residential and commercial building
2	energy codes under subsection (c)—
3	"(A) to a State or Indian tribe for which
4	the Secretary has validated a certification under
5	subsection (b) or (c); and
6	"(B) in a State or Indian tribe that is not
7	eligible under subparagraph (A), to a local gov-
8	ernment that is eligible under this section.
9	"(3) Training.—Of the amounts made avail-
10	able under this subsection, the State or Indian tribe
11	may use amounts required, but not to exceed
12	\$750,000 for a State, to train State and local build-
13	ing code officials to implement and enforce codes de-
14	scribed in paragraph (2).
15	"(4) Local governments.—States may share
16	grants under this subsection with local governments
17	that implement and enforce the codes.
18	"(g) Stretch Codes and Advanced Stand-
19	ARDS.—
20	"(1) IN GENERAL.—The Secretary shall provide
21	technical and financial support for the development
22	of stretch codes and advanced standards for residen-
23	tial and commercial buildings for use as—

1	"(A) an option for adoption as a building
2	energy code by local, tribal, or State govern-
3	ments; and
4	"(B) guidelines for energy-efficient build-
5	ing design.
6	"(2) Targets.—The stretch codes and ad-
7	vanced standards shall be designed—
8	"(A) to achieve substantial energy savings
9	compared to the model building energy codes;
10	and
11	"(B) to meet targets under section 307(b),
12	if available, at least 3 to 6 years in advance of
13	the target years.
14	"(h) Studies.—The Secretary, in consultation with
15	building science experts from the National Laboratories
16	and institutions of higher education, designers and build-
17	ers of energy-efficient residential and commercial build-
18	ings, code officials, and other stakeholders, shall under-
19	take a study of the feasibility, impact, economics, and
20	merit of—
21	"(1) code improvements that would require that
22	buildings be designed, sited, and constructed in a
23	manner that makes the buildings more adaptable in
24	the future to become zero-net-energy after initial

1 construction, as advances are achieved in energy-sav-2 ing technologies; 3 "(2) code procedures to incorporate measured 4 lifetimes, not just first-year energy use, in trade-offs 5 and performance calculations; and 6 "(3) legislative options for increasing energy 7 savings from building energy codes, including addi-8 tional incentives for effective State and local action, 9 and verification of compliance with and enforcement 10 of a code other than by a State or local government. 11 "(i) Effect on Other Laws.—Nothing in this sec-12 tion or section 307 supersedes or modifies the application 13 of sections 321 through 346 of the Energy Policy and 14 Conservation Act (42 U.S.C. 6291 et seq.). 15 "(j) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section 16 17 and section 307 \$200,000,000, to remain available until expended.". 18 19 FEDERAL Building ENERGY EFFICIENCY STANDARDS.—Section 305 of the Energy Conservation 20 21 and Production Act (42 U.S.C. 6834) is amended by striking "voluntary building energy code" each place it appears in subsections (a)(2)(B) and (b) and inserting "model building energy code".

1	(d) Model Building Energy Codes.—Section 307
2	of the Energy Conservation and Production Act (42
3	U.S.C. 6836) is amended to read as follows:
4	"SEC. 307. SUPPORT FOR MODEL BUILDING ENERGY
5	CODES.
6	"(a) In General.—The Secretary shall support the
7	updating of model building energy codes.
8	"(b) Targets.—
9	"(1) In General.—The Secretary shall sup-
10	port the updating of the model building energy codes
11	to enable the achievement of aggregate energy sav-
12	ings targets established under paragraph (2).
13	"(2) Targets.—
14	"(A) In General.—The Secretary shall
15	work with State, Indian tribes, local govern-
16	ments, nationally recognized code and stand-
17	ards developers, and other interested parties to
18	support the updating of model building energy
19	codes by establishing one or more aggregate en-
20	ergy savings targets to achieve the purposes of
21	this section.
22	"(B) Separate targets.—The Secretary
23	may establish separate targets for commercial
24	and residential buildings.

1	"(C) Baselines.—The baseline for updat-
2	ing model building energy codes shall be the
3	2009 IECC for residential buildings and
4	ASHRAE Standard 90.1–2010 for commercial
5	buildings.
6	"(D) Specific years.—
7	"(i) In general.—Targets for spe-
8	cific years shall be established and revised
9	by the Secretary through rulemaking and
10	coordinated with nationally recognized code
11	and standards developers at a level that—
12	"(I) is at the maximum level of
13	energy efficiency that is techno-
14	logically feasible and life-cycle cost ef-
15	fective, while accounting for the eco-
16	nomic considerations under paragraph
17	(4);
18	"(II) is higher than the preceding
19	target; and
20	"(III) promotes the achievement
21	of commercial and residential high-
22	performance buildings through high
23	performance energy efficiency (within
24	the meaning of section 401 of the En-

1	ergy Independence and Security Act
2	of 2007 (42 U.S.C. 17061)).
3	"(ii) Initial targets.—Not later
4	than 1 year after the date of enactment of
5	this clause, the Secretary shall establish
6	initial targets under this subparagraph.
7	"(iii) Different target years.—
8	Subject to clause (i), prior to the applica-
9	ble year, the Secretary may set a later tar-
10	get year for any of the model building en-
11	ergy codes described in subparagraph (A)
12	if the Secretary determines that a target
13	cannot be met.
14	"(iv) SMALL BUSINESS.—When estab-
15	lishing targets under this paragraph
16	through rulemaking, the Secretary shall
17	ensure compliance with the Small Business
18	Regulatory Enforcement Fairness Act of
19	1996 (5 U.S.C. 601 note; Public Law 104-
20	121).
21	"(3) APPLIANCE STANDARDS AND OTHER FAC-
22	TORS AFFECTING BUILDING ENERGY USE.—In es-
23	tablishing building code targets under paragraph
24	(2), the Secretary shall develop and adjust the tar-

1	gets in recognition of potential savings and costs re-
2	lating to—
3	"(A) efficiency gains made in appliances
4	lighting, windows, insulation, and building enve-
5	lope sealing;
6	"(B) advancement of distributed genera-
7	tion and on-site renewable power generation
8	technologies;
9	"(C) equipment improvements for heating
10	cooling, and ventilation systems;
11	"(D) building management systems and
12	SmartGrid technologies to reduce energy use
13	and
14	"(E) other technologies, practices, and
15	building systems that the Secretary considers
16	appropriate regarding building plug load and
17	other energy uses.
18	"(4) Economic considerations.—In estab-
19	lishing and revising building code targets under
20	paragraph (2), the Secretary shall consider the eco-
21	nomic feasibility of achieving the proposed targets
22	established under this section and the potential costs
23	and savings for consumers and building owners, in-
24	cluding a return on investment analysis.

"(c) Technical Assistance to Model Building
ENERGY CODE-SETTING AND STANDARD DEVELOPMENT
Organizations.—
"(1) IN GENERAL.—The Secretary shall, on a
timely basis, provide technical assistance to model
building energy code-setting and standard develop-
ment organizations consistent with the goals of this
section.
"(2) Assistance .—The assistance shall in-
clude, as requested by the organizations, technical
assistance in—
"(A) evaluating code or standards pro-
posals or revisions;
"(B) building energy analysis and design
tools;
"(C) building demonstrations;
"(D) developing definitions of energy use
intensity and building types for use in model
building energy codes to evaluate the efficiency
impacts of the model building energy codes;
"(E) performance-based standards;
"(F) evaluating economic considerations
under subsection (b)(4); and

"(G) developing model building energy 1 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 standard 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. "(d) Determination.— 16 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 re-20 vised, the Secretary shall make a preliminary deter-21 mination not later than 90 days after the date of the 22 revision, and a final determination not later than 15 23 months after the date of the revision, on whether or 24 not the revision will—

1	(A) improve energy efficiency in buildings
2	compared to the existing model building energy
3	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) In General.—If the Secretary
9	makes a preliminary determination under para-
10	graph (1)(B) that a code or standard does not
11	meet the targets established under subsection
12	(b)(2), the Secretary may at the same time pro-
13	vide the model building energy code or standard
14	developer with proposed changes that would re-
15	sult in a model building energy code that meets
16	the targets and with supporting evidence, tak-
17	ing into consideration—
18	"(i) whether the modified code is tech-
19	nically feasible and life-cycle cost effective
20	"(ii) available appliances, technologies,
21	materials, and construction practices; and
22	"(iii) the economic considerations
23	under subsection $(b)(4)$ .
24	"(B) Incorporation of changes.—

1	"(i) In general.—On receipt of the
2	proposed changes, the model building en-
3	ergy code or standard developer shall have
4	an additional 270 days to accept or reject
5	the proposed changes of the Secretary to
6	the model building energy code or standard
7	for the Secretary to make a final deter-
8	mination.
9	"(ii) Final determination.—A
10	final determination under paragraph (1)
11	shall be on the modified model building en-
12	ergy code or standard.
13	"(e) Administration.—In carrying out this section,
14	the Secretary shall—
15	"(1) publish notice of targets and supporting
16	analysis and determinations under this section in the
17	Federal Register to provide an explanation of and
18	the basis for such actions, including any supporting
19	modeling, data, assumptions, protocols, and cost-
20	benefit analysis, including return on investment; and
21	"(2) provide an opportunity for public comment
22	on targets and supporting analysis and determina-
23	tions under this section.
24	"(f) Voluntary Codes and Standards.—Not-
25	withstanding any other provision of this section, any

1	model building code or standard established under section
2	304 shall not be binding on a State, local government, or
3	Indian tribe as a matter of Federal law.".
4	Subtitle B—Worker Training and
5	<b>Capacity Building</b>
6	SEC. 111. BUILDING TRAINING AND ASSESSMENT CENTERS.
7	(a) In General.—The Secretary shall provide
8	grants to institutions of higher education (as defined in
9	section 101 of the Higher Education Act of 1965 (20
10	U.S.C. 1001)) and Tribal Colleges or Universities (as de-
11	fined in section 316(b) of that Act (20 U.S.C. 1059c(b)))
12	to establish building training and assessment centers—
13	(1) to identify opportunities for optimizing en-
14	ergy efficiency and environmental performance in
15	buildings;
16	(2) to promote the application of emerging con-
17	cepts and technologies in commercial and institu-
18	tional buildings;
19	(3) to train engineers, architects, building sci-
20	entists, building energy permitting and enforcement
21	officials, and building technicians in energy-efficient
22	design and operation;
23	(4) to assist institutions of higher education
24	and Tribal Colleges or Universities in training build-
25	ing technicians;

1	(5) to promote research and development for
2	the use of alternative energy sources and distributed
3	generation to supply heat and power for buildings
4	particularly energy-intensive buildings; and
5	(6) to coordinate with and assist State-accred-
6	ited technical training centers, community colleges,
7	Tribal Colleges or Universities, and local offices of
8	the National Institute of Food and Agriculture and
9	ensure appropriate services are provided under this
10	section to each region of the United States.
11	(b) Coordination and Nonduplication.—
12	(1) IN GENERAL.—The Secretary shall coordi-
13	nate the program with the industrial research and
14	assessment centers program and with other Federal
15	programs to avoid duplication of effort.
16	(2) Collocation.—To the maximum extent
17	practicable, building, training, and assessment cen-
18	ters established under this section shall be collocated
19	with Industrial Assessment Centers.
20	(c) Authorization of Appropriations.—There is
21	authorized to be appropriated to carry out this section
22	\$10,000,000, to remain available until expended.
23	SEC. 112. CAREER SKILLS TRAINING.
24	(a) In General.—The Secretary shall pay grants to
25	eligible entities described in subsection (b) to pay the Fed-

- 1 eral share of associated career skills training programs
- 2 under which students concurrently receive classroom in-
- 3 struction and on-the-job training for the purpose of ob-
- 4 taining an industry-related certification to install energy
- 5 efficient buildings technologies, including technologies de-
- 6 scribed in section 307(b)(3) of the Energy Conservation
- 7 and Production Act (42 U.S.C. 6836(b)(3)).
- 8 (b) Eligibility.—To be eligible to obtain a grant
- 9 under subsection (a), an entity shall be a nonprofit part-
- 10 nership described in section 171(e)(2)(B)(ii) of the Work-
- 11 force Investment Act of 1998 (29 U.S.C.
- 12 2916(e)(2)(B)(ii).
- 13 (c) Federal Share.—The Federal share of the cost
- 14 of carrying out a career skills training program described
- 15 in subsection (a) shall be 50 percent.
- 16 (d) AUTHORIZATION OF APPROPRIATIONS.—There is
- 17 authorized to be appropriated to carry out this section
- 18 \$10,000,000, to remain available until expended.

## 19 Subtitle C—School Buildings

- 20 SEC. 121. COORDINATION OF ENERGY RETROFITTING AS-
- 21 SISTANCE FOR SCHOOLS.
- 22 (a) Definition of School.—In this section, the
- 23 term "school" means—
- 24 (1) an elementary school or secondary school
- 25 (as defined in section 9101 of the Elementary and

1 Secondary Education Act of 1965 (20U.S.C. 2 7801)); 3 (2) an institution of higher education (as de-4 fined in section 102(a) of the Higher Education Act 5 of 1965 (20 U.S.C. 1002(a)); 6 (3) a school of the defense dependents' edu-7 cation system under the Defense Dependents' Edu-8 cation Act of 1978 (20 U.S.C. 921 et seq.) or estab-9 lished under section 2164 of title 10, United States 10 Code; 11 (4) a school operated by the Bureau of Indian 12 Affairs; 13 (5) a tribally controlled school (as defined in 14 section 5212 of the Tribally Controlled Schools Act 15 of 1988 (25 U.S.C. 2511)); and 16 (6) a Tribal College or University (as defined in 17 section 316(b) of the Higher Education Act of 1965 18 (20 U.S.C. 1059c(b))).19 (b) Designation of Lead Agency.—The Sec-20 retary, acting through the Office of Energy Efficiency and 21 Renewable Energy, shall act as the lead Federal agency for coordinating and disseminating information on existing Federal programs and assistance that may be used to help initiate, develop, and finance energy efficiency, re-

newable energy, and energy retrofitting projects for 2 schools. 3 (c) REQUIREMENTS.—In carrying out coordination and outreach under subsection (b), the Secretary shall— 5 (1) in consultation and coordination with the 6 appropriate Federal agencies, carry out a review of 7 existing programs and financing mechanisms (in-8 cluding revolving loan funds and loan guarantees) 9 available in or from the Department of Agriculture, 10 the Department of Energy, the Department of Edu-11 cation, the Department of the Treasury, the Internal 12 Revenue Service, the Environmental Protection Agency, and other appropriate Federal agencies with 13 14 jurisdiction over energy financing and facilitation 15 that are currently used or may be used to help ini-16 tiate, develop, and finance energy efficiency, renew-17 able energy, and energy retrofitting projects for 18 schools; 19 (2) establish a Federal cross-departmental col-20 laborative coordination, education, and outreach ef-21 fort to streamline communication and promote avail-22 able Federal opportunities and assistance described 23 in paragraph (1), for energy efficiency, renewable 24 energy, and energy retrofitting projects that enables 25 States, local educational agencies, and schools—

1	(A) to use existing Federal opportunities
2	more effectively; and
3	(B) to form partnerships with Governors,
4	State energy programs, local educational, finan-
5	cial, and energy officials, State and local gov-
6	ernment officials, nonprofit organizations, and
7	other appropriate entities, to support the initi-
8	ation of the projects;
9	(3) provide technical assistance for States, local
10	educational agencies, and schools to help develop
11	and finance energy efficiency, renewable energy, and
12	energy retrofitting projects—
13	(A) to increase the energy efficiency of
14	buildings or facilities;
15	(B) to install systems that individually
16	generate energy from renewable energy re-
17	sources;
18	(C) to establish partnerships to leverage
19	economies of scale and additional financing
20	mechanisms available to larger clean energy ini-
21	tiatives; or
22	(D) to promote—
23	(i) the maintenance of health, environ-
24	mental quality, and safety in schools, in-
25	cluding the ambient air quality, through

1	energy efficiency, renewable energy, and
2	energy retrofit projects; and
3	(ii) the achievement of expected en-
4	ergy savings and renewable energy produc-
5	tion through proper operations and main-
6	tenance practices;
7	(4) develop and maintain a single online re-
8	source Web site with contact information for rel-
9	evant technical assistance and support staff in the
10	Office of Energy Efficiency and Renewable Energy
11	for States, local educational agencies, and schools to
12	effectively access and use Federal opportunities and
13	assistance described in paragraph (1) to develop en-
14	ergy efficiency, renewable energy, and energy retro-
15	fitting projects; and
16	(5) establish a process for recognition of schools
17	that—
18	(A) have successfully implemented energy
19	efficiency, renewable energy, and energy retro-
20	fitting projects; and
21	(B) are willing to serve as resources for
22	other local educational agencies and schools to
23	assist initiation of similar efforts.
24	(d) Report.—Not later than 180 days after the date
25	of enactment of this Act, the Secretary shall submit to

Congress a report describing the implementation of this 2 section. Subtitle D—Better Buildings 3 SEC. 131. ENERGY EFFICIENCY IN FEDERAL AND OTHER 4 5 BUILDINGS. 6 (a) Definitions.—In this section: 7 ADMINISTRATOR.—The term "Adminis-8 trator" means the Administrator of General Serv-9 ices. 10 (2)Cost-effective ENERGY **EFFICIENCY** 11 MEASURE.—The terms "cost-effective energy efficiency measure" and "measure" mean any building 12 13 product, material, equipment, or service and the in-14 stalling, implementing, or operating thereof, that 15 provides energy savings in an amount that is not 16 less than the cost of such installing, implementing, 17 or operating. 18 (b) Model Provisions, Policies, and Best Prac-19 TICES.— 20 (1) IN GENERAL.—Not later than 180 days 21 after the date of enactment of this Act, the Adminis-22 trator, in consultation with the Secretary and after 23 providing the public with an opportunity for notice 24 and comment, shall develop model leasing provisions

1 and best practices in accordance with this sub-2 section. 3 (2) Commercial leasing.— 4 (A) IN GENERAL.—The model commercial 5 leasing provisions developed under this sub-6 section shall, at a minimum, align the interests 7 of building owners and tenants with regard to 8 investments in cost-effective energy efficiency 9 measures to encourage building owners and ten-10 ants to collaborate to invest in such measures. 11 (B) Use of model provisions.—The 12 Administrator may use the model provisions de-13 veloped under this subsection in any standard 14 leasing document that designates a Federal 15 agency (or other client of the Administrator) as 16 a landlord or tenant. 17 Publication.—The (C) Administrator 18 shall periodically publish the model leasing pro-19 visions developed under this subsection, along 20 with explanatory materials, to encourage build-21 ing owners and tenants in the private sector to 22 use such provisions and materials. 23 (3)REALTY SERVICES.—The Administrator 24 shall develop policies and practices to implement 25 cost-effective energy efficiency measures for the real-

1	ty services provided by the Administrator to Federal
2	agencies (or other clients of the Administrator), in-
3	cluding periodic training of appropriate Federal em-
4	ployees and contractors on how to identify and
5	evaluate those measures.
6	(4) State and local assistance.—The Ad-
7	ministrator, in consultation with the Secretary, shall
8	make available model leasing provisions and best
9	practices developed under this subsection to State,
10	county, and municipal governments to manage
11	owned and leased building space in accordance with
12	the goal of encouraging investment in all cost-effec-
13	tive energy efficiency measures.
1 /	SEC. 132. SEPARATE SPACES WITH HIGH-PERFORMANCE
14	
15	ENERGY EFFICIENCY MEASURES.
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15 16 17	ENERGY EFFICIENCY MEASURES.  Subtitle B of title IV of the Energy Independence and
15 16 17	ENERGY EFFICIENCY MEASURES.  Subtitle B of title IV of the Energy Independence and Security Act of 2007 (42 U.S.C. 17081 et seq.) is amend-
15 16 17 18	ENERGY EFFICIENCY MEASURES.  Subtitle B of title IV of the Energy Independence and Security Act of 2007 (42 U.S.C. 17081 et seq.) is amended by adding at the end the following:
15 16 17 18 19	ENERGY EFFICIENCY MEASURES.  Subtitle B of title IV of the Energy Independence and Security Act of 2007 (42 U.S.C. 17081 et seq.) is amended by adding at the end the following:  "SEC. 424. SEPARATE SPACES WITH HIGH-PERFORMANCE
15 16 17 18 19 20	ENERGY EFFICIENCY MEASURES.  Subtitle B of title IV of the Energy Independence and Security Act of 2007 (42 U.S.C. 17081 et seq.) is amended by adding at the end the following:  "SEC. 424. SEPARATE SPACES WITH HIGH-PERFORMANCE ENERGY EFFICIENCY MEASURES.
15 16 17 18 19 20 21	ENERGY EFFICIENCY MEASURES.  Subtitle B of title IV of the Energy Independence and Security Act of 2007 (42 U.S.C. 17081 et seq.) is amended by adding at the end the following:  "SEC. 424. SEPARATE SPACES WITH HIGH-PERFORMANCE ENERGY EFFICIENCY MEASURES.  "(a) DEFINITIONS.—In this section:
15 16 17 18 19 20 21 22	ENERGY EFFICIENCY MEASURES.  Subtitle B of title IV of the Energy Independence and Security Act of 2007 (42 U.S.C. 17081 et seq.) is amended by adding at the end the following:  "SEC. 424. SEPARATE SPACES WITH HIGH-PERFORMANCE ENERGY EFFICIENCY MEASURES.  "(a) DEFINITIONS.—In this section:  "(1) HIGH-PERFORMANCE ENERGY EFFICIENCY

1	cost savings by reducing energy consumption and
2	utility costs.
3	"(2) Separate spaces.—The term 'separate
4	spaces' means areas within a commercial building
5	that are leased or otherwise occupied by a tenant or
6	other occupant for a period of time pursuant to the
7	terms of a written agreement.
8	"(b) STUDY.—
9	"(1) In general.—Not later than 1 year after
10	the date of enactment of this section, the Secretary,
11	acting through the Assistant Secretary of Energy
12	Efficiency and Renewable Energy, shall complete a
13	study on the feasibility of—
14	"(A) significantly improving energy effi-
15	ciency in commercial buildings through the de-
16	sign and construction, by owners and tenants,
17	
	of separate spaces with high-performance en-
18	of separate spaces with high-performance en- ergy efficiency measures; and
18 19	
	ergy efficiency measures; and
19	ergy efficiency measures; and "(B) encouraging owners and tenants to
19 20	ergy efficiency measures; and  "(B) encouraging owners and tenants to implement high-performance energy efficiency
19 20 21	ergy efficiency measures; and  "(B) encouraging owners and tenants to implement high-performance energy efficiency measures in separate spaces.

1	"(i) high-performance energy effi-
2	ciency measures that should be considered
3	as part of the initial design and construc-
4	tion of separate spaces;
5	"(ii) processes that owners, tenants,
6	architects, and engineers may replicate
7	when designing and constructing separate
8	spaces with high-performance energy effi-
9	ciency measures;
10	"(iii) policies and best practices to
11	achieve reductions in energy intensities for
12	lighting, plug loads, heating, cooling, cook-
13	ing, laundry, and other systems to satisfy
14	the needs of the commercial building ten-
15	ant;
16	"(iv) return on investment and pay-
17	back analyses of the incremental cost and
18	projected energy savings of the proposed
19	set of high-performance energy efficiency
20	measures, including consideration of avail-
21	able incentives;
22	"(v) models and simulation methods
23	that predict the quantity of energy used by
24	separate spaces with high-performance en-
25	ergy efficiency measures and that compare

1	that predicted quantity to the quantity of
2	energy used by separate spaces without
3	high-performance energy efficiency meas-
4	ures but that otherwise comply with appli-
5	cable building code requirements;
6	"(vi) measurement and verification
7	platforms demonstrating actual energy use
8	of high-performance energy efficiency
9	measures installed in separate spaces, and
10	whether such measures generate the sav-
11	ings intended in the initial design and con-
12	struction of the separate spaces;
13	"(vii) best practices that encourage an
14	integrated approach to designing and con-
15	structing separate spaces to perform at op-
16	timum energy efficiency in conjunction
17	with the central systems of a commercial
18	building; and
19	"(viii) any impact on employment re-
20	sulting from the design and construction of
21	separate spaces with high-performance en-
22	ergy efficiency measures; and
23	"(B) case studies reporting economic and
24	energy saving returns in the design and con-

1	struction of separate spaces with high-perform-
2	ance energy efficiency measures.
3	"(3) Public Participation.—Not later than
4	90 days after the date of the enactment of this sec-
5	tion, the Secretary shall publish a notice in the Fed-
6	eral Register requesting public comments regarding
7	effective methods, measures, and practices for the
8	design and construction of separate spaces with
9	high-performance energy efficiency measures.
10	"(4) Publication.—The Secretary shall pub-
11	lish the study on the website of the Department of
12	Energy.".
13	SEC. 133. TENANT STAR PROGRAM.
14	Subtitle B of title IV of the Energy Independence and
15	Security Act of $2007$ (42 U.S.C. $17081$ et seq.) (as
16	amended by section 132) is amended by adding at the end
17	the following:
18	"SEC. 425. TENANT STAR PROGRAM.
19	"(a) Definitions.—In this section:
20	"(1) High-performance energy efficiency
21	MEASURE.—The term 'high-performance energy effi-
22	ciency measure' has the meaning given the term in
23	section 424.

1	"(2) SEPARATE SPACES.—The term 'separate
2	spaces' has the meaning given the term in section
3	424.
4	"(b) TENANT STAR.—The Administrator of the Envi-
5	ronmental Protection Agency, in consultation with the
6	Secretary of Energy, shall develop a voluntary program
7	within the Energy Star program established by section
8	324A of the Energy Policy and Conservation Act (42
9	U.S.C. 6294a), which may be known as Tenant Star, to
10	promote energy efficiency in separate spaces leased by ten-
11	ants or otherwise occupied within commercial buildings.
12	"(c) Expanding Survey Data.—The Secretary of
13	Energy, acting through the Administrator of the Energy
14	Information Administration, shall—
15	"(1) collect, through each Commercial Build-
16	ings Energy Consumption Survey of the Energy In-
17	formation Administration that is conducted after the
18	date of enactment of this section, data on—
19	"(A) categories of building occupancy that
20	are known to consume significant quantities of
21	energy, such as occupancy by data centers,
22	trading floors, and restaurants; and
23	"(B) other aspects of the property, build-
24	ing operation, or building occupancy determined
25	by the Administrator of the Energy Information

1	Administration, in consultation with the Admin-
2	istrator of the Environmental Protection Agen-
3	cy, to be relevant in lowering energy consump-
4	tion;
5	"(2) with respect to the first Commercial Build-
6	ings Energy Consumption Survey conducted after
7	the date of enactment of this section, to the extent
8	full compliance with the requirements of paragraph
9	(1) is not feasible, conduct activities to develop the
10	capability to collect such data and begin to collect
11	such data; and
12	"(3) make data collected under paragraphs (1)
13	and (2) available to the public in aggregated form
14	and provide such data, and any associated results, to
15	the Administrator of the Environmental Protection
16	Agency for use in accordance with subsection (d).
17	"(d) Recognition of Owners and Tenants.—
18	"(1) OCCUPANCY-BASED RECOGNITION.—Not
19	later than 1 year after the date on which sufficient
20	data is received pursuant to subsection (c), the Ad-
21	ministrator of the Environmental Protection Agency
22	shall, following an opportunity for public notice and
23	comment—
24	"(A) in a manner similar to the Energy
25	Star rating system for commercial buildings

1	develop policies and procedures to recognize
2	tenants in commercial buildings that voluntarily
3	achieve high levels of energy efficiency in sepa-
4	rate spaces;
5	"(B) establish building occupancy cat-
6	egories eligible for Tenant Star recognition
7	based on the data collected under subsection (c)
8	and any other appropriate data sources; and
9	"(C) consider other forms of recognition
10	for commercial building tenants or other occu-
11	pants that lower energy consumption in sepa-
12	rate spaces.
13	"(2) Design- and Construction-Based Rec-
14	OGNITION.—After the study required by section
15	424(b) is completed, the Administrator of the Envi-
16	ronmental Protection Agency, in consultation with
17	the Secretary and following an opportunity for pub-
18	lic notice and comment, may develop a voluntary
19	program to recognize commercial building owners
20	and tenants that use high-performance energy effi-
21	ciency measures in the design and construction of
22	separate spaces.".

1	Subtitle E—Energy Information for
2	<b>Commercial Buildings</b>
3	SEC. 141. ENERGY INFORMATION FOR COMMERCIAL BUILD-
4	INGS.
5	(a) Requirement of Benchmarking and Disclo-
6	SURE FOR LEASING BUILDINGS WITHOUT ENERGY STAR
7	Labels.—Section 435(b)(2) of the Energy Independence
8	and Security Act of 2007 (42 U.S.C. 17091(b)(2)) is
9	amended—
10	(1) by striking "paragraph (2)" and inserting
11	"paragraph (1)"; and
12	(2) by striking "signing the contract," and all
13	that follows through the period at the end and in-
14	serting the following:
15	"signing the contract, the following requirements are
16	met:
17	"(A) The space is renovated for all energy
18	efficiency and conservation improvements that
19	would be cost effective over the life of the lease,
20	including improvements in lighting, windows,
21	and heating, ventilation, and air conditioning
22	systems.
23	"(B)(i) Subject to clause (ii), the space is
24	benchmarked under a nationally recognized, on-

line, free benchmarking program, with public

25

1	disclosure, unless the space is a space for which
2	owners cannot access whole building utility con-
3	sumption data, including spaces—
4	"(I) that are located in States with
5	privacy laws that provide that utilities shall
6	not provide such aggregated information to
7	multitenant building owners; and
8	"(II) for which tenants do not provide
9	energy consumption information to the
10	commercial building owner in response to a
11	request from the building owner.
12	"(ii) A Federal agency that is a tenant of
13	the space shall provide to the building owner, or
14	authorize the owner to obtain from the utility,
15	the energy consumption information of the
16	space for the benchmarking and disclosure re-
17	quired by this subparagraph.".
18	(b) Department of Energy Study.—
19	(1) In general.—Not later than 2 years after
20	the date of enactment of this Act, the Secretary
21	shall complete a study, with opportunity for public
22	comment—
23	(A) on the impact of—
24	(i) State and local performance
25	benchmarking and disclosure policies, and

any associated building efficiency policies,
for commercial and multifamily buildings;
and
(ii) programs and systems in which
utilities provide aggregated information re-
garding whole building energy consumption
and usage information to owners of multi-
tenant commercial, residential, and mixed-
use buildings;
(B) that identifies best practice policy ap-
proaches studied under subparagraph (A) that
have resulted in the greatest improvements in
building energy efficiency; and
(C) that considers—
(i) compliance rates and the benefits
and costs of the policies and programs on
building owners, utilities, tenants, and
other parties;
(ii) utility practices, programs, and
systems that provide aggregated energy
consumption information to multitenant
building owners, and the impact of public
utility commissions and State privacy laws
on those practices, programs, and systems;

1	(iii) exceptions to compliance in exist-
2	ing laws where building owners are not
3	able to gather or access whole building en-
4	ergy information from tenants or utilities;
5	(iv) the treatment of buildings with—
6	(I) multiple uses;
7	(II) uses for which baseline infor-
8	mation is not available; and
9	(III) uses that require high levels
10	of energy intensities, such as data
11	centers, trading floors, and televisions
12	studios;
13	(v) implementation practices, includ-
14	ing disclosure methods and phase-in of
15	compliance;
16	(vi) the safety and security of
17	benchmarking tools offered by government
18	agencies, and the resiliency of those tools
19	against cyber-attacks; and
20	(vii) international experiences with re-
21	gard to building benchmarking and disclo-
22	sure laws and data aggregation for multi-
23	tenant buildings.

1	(2) Submission to congress.—At the conclu-
2	sion of the study, the Secretary shall submit to Con-
3	gress a report on the results of the study.
4	(c) Creation and Maintenance of Databases.—
5	(1) In General.—Not later than 18 months
6	after the date of enactment of this Act and following
7	opportunity for public notice and comment, the Sec-
8	retary, in coordination with other relevant agencies
9	shall, to carry out the purpose described in para-
10	graph (2)—
11	(A) assess existing databases; and
12	(B) as necessary—
13	(i) modify and maintain existing data-
14	bases; or
15	(ii) create and maintain a new data-
16	base platform.
17	(2) Purpose.—The maintenance of existing
18	databases or creation of a new database platform
19	under paragraph (1) shall be for the purpose of stor-
20	ing and making available public energy-related infor-
21	mation on commercial and multifamily buildings, in-
22	cluding—
23	(A) data provided under Federal, State,
24	local, and other laws or programs regarding

1	building benchmarking and energy information
2	disclosure;
3	(B) buildings that have received energy
4	ratings and certifications; and
5	(C) energy-related information on buildings
6	provided voluntarily by the owners of the build-
7	ings, in an anonymous form, unless the owner
8	provides otherwise.
9	(d) Competitive Awards.—Based on the results of
10	the research for the portion of the study described in sub-
11	section (b)(1)(A)(ii), and with criteria developed following
12	public notice and comment, the Secretary may make com-
13	petitive awards to utilities, utility regulators, and utility
14	partners to develop and implement effective and promising
15	programs to provide aggregated whole building energy
16	consumption information to multitenant building owners.
17	(e) Input From Stakeholders.—The Secretary
18	shall seek input from stakeholders to maximize the effec-
19	tiveness of the actions taken under this section.
20	(f) Report.—Not later than 2 years after the date
21	of enactment of this Act, and every 2 years thereafter,
22	the Secretary shall submit to Congress a report on the
23	progress made in complying with this section.
24	(g) AUTHORIZATION OF APPROPRIATIONS.—There is
25	authorized to be appropriated to carry out subsection (b)

1	\$2,500,000 for each of fiscal years $2014$ through $2018$ ,
2	to remain available until expended.
3	TITLE II—INDUSTRIAL EFFI-
4	CIENCY AND COMPETITIVE-
5	NESS
6	Subtitle A—Manufacturing Energy
7	Efficiency
8	SEC. 201. PURPOSES.
9	The purposes of this subtitle are—
10	(1) to reform and reorient the industrial effi-
11	ciency programs of the Department of Energy;
12	(2) to establish a clear and consistent authority
13	for industrial efficiency programs of the Depart-
14	ment;
15	(3) to accelerate the deployment of technologies
16	and practices that will increase industrial energy ef-
17	ficiency and improve productivity;
18	(4) to accelerate the development and dem-
19	onstration of technologies that will assist the deploy-
20	ment goals of the industrial efficiency programs of
21	the Department and increase manufacturing effi-
22	ciency;
23	(5) to stimulate domestic economic growth and
24	improve industrial productivity and competitiveness;
25	and

1	(6) to strengthen partnerships between Federal
2	and State governmental agencies and the private
3	and academic sectors.
4	SEC. 202. FUTURE OF INDUSTRY PROGRAM.
5	(a) In General.—Section 452 of the Energy Inde-
6	pendence and Security Act of 2007 (42 U.S.C. 17111) is
7	amended by striking the section heading and inserting the
8	following: "FUTURE OF INDUSTRY PROGRAM".
9	(b) Definition of Energy Service Provider.—
10	Section 452(a) of the Energy Independence and Security
11	Act of 2007 (42 U.S.C. 17111(a)) is amended—
12	(1) by redesignating paragraphs (3) through
13	(5) as paragraphs (4) through (6), respectively; and
14	(2) by inserting after paragraph (2):
15	"(3) Energy service provider.—The term
16	'energy service provider' means any business pro-
17	viding technology or services to improve the energy
18	efficiency, power factor, or load management of a
19	manufacturing site or other industrial process in an
20	energy-intensive industry, or any utility operating
21	under a utility energy service project.".
22	(c) Industrial Research and Assessment Cen-
23	TERS.—Section 452(e) of the Energy Independence and
24	Security Act of 2007 (42 U.S.C. 17111(e)) is amended—

1	(1) by redesignating paragraphs (1) through
2	(5) as subparagraphs (A) through (E), respectively,
3	and indenting appropriately;
4	(2) by striking "The Secretary" and inserting
5	the following:
6	"(1) In General.—The Secretary";
7	(3) in subparagraph (A) (as redesignated by
8	paragraph (1)), by inserting before the semicolon at
9	the end the following: ", including assessments of
10	sustainable manufacturing goals and the implemen-
11	tation of information technology advancements for
12	supply chain analysis, logistics, system monitoring,
13	industrial and manufacturing processes, and other
14	purposes"; and
15	(4) by adding at the end the following:
16	"(2) Coordination.—
17	"(A) In general.—To increase the value
18	and capabilities of the industrial research and
19	assessment centers, the centers shall—
20	"(i) coordinate with Manufacturing
21	Extension Partnership Centers of the Na-
22	tional Institute of Standards and Tech-
23	nology;
24	"(ii) coordinate with the Building
25	Technologies Program of the Department

1	of Energy to provide building assessment
2	services to manufacturers;
3	"(iii) increase partnerships with the
4	National Laboratories of the Department
5	of Energy to leverage the expertise and
6	technologies of the National Laboratories
7	for national industrial and manufacturing
8	needs;
9	"(iv) increase partnerships with en-
10	ergy service providers and technology pro-
11	viders to leverage private sector expertise
12	and accelerate deployment of new and ex-
13	isting technologies and processes for en-
14	ergy efficiency, power factor, and load
15	management;
16	"(v) identify opportunities for reduc-
17	ing greenhouse gas emissions; and
18	"(vi) promote sustainable manufac-
19	turing practices for small- and medium-
20	sized manufacturers.
21	"(3) Outreach.—The Secretary shall provide
22	funding for—
23	"(A) outreach activities by the industrial
24	research and assessment centers to inform
25	small- and medium-sized manufacturers of the

1	information, technologies, and services avail-
2	able; and
3	"(B) coordination activities by each indus-
4	trial research and assessment center to leverage
5	efforts with—
6	"(i) Federal and State efforts;
7	"(ii) the efforts of utilities and energy
8	service providers;
9	"(iii) the efforts of regional energy ef-
10	ficiency organizations; and
11	"(iv) the efforts of other industrial re-
12	search and assessment centers.
13	"(4) Workforce training.—
14	"(A) IN GENERAL.—The Secretary shall
15	pay the Federal share of associated internship
16	programs under which students work with or
17	for industries, manufacturers, and energy serv-
18	ice providers to implement the recommendations
19	of industrial research and assessment centers.
20	"(B) FEDERAL SHARE.—The Federal
21	share of the cost of carrying out internship pro-
22	grams described in subparagraph (A) shall be
23	50 percent.
24	"(5) SMALL BUSINESS LOANS.—The Adminis-
25	trator of the Small Business Administration shall, to

1 the maximum extent practicable, expedite consider-2 ation of applications from eligible small business 3 concerns for loans under the Small Business Act (15 U.S.C. 631 et seq.) to implement recommendations 4 5 of industrial research and assessment centers estab-6 lished under paragraph (1). 7 "(6) Advanced manufacturing steering 8 COMMITTEE.—The Secretary shall establish an advi-9 sory steering committee to provide recommendations 10 to the Secretary on planning and implementation of 11 the Advanced Manufacturing Office of the Depart-12 ment of Energy.". 13 SEC. 203. SUSTAINABLE MANUFACTURING INITIATIVE. 14 (a) IN GENERAL.—Part E of title III of the Energy Policy and Conservation Act (42 U.S.C. 6341) is amended 15 by adding at the end the following: 16 "SEC. 376. SUSTAINABLE MANUFACTURING INITIATIVE. 17 18 "(a) In General.—As part of the Office of Energy 19 Efficiency and Renewable Energy, the Secretary, on the 20 request of a manufacturer, shall conduct onsite technical 21 assessments to identify opportunities for— 22 "(1) maximizing the energy efficiency of indus-23 trial processes and cross-cutting systems; 24 "(2) preventing pollution and minimizing waste;

1	(3) improving efficient use of water in manu-
2	facturing processes;
3	"(4) conserving natural resources; and
4	"(5) achieving such other goals as the Secretary
5	determines to be appropriate.
6	"(b) Coordination.—The Secretary shall carry out
7	the initiative in coordination with the private sector and
8	appropriate agencies, including the National Institute of
9	Standards and Technology, to accelerate adoption of new
10	and existing technologies and processes that improve en-
11	ergy efficiency.
12	"(c) Research and Development Program for
13	SUSTAINABLE MANUFACTURING AND INDUSTRIAL TECH-
14	NOLOGIES AND PROCESSES.—As part of the industrial ef-
15	ficiency programs of the Department of Energy, the Sec-
16	retary shall carry out a joint industry-government partner-
17	ship program to research, develop, and demonstrate new
18	sustainable manufacturing and industrial technologies and
19	processes that maximize the energy efficiency of industrial
20	plants, reduce pollution, and conserve natural resources."
21	(b) Table of Contents.—The table of contents of
22	the Energy Policy and Conservation Act (42 U.S.C. prec
23	6201) is amended by adding at the end of the items relat-
24	ing to part E of title III the following:
	"Sec. 376. Sustainable manufacturing initiative.".

## 1 SEC. 204. CONFORMING AMENDMENTS.

- 2 (a) Section 106 of the Energy Policy Act of 2005 (42)
- 3 U.S.C. 15811) is repealed.
- 4 (b) Sections 131, 132, 133, 2103, and 2107 of the
- 5 Energy Policy Act of 1992 (42 U.S.C. 6348, 6349, 6350,
- 6 13453, 13456) are repealed.
- 7 (c) Section 2101(a) of the Energy Policy Act of 1992
- 8 (42 U.S.C. 13451(a)) is amended in the third sentence
- 9 by striking "sections 2102, 2103, 2104, 2105, 2106,
- 10 2107, and 2108" and inserting "sections 2102, 2104,
- 11 2105, 2106, and 2108 of this Act and section 376 of the
- 12 Energy Policy and Conservation Act,".

## 13 Subtitle B—Supply Star

- 14 SEC. 211. SUPPLY STAR.
- 15 The Energy Policy and Conservation Act is amended
- 16 by inserting after section 324A (42 U.S.C. 6294a) the fol-
- 17 lowing:
- 18 "SEC. 324B. SUPPLY STAR PROGRAM.
- 19 "(a) IN GENERAL.—There is established within the
- 20 Department of Energy a Supply Star program to identify
- 21 and promote practices, recognize companies, and, as ap-
- 22 propriate, recognize products that use highly efficient sup-
- 23 ply chains in a manner that conserves energy, water, and
- 24 other resources.
- 25 "(b) Coordination.—In carrying out the program
- 26 described in subsection (a), the Secretary shall—

1	"(1) consult with other appropriate agencies
2	and
3	"(2) coordinate efforts with the Energy Star
4	program established under section 324A.
5	"(c) Duties.—In carrying out the Supply Star pro-
6	gram described in subsection (a), the Secretary shall—
7	"(1) promote practices, recognize companies
8	and, as appropriate, recognize products that comply
9	with the Supply Star program as the preferred prac-
10	tices, companies, and products in the marketplace
11	for maximizing supply chain efficiency;
12	"(2) work to enhance industry and public
13	awareness of the Supply Star program;
14	"(3) collect and disseminate data on supply
15	chain energy resource consumption;
16	"(4) develop and disseminate metrics, proc-
17	esses, and analytical tools (including software) for
18	evaluating supply chain energy resource use;
19	"(5) develop guidance at the sector level for im-
20	proving supply chain efficiency;
21	"(6) work with domestic and international orga-
22	nizations to harmonize approaches to analyzing sup-
23	ply chain efficiency, including the development of $\epsilon$
24	consistent set of tools, templates, calculators, and
25	databases; and

1	"(7) work with industry, including small busi-
2	nesses, to improve supply chain efficiency through
3	activities that include—
4	"(A) developing and sharing best practices;
5	and
6	"(B) providing opportunities to benchmark
7	supply chain efficiency.
8	"(d) Evaluation.—In any evaluation of supply
9	chain efficiency carried out by the Secretary with respect
10	to a specific product, the Secretary shall consider energy
11	consumption and resource use throughout the entire
12	lifecycle of a product, including production, transport,
13	packaging, use, and disposal.
14	"(e) Grants and Incentives.—
15	"(1) In General.—The Secretary may award
16	grants or other forms of incentives on a competitive
17	basis to eligible entities, as determined by the Sec-
18	retary, for the purposes of—
19	"(A) studying supply chain energy resource
20	efficiency; and
21	"(B) demonstrating and achieving reduc-
22	tions in the energy resource consumption of
23	commercial products through changes and im-
24	provements to the production supply and dis-
25	tribution chain of the products.

1	"(2) Use of information.—Any information
2	or data generated as a result of the grants or incen-
3	tives described in paragraph (1) shall be used to in-
4	form the development of the Supply Star Program.
5	"(f) Training.—The Secretary shall use funds to
6	support professional training programs to develop and
7	communicate methods, practices, and tools for improving
8	supply chain efficiency.
9	"(g) Effect of Outsourcing of American
10	Jobs.—For purposes of this section, the outsourcing of
11	American jobs in the production of a product shall not
12	count as a positive factor in determining supply chain effi-
13	ciency.
14	"(h) AUTHORIZATION OF APPROPRIATIONS.—There
15	is authorized to be appropriated to carry out this section
16	\$10,000,000 for the period of fiscal years 2014 through
17	2023.".
18	Subtitle C—Electric Motor Rebate
19	Program
20	SEC. 221. ENERGY SAVING MOTOR CONTROL, ELECTRIC
21	MOTOR, AND ADVANCED MOTOR SYSTEMS
22	REBATE PROGRAM.
23	(a) Definitions.—In this section:
24	(1) Advanced motor and drive system.—
25	The term "advanced motor and drive system" means

1	an electric motor and any required associated elec-
2	tronic control that—
3	(A) offers variable or multiple speed oper-
4	ation;
5	(B) offers efficiency at a rated full load
6	that is greater than the efficiency described for
7	the equivalent rating in—
8	(i) table 12–12 of National Electrical
9	Manufactures Association (NEMA MG 1-
10	2011); or
11	(ii) section 431.446 of National Elec-
12	trical Manufactures Association (2012);
13	and
14	(C) uses—
15	(i) permanent magnet alternating cur-
16	rent synchronous motor technology;
17	(ii) electronically commutated motor
18	technology;
19	(iii) switched reluctance motor tech-
20	nology;
21	(iv) synchronous reluctance motor
22	technology; or
23	(v) such other motor that has greater
24	than 1 horsepower and uses a drive sys-

1	tems technology, as determined by the Sec-
2	retary.
3	(2) Electric motor.—The term "electric
4	motor" has the meaning given the term in section
5	431.12 of title 10, Code of Federal Regulations (as
6	in effect on the date of enactment of this Act).
7	(3) QUALIFIED PRODUCT.—The term "qualified
8	product" means—
9	(A) a new constant speed electric motor
10	control that—
11	(i) is attached to an electric motor;
12	and
13	(ii) reduces the energy use of the elec-
14	tric motor by not less than 5 percent; and
15	(B) commercial or industrial machinery or
16	equipment that—
17	(i) is manufactured and incorporates
18	an advanced motor and drive system that
19	has greater than 1 horsepower into a rede-
20	signed machine or equipment that did not
21	previously make use of the advanced motor
22	and drive system; or
23	(ii) was previously used and placed
24	back into service in calendar year 2014 or
25	2015 that upgrades the existing machine

1	or equipment with an advanced motor and
2	drive system.
3	(b) Establishment.—Not later than 90 days after
4	the date of enactment of this Act, the Secretary shall es-
5	tablish a program to provide rebates for expenditures
6	made by qualified entities for the purchase and installa-
7	tion of qualified products.
8	(c) QUALIFIED ENTITIES.—A qualified entity under
9	this section shall be—
10	(1) in the case of a qualified product described
11	in subsection (a)(3)(A), the purchaser of the quali-
12	fied product for whom the qualified product is in-
13	stalled; and
14	(2) in the case of a qualified product described
15	in subsection (a)(3)(B)), the manufacturer of the
16	machine or equipment that incorporated the ad-
17	vanced motor and drive system into the machine or
18	equipment.
19	(d) Requirements.—
20	(1) Application.—To be eligible to receive a
21	rebate under this section, a qualified entity shall
22	submit to the Secretary or an entity designated by
23	the Secretary an application and certification in
24	such form, at such time, and containing such infor-
25	mation as the Secretary may require, including dem-

1	onstrated evidence that the qualified entity pur-
2	chased a qualified product and—
3	(A) in the case of a qualified product de-
4	scribed in subsection (a)(3)(A)—
5	(i) demonstrated evidence that the
6	qualified entity installed the qualified prod-
7	uct in calendar year 2014 or 2015;
8	(ii) demonstrated evidence that the
9	qualified product reduces motor energy use
10	by not less than 5 percent, in accordance
11	with procedures approved by the Secretary;
12	and
13	(iii) the serial number, manufacturer,
14	and model number from the nameplate of
15	the installed motor of the qualified entity
16	on which the qualified product was in-
17	stalled; and
18	(B) in the case of a qualified product de-
19	scribed in subsection (a)(3)(B)—
20	(i) demonstrated evidence that the
21	manufacturer—
22	(I) redesigned a machine or
23	equipment of a manufacturer that did
24	not previously make use of an ad-
25	vanced motor and drive system; or

1	(II) upgraded a used machine or
2	equipment to incorporate an advanced
3	motor and drive system;
4	(ii) demonstrated evidence that the
5	qualified product was sold, installed, or
6	placed back into service in calendar year
7	2014 or 2015; and
8	(iii) the serial number, manufacturer,
9	and model number from the nameplate of
10	the installed motor of the qualified entity
11	with which the advanced motor and drive
12	system is integrated.
13	(2) AUTHORIZED AMOUNT OF REBATE.—The
14	Secretary may provide to a qualified entity that has
15	satisfied the requirements of paragraph (1) a rebate
16	the amount of which shall be equal to the product
17	obtained by multiplying—
18	(A) the nameplate rated horsepower of—
19	(i) the electric motor to which the new
20	constant speed electric motor control is at-
21	tached;
22	(ii) the new electric motor that re-
23	placed a previously installed electric motor;
24	or

1	(iii) the advanced electric motor con-
2	trol system; and
3	(B) \$25.
4	(3) Maximum aggregate amount.—No entity
5	shall be entitled to aggregate rebates under this sec-
6	tion in excess of \$250,000.
7	(e) AUTHORIZATION OF APPROPRIATIONS.—There is
8	authorized to be appropriated to carry out this section
9	\$5,000,000 for each of fiscal years 2014 and 2015, to re-
10	main available until expended.
11	Subtitle D—Transformer Rebate
12	Program
13	SEC. 231. ENERGY EFFICIENT TRANSFORMER REBATE PRO-
	SEC. 231. ENERGY EFFICIENT TRANSFORMER REBATE PROGRAM.
14	
14 15	GRAM.
14 15 16	GRAM.  (a) Definition of Qualified Transformer.—In
14 15 16 17	GRAM.  (a) DEFINITION OF QUALIFIED TRANSFORMER.—In this section, the term "qualified transformer" means a
14 15 16 17	GRAM.  (a) DEFINITION OF QUALIFIED TRANSFORMER.—In this section, the term "qualified transformer" means a transformer that meets or exceeds the National Electrical
114 115 116 117 118	GRAM.  (a) DEFINITION OF QUALIFIED TRANSFORMER.—In this section, the term "qualified transformer" means a transformer that meets or exceeds the National Electrical Manufacturers Association (NEMA) Premium Efficiency
114 115 116 117 118 119 220	GRAM.  (a) DEFINITION OF QUALIFIED TRANSFORMER.—In this section, the term "qualified transformer" means a transformer that meets or exceeds the National Electrical Manufacturers Association (NEMA) Premium Efficiency designation, calculated to 2 decimal points, as having 30
14 15 16 17 18 19 20 21	GRAM.  (a) Definition of Qualified Transformer.—In this section, the term "qualified transformer" means a transformer that meets or exceeds the National Electrical Manufacturers Association (NEMA) Premium Efficiency designation, calculated to 2 decimal points, as having 30 percent fewer losses than the NEMA TP-1-2002 efficiency
14 15 16 17 18 19 20 21	GRAM.  (a) Definition of Qualified Transformer.—In this section, the term "qualified transformer" means a transformer that meets or exceeds the National Electrical Manufacturers Association (NEMA) Premium Efficiency designation, calculated to 2 decimal points, as having 30 percent fewer losses than the NEMA TP-1-2002 efficiency standard for a transformer of the same number of
19 20 21 22 23	GRAM.  (a) Definition of Qualified Transformer.—In this section, the term "qualified transformer" means a transformer that meets or exceeds the National Electrical Manufacturers Association (NEMA) Premium Efficiency designation, calculated to 2 decimal points, as having 30 percent fewer losses than the NEMA TP-1-2002 efficiency standard for a transformer of the same number of phases and capacity, as measured in kilovolt-amperes.

1	industrial or manufacturing facilities, commercial build-
2	ings, and multifamily residential buildings for the pur-
3	chase and installation of a new energy efficient trans-
4	formers.
5	(c) Requirements.—
6	(1) APPLICATION.—To be eligible to receive a
7	rebate under this section, an owner shall submit to
8	the Secretary an application in such form, at such
9	time, and containing such information as the Sec-
10	retary may require, including demonstrated evidence
11	that the owner purchased a qualified transformer.
12	(2) Authorized amount of rebate.—For
13	qualified transformers, rebates, in dollars per kilo-
14	volt-ampere (referred to in this paragraph as
15	"kVA") shall be—
16	(A) for 3-phase transformers—
17	(i) with a capacity of not greater than
18	10 kVA, 15;
19	(ii) with a capacity of not less than 10
20	kVA and not greater than 100 kVA, the
21	difference between 15 and the quotient ob-
22	tained by dividing—
23	(I) the difference between—
24	(aa) the capacity of the
25	transformer in kVA; and

1	(bb) 10; by
2	(II) 9; and
3	(iii) with a capacity greater than or
4	equal to 100 kVA, 5; and
5	(B) for single-phase transformers, 75 per-
6	cent of the rebate for a 3-phase transformer of
7	the same capacity.
8	(d) Authorization of Appropriations.—There is
9	authorized to be appropriated to carry out this section
10	\$5,000,000 for each of fiscal years 2014 and 2015, to re-
11	main available until expended.
12	(e) TERMINATION OF EFFECTIVENESS.—The author-
13	ity provided by this section terminates effective December
14	31, 2015.
15	TITLE III—FEDERAL AGENCY
16	ENERGY EFFICIENCY
17	SEC. 301. ENERGY-EFFICIENT AND ENERGY-SAVING INFOR-
18	MATION TECHNOLOGIES.
19	Section 543 of the National Energy Conservation
20	Policy Act (42 U.S.C. 8253) is amended—
21	(1) by redesignating the second subsection (f)
22	(relating to large capital energy investments) as sub-
23	section (g); and
24	(2) by adding at the end the following:

1	"(h) F'EDERAL IMPLEMENTATION STRATEGY FOR
2	ENERGY-EFFICIENT AND ENERGY-SAVING INFORMATION
3	TECHNOLOGIES.—
4	"(1) Definitions.—In this subsection:
5	"(A) DIRECTOR.—The term 'Director
6	means the Director of the Office of Manage-
7	ment and Budget.
8	"(B) Information Technology.—The
9	term 'information technology' has the meaning
10	given the term in section 11101 of title 40
11	United States Code.
12	"(2) Development of implementation
13	STRATEGY.—Not later than 1 year after the date of
14	enactment of this subsection, each Federal agency
15	shall collaborate with the Director to develop an im-
16	plementation strategy (including best-practices and
17	measurement and verification techniques) for the
18	maintenance, purchase, and use by the Federal
19	agency of energy-efficient and energy-saving infor-
20	mation technologies.
21	"(3) Administration.—In developing an im-
22	plementation strategy, each Federal agency shall
23	consider—
24	"(A) advanced metering infrastructure;

1	"(B) energy efficient data center strategies
2	and methods of increasing asset and infrastruc-
3	ture utilization;
4	"(C) advanced power management tools;
5	"(D) building information modeling, in-
6	cluding building energy management; and
7	"(E) secure telework and travel substi-
8	tution tools.
9	"(4) Performance goals.—
10	"(A) In General.—Not later than Sep-
11	tember 30, 2014, the Director, in consultation
12	with the Secretary, shall establish performance
13	goals for evaluating the efforts of Federal agen-
14	cies in improving the maintenance, purchase
15	and use of energy-efficient and energy-saving
16	information technology systems.
17	"(B) Best practices.—The Chief Infor-
18	mation Officers Council established under sec-
19	tion 3603 of title 44, United States Code, shall
20	supplement the performance goals established
21	under this paragraph with recommendations or
22	best practices for the attainment of the per-
23	formance goals, to include a requirement for
24	agencies to consider the use of—

1	"(i) energy savings performance con-
2	tracting; and
3	"(ii) utility energy services con-
4	tracting.
5	"(5) Reports.—
6	"(A) AGENCY REPORTS.—Each Federal
7	agency subject to the requirements of this sub-
8	section shall include in the report of the agency
9	under section 527 of the Energy Independence
10	and Security Act of 2007 (42 U.S.C. 17143) a
11	description of the efforts and results of the
12	agency under this subsection.
13	"(B) OMB GOVERNMENT EFFICIENCY RE-
14	PORTS AND SCORECARDS.—Effective beginning
15	not later than October 1, 2014, the Director
16	shall include in the annual report and scorecard
17	of the Director required under section 528 of
18	the Energy Independence and Security Act of
19	2007 (42 U.S.C. 17144) a description of the ef-
20	forts and results of Federal agencies under this
21	subsection.
22	"(C) Use of existing reporting struc-
23	TURES.—The Director may require Federal
24	agencies to submit any information required to
25	be submitted under this subsection though re-

1	porting structures in use as of the date of en-
2	actment of the Energy Savings and Industrial
3	Competitiveness Act of 2014.".
4	SEC. 302. AVAILABILITY OF FUNDS FOR DESIGN UPDATES.
5	Section 3307 of title 40, United States Code, is
6	amended—
7	(1) by redesignating subsections (d) through (h)
8	as subsections (e) through (i), respectively; and
9	(2) by inserting after subsection (c) the fol-
10	lowing:
11	"(d) Availability of Funds for Design Up-
12	DATES.—
13	"(1) In general.—Subject to paragraph (2),
14	for any project for which congressional approval is
15	received under subsection (a) and for which the de-
16	sign has been substantially completed but construc-
17	tion has not begun, the Administrator of General
18	Services may use appropriated funds to update the
19	project design to meet applicable Federal building
20	energy efficiency standards established under section
21	305 of the Energy Conservation and Production Act
22	(42 U.S.C. 6834) and other requirements estab-
23	lished under section 3312.
24	"(2) Limitation.—The use of funds under
25	paragraph (1) shall not exceed 125 percent of the

1	estimated energy or other cost savings associated
2	with the updates as determined by a life cycle cost
3	analysis under section 544 of the National Energy
4	Conservation Policy Act (42 U.S.C. 8254).".
5	SEC. 303. ENERGY EFFICIENT DATA CENTERS.
6	Section 453 of the Energy Independence and Security
7	Act of 2007 (42 U.S.C. 17112) is amended—
8	(1) in subsection (c), by striking paragraph (1)
9	and inserting the following:
10	"(1) In general.—Not later than 30 days
11	after the date of enactment of the Energy Savings
12	and Industrial Competitiveness Act of 2014, the
13	Secretary and the Administrator shall—
14	"(A) designate an established information
15	technology industry organization to coordinate
16	the program described in subsection (b); and
17	"(B) make the designation public, includ-
18	ing on an appropriate website.";
19	(2) by striking subsections (e) and (f) and in-
20	serting the following:
21	"(e) Study.—The Secretary, with assistance from
22	the Administrator, shall—
23	"(1) not later than December 31, 2014, make
24	available to the public an update to the Report to
25	Congress on Server and Data Center Energy Effi-

1	ciency published on August 2, 2007, under section
2	1 of Public Law 109–431 (120 Stat. 2920), that
3	provides—
4	"(A) a comparison and gap analysis of the
5	estimates and projections contained in the origi-
6	nal report with new data regarding the period
7	from 2007 through 2013;
8	"(B) an analysis considering the impact of
9	information technologies, to include
10	virtualization and cloud computing, in the pub-
11	lic and private sectors; and
12	"(C) updated projections and recommenda-
13	tions for best practices through fiscal year
14	2020; and
15	"(2) collaborate with the organization des-
16	ignated under subsection (c) in preparing the report.
17	"(f) Data Center Energy Practitioner Pro-
18	GRAM.—
19	"(1) In General.—The Secretary, in collabo-
20	ration with the organization designated under sub-
21	section (c) and in consultation with the Adminis-
22	trator for the Office of E-Government and Informa-
23	tion Technology within the Office of Management
24	and Budget, shall maintain a data center energy
25	practitioner program that leads to the certification

1	of energy practitioners qualified to evaluate the en-
2	ergy usage and efficiency opportunities in data cen-
3	ters.
4	"(2) EVALUATIONS.—Each Federal agency
5	shall consider having the data centers of the agency
6	evaluated every 4 years by energy practitioners cer-
7	tified pursuant to the program, whenever practicable
8	using certified practitioners employed by the agen-
9	ey.'';
10	(3) by redesignating subsection (g) as sub-
11	section (j); and
12	(4) by inserting after subsection (f) the fol-
13	lowing:
14	"(g) Open Data Initiative.—
15	"(1) In general.—The Secretary, in collabo-
16	ration with the organization designated under sub-
17	section (e) and in consultation with the Adminis-
18	trator for the Office of E-Government and Informa-
19	tion Technology within the Office of Management
20	and Budget, shall establish an open data initiative
21	for Federal data center energy usage data, with the
22	purpose of making the data available and accessible
23	in a manner that empowers further data center opti-
24	mization and consolidation.

1 "(2) Administration.—In establishing the ini-2 tiative, the Secretary shall consider use of the online 3 Data Center Maturity Model. "(h) 4 INTERNATIONAL **SPECIFICATIONS** AND 5 Metrics.—The Secretary, in collaboration with the organization designated under subsection (c), shall actively 6 participate in efforts to harmonize global specifications 8 and metrics for data center energy efficiency. 9 "(i) Data Center Utilization Metric.—The Sec-10 retary, in collaboration with the organization designated 11 under subsection (c), shall assist in the development of 12 an efficiency metric that measures the energy efficiency 13 of the overall data center.". 14 SEC. 304. BUDGET-NEUTRAL DEMONSTRATION PROGRAM 15 FOR ENERGY AND WATER CONSERVATION IM-16 PROVEMENTS AT MULTIFAMILY RESIDEN-17 TIAL UNITS. 18 (a) Establishment.—The Secretary of Housing 19 and Urban Development (referred to in this section as the 20 "Secretary") shall establish a demonstration program 21 under which, during the period beginning on the date of 22 enactment of this Act, and ending on September 30, 2017, 23 the Secretary may enter into budget-neutral, performancebased agreements that result in a reduction in energy or water costs with such entities as the Secretary determines

1	to be appropriate under which the entities shall carry out
2	projects for energy or water conservation improvements at
3	not more than 20,000 residential units in multifamily
4	buildings participating in—
5	(1) the project-based rental assistance program
6	under section 8 of the United States Housing Act of
7	1937 (42 U.S.C. 1437f), other than assistance pro-
8	vided under section 8(o) of that Act;
9	(2) the supportive housing for the elderly pro-
10	gram under section 202 of the Housing Act of 1959
11	(12 U.S.C. 1701q); or
12	(3) the supportive housing for persons with dis-
13	abilities program under section $811(d)(2)$ of the
14	Cranston-Gonzalez National Affordable Housing Act
15	(42  U.S.C.  8013(d)(2)).
16	(b) Requirements.—
17	(1) Payments contingent on savings.—
18	(A) IN GENERAL.—The Secretary shall
19	provide to an entity a payment under an agree-
20	ment under this section only during applicable
21	years for which an energy or water cost savings
22	is achieved with respect to the applicable multi-
23	family portfolio of properties, as determined by
24	the Secretary, in accordance with subparagraph
25	(B).

(B) Payment methodology.—
(i) In General.—Each agreement
under this section shall include a pay-for-
success provision—
(I) that will serve as a payment
threshold for the term of the agree-
ment; and
(II) pursuant to which the De-
partment of Housing and Urban De-
velopment shall share a percentage of
the savings at a level determined by
the Secretary that is sufficient to
cover the administrative costs of car-
rying out this section.
(ii) Limitations.—A payment made
by the Secretary under an agreement
under this section shall—
(I) be contingent on documented
utility savings; and
(II) not exceed the utility savings
achieved by the date of the payment
and not previously paid, as a result of
the improvements made under the
agreement.

1	(C) THIRD PARTY VERIFICATION.—Savings
2	payments made by the Secretary under this sec-
3	tion shall be based on a measurement and
4	verification protocol that includes at least—
5	(i) establishment of a weather-normal-
6	ized and occupancy-normalized utility con-
7	sumption baseline established preretrofit;
8	(ii) annual third party confirmation of
9	actual utility consumption and cost for
10	owner-paid utilities;
11	(iii) annual third party validation of
12	the tenant utility allowances in effect dur-
13	ing the applicable year and vacancy rates
14	for each unit type; and
15	(iv) annual third party determination
16	of savings to the Secretary.
17	(2) TERM.—The term of an agreement under
18	this section shall be not longer than 12 years.
19	(3) Entity eligibility.—The Secretary
20	shall—
21	(A) establish a competitive process for en-
22	tering into agreements under this section; and
23	(B) enter into such agreements only with
24	entities that demonstrate significant experience
25	relating to—

1	(i) financing and operating properties
2	receiving assistance under a program de-
3	scribed in subsection (a);
4	(ii) oversight of energy and water con-
5	servation programs, including oversight of
6	contractors; and
7	(iii) raising capital for energy and
8	water conservation improvements from
9	charitable organizations or private inves-
10	tors.
11	(4) Geographical diversity.—Each agree-
12	ment entered into under this section shall provide
13	for the inclusion of properties with the greatest fea-
14	sible regional and State variance.
15	(c) Plan and Reports.—
16	(1) Plan.—Not later than 90 days after the
17	date of enactment of this Act, the Secretary shall
18	submit to the Committees on Appropriations of the
19	House of Representatives and the Senate a detailed
20	plan for the implementation of this section.
21	(2) Reports.—Not later than 1 year after the
22	date of enactment of this Act, and annually there-
23	after, the Secretary shall—
24	(A) conduct an evaluation of the program
25	under this section; and

1	(B) submit to Congress a report describing
2	each evaluation conducted under subparagraph
3	(A).
4	(d) Funding.—For each fiscal year during which an
5	agreement under this section is in effect, the Secretary
6	may use to carry out this section any funds appropriated
7	to the Secretary for the renewal of contracts under a pro-
8	gram described in subsection (a).
9	TITLE IV—REGULATORY
10	PROVISIONS
11	Subtitle A—Third-party Certifi-
12	cation Under Energy Star Pro-
13	gram
14	SEC. 401. THIRD-PARTY CERTIFICATION UNDER ENERGY
15	STAR PROGRAM.
16	Section 324A of the Energy Policy and Conservation
17	Act (42 U.S.C. 6294a) is amended by adding at the end
18	the following:
19	"(e) Third-party Certification.—
20	"(1) In general.—Subject to paragraph (2),
21	not later than 180 days after the date of enactment
22	of this subsection, the Administrator shall revise the
23	certification requirements for the labeling of con-
24	sumer, home, and office electronic products for pro-
25	gram partners that have complied with all require-

1	ments of the Energy Star program for a period of
2	at least 18 months.
3	"(2) Administration.—In the case of a pro-
4	gram partner described in paragraph (1), the new
5	requirements under paragraph (1)—
6	"(A) shall not require third-party certifi-
7	cation for a product to be listed; but
8	"(B) may require that test data and other
9	product information be submitted to facilitate
10	product listing and performance verification for
11	a sample of products.
12	"(3) Third parties.—Nothing in this sub-
13	section prevents the Administrator from using third
14	parties in the course of the administration of the
15	Energy Star program.
16	"(4) TERMINATION.—
17	"(A) In general.—Subject to subpara-
18	graph (B), an exemption from third-party cer-
19	tification provided to a program partner under
20	paragraph (1) shall terminate if the program
21	partner is found to have violated program re-
22	quirements with respect to at least 2 separate
23	models during a 2-year period.
24	"(B) Resumption.—A termination for a
25	program partner under subparagraph (A) shall

1	cease if the program partner complies with all
2	Energy Star program requirements for a period
3	of at least 3 years.".
4	Subtitle B—Federal Green
5	Buildings
6	SEC. 411. HIGH-PERFORMANCE GREEN FEDERAL BUILD-
7	INGS.
8	Section 436(h) of the Energy Independence and Se-
9	curity Act of 2007 (42 U.S.C. 17092(h)) is amended—
10	(1) in the subsection heading, by striking "Sys-
11	TEM" and inserting "Systems";
12	(2) by striking paragraph (1) and inserting the
13	following:
14	"(1) In general.—Based on an ongoing re-
15	view, the Federal Director shall identify and shall
16	provide to the Secretary pursuant to section
17	305(a)(3)(D) of the Energy Conservation and Pro-
18	duction Act (42 U.S.C. 6834(a)(3)(D)), a list of
19	those certification systems that the Director identi-
20	fies as the most likely to encourage a comprehensive
21	and environmentally sound approach to certification
22	of green buildings."; and
23	(3) in paragraph (2)—

1	(A) in the matter preceding subparagraph
2	(A), by striking "system" and inserting "sys-
3	tems'';
4	(B) by striking subparagraph (A) and in-
5	serting the following:
6	"(A) an ongoing review provided to the
7	Secretary pursuant to section 305(a)(3)(D) of
8	the Energy Conservation and Production Act
9	(42 U.S.C. 6834(a)(3)(D)), which shall—
10	"(i) be carried out by the Federal Di-
11	rector to compare and evaluate standards;
12	and
13	"(ii) allow any developer or adminis-
14	trator of a rating system or certification
15	system to be included in the review;";
16	(C) in subparagraph (E)(v), by striking
17	"and" after the semicolon at the end;
18	(D) in subparagraph (F), by striking the
19	period at the end and inserting a semicolon;
20	and
21	(E) by adding at the end the following:
22	"(G) a finding that, for all credits address-
23	ing grown, harvested, or mined materials, the
24	system does not discriminate against the use of

1	domestic products that have obtained certifi-
2	cations of responsible sourcing; and
3	"(H) a finding that the system incor-
4	porates life-cycle assessment as a credit path-
5	way.".
6	Subtitle C—Water Heaters
7	SEC. 421. GRID-ENABLED WATER HEATERS.
8	Part B of title III of the Energy Policy and Conserva-
9	tion Act (42 U.S.C. 6291 et seq.) is amended—
10	(1) in section 325(e), by adding at the end the
11	following:
12	"(6) Additional standards for grid-en-
13	ABLED WATER HEATERS.—
14	"(A) Definitions.—In this paragraph:
15	"(i) ACTIVATION KEY.—The term 'ac-
16	tivation key' means a physical device or
17	control directly on the water heater, a soft-
18	ware code, or a digital communication
19	means—
20	"(I) that must be activated to en-
21	able the product to operate continu-
22	ously and at its designed specifica-
23	tions and capabilities; and
24	"(II) without which activation
25	the product will provide not greater

1	than 50 percent of the rated first
2	hour delivery of hot water certified by
3	the manufacturer.
4	"(ii) Grid-enabled water heat-
5	ER.—The term 'grid-enabled water heater'
6	means an electric resistance water heat-
7	er—
8	"(I) with a rated storage tank
9	volume of more than 75 gallons;
10	"(II) manufactured on or after
11	April 16, 2015;
12	"(III) that has—
13	"(aa) an energy factor of
14	not less than 1.061 minus the
15	product obtained by multi-
16	plying—
17	"(AA) the rated storage
18	volume of the tank, ex-
19	pressed in gallons; and
20	"(BB) $0.00168$ ; or
21	"(bb) an efficiency level
22	equivalent to the energy factor
23	under item (aa) and expressed as
24	a uniform energy descriptor
25	based on the revised test proce-

1	dure for water heaters described
2	in paragraph (5);
3	"(IV) equipped by the manufac-
4	turer with an activation key; and
5	"(V) that bears a permanent
6	label applied by the manufacturer
7	that—
8	"(aa) is made of material
9	not adversely affected by water;
10	"(bb) is attached by means
11	of non-water-soluble adhesive;
12	and
13	"(cc) advises purchasers and
14	end-users of the intended and ap-
15	propriate use of the product with
16	the following notice printed in
17	16.5 point Arial Narrow Bold
18	font:
19	"'IMPORTANT INFORMATION: This water heater is
20	intended only for use as part of an electric thermal storage
21	or demand response program. It will not provide adequate
22	hot water unless enrolled in such a program and activated
23	by your utility company or another program operator.
24	Confirm the availability of a program in your local area
25	before purchasing or installing this product.'.

1	"(B) REQUIREMENT.—The manufacturer
2	or private labeler shall provide the activation
3	key only to utilities or other companies oper-
4	ating electric thermal storage or demand re-
5	sponse programs that use grid-enabled water
6	heaters.
7	"(C) Reports.—
8	"(i) Manufacturers.—The Sec-
9	retary shall require each manufacturer of
10	grid-enabled water heaters to report to the
11	Secretary annually the number of grid-en-
12	abled water heaters that the manufacturer
13	ships each year.
14	"(ii) Operators.—The Secretary
15	shall require utilities and other demand re-
16	sponse and thermal storage program oper-
17	ators to report annually the number of
18	grid-enabled water heaters activated for
19	their programs using forms of the Energy
20	Information Agency or using such other
21	mechanism that the Secretary determines
22	appropriate after an opportunity for notice
23	and comment.
24	"(iii) Confidentiality require-
25	MENTS.—The Secretary shall treat ship-

1	ment data reported by manufacturers as
2	confidential business information.
3	"(D) Publication of information.—
4	"(i) In General.—In 2017 and
5	2019, the Secretary shall publish an anal-
6	ysis of the data collected under subpara-
7	graph (C) to assess the extent to which
8	shipped products are put into use in de-
9	mand response and thermal storage pro-
10	grams.
11	"(ii) Prevention of product di-
12	VERSION.—If the Secretary determines
13	that sales of grid-enabled water heaters ex-
14	ceed by 15 percent or greater the number
15	of such products activated for use in de-
16	mand response and thermal storage pro-
17	grams annually, the Secretary shall, after
18	opportunity for notice and comment, estab-
19	lish procedures to prevent product diver-
20	sion for non-program purposes.
21	"(E) Compliance.—
22	"(i) In General.—Subparagraphs
23	(A) through (D) shall remain in effect
24	until the Secretary determines under this
25	section that grid-enabled water heaters do

1	not require a separate efficiency require-
2	ment.
3	"(ii) Effective date.—If the Sec-
4	retary exercises the authority described in
5	clause (i) or amends the efficiency require-
6	ment for grid-enabled water heaters, that
7	action will take effect on the date de-
8	scribed in subsection (m)(4)(A)(ii).
9	"(iii) Consideration.—In carrying
10	out this section with respect to electric
11	water heaters, the Secretary shall consider
12	the impact on thermal storage and demand
13	response programs, including the con-
14	sequent impact on energy savings, electric
15	bills, electric reliability, integration of re-
16	newable resources, and the environment.
17	"(iv) Requirements.—In carrying
18	out this subparagraph, the Secretary shall
19	require that grid-enabled water heaters be
20	equipped with communication capability to
21	enable the grid-enabled water heaters to
22	participate in ancillary services programs if
23	the Secretary determines that the tech-
24	nology is available, practical, and cost-ef-
25	fective."; and

1	(2) in section 332—
2	(A) in paragraph (5), by striking "or" at
3	the end;
4	(B) in the first paragraph (6), by striking
5	the period at the end and inserting a semicolon;
6	(C) by redesignating the second paragraph
7	(6) as paragraph (7);
8	(D) in subparagraph (B) of paragraph (7)
9	(as so redesignated), by striking the period at
10	the end and inserting "; or"; and
11	(E) by adding at the end the following:
12	"(8) with respect to grid-enabled water heaters
13	that are not used as part of an electric thermal stor-
14	age or demand response program, for any person
15	knowingly and repeatedly—
16	"(A) to distribute activation keys for those
17	grid-enabled water heaters;
18	"(B) otherwise to enable the full operation
19	of those grid-enabled water heaters; or
20	"(C) to remove or render illegible the la-
21	bels of those grid-enabled water heaters.".

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## 1 Subtitle D—Energy Performance

## Requirement for Federal Buildings

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- 5 Section 543 of the National Energy Conservation
- 6 Policy Act (42 U.S.C. 8253) is amended—
- 7 (1) by striking subsection (a) and inserting the
- 8 following:
- 9 "(a) Energy Performance Requirement for
- 10 Federal Buildings.—
- 11 "(1) REQUIREMENT.—Subject to paragraph
- 12 (2), each agency shall apply energy conservation
- measures to, and shall improve the design for the
- 14 construction of, the Federal buildings of the agency
- 15 (including each industrial or laboratory facility) so
- that the energy consumption per gross square foot
- of the Federal buildings of the agency in fiscal years
- 18 2006 through 2017 is reduced, as compared with the
- 19 energy consumption per gross square foot of the
- Federal buildings of the agency in fiscal year 2003,
- by the percentage specified in the following table:

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

	"Fiscal Year Reduction
	2013       24         2014       27
	2015
	2017
1	"(2) Exclusion for buildings with energy
2	INTENSIVE ACTIVITIES.—
3	"(A) In General.—An agency may ex-
4	clude from the requirements of paragraph (1)
5	any building (including the associated energy
6	consumption and gross square footage) in which
7	energy intensive activities are carried out.
8	"(B) Reports.—Each agency shall iden-
9	tify and list in each report made under section
10	548(a) the buildings designated by the agency
11	for exclusion under subparagraph (A).
12	"(3) Review.—Not later than December 31,
13	2017, the Secretary shall—
14	"(A) review the results of the implementa-
15	tion of the energy performance requirements es-
16	tablished under paragraph (1); and
17	"(B) based on the review conducted under
18	subparagraph (A), submit to Congress a report
19	that addresses the feasibility of requiring each
20	agency to apply energy conservation measures
21	to, and improve the design for the construction
22	of, the Federal buildings of the agency (includ-

1	ing each industrial or laboratory facility) so
2	that the energy consumption per gross square
3	foot of the Federal buildings of the agency in
4	each of fiscal years 2018 through 2030 is re-
5	duced, as compared with the energy consump-
6	tion per gross square foot of the Federal build-
7	ings of the agency in the prior fiscal year, by
8	3 percent."; and
9	(2) in subsection (f)—
10	(A) in paragraph (1)—
11	(i) by redesignating subparagraphs
12	(E), (F), and (G) as subparagraphs (F),
13	(G), and (H), respectively; and
14	(ii) by inserting after subparagraph
15	(D) the following:
16	"(E) Ongoing commissioning.—The
17	term 'ongoing commissioning' means an ongo-
18	ing process of commissioning using monitored
19	data, the primary goal of which is to ensure
20	continuous optimum performance of a facility,
21	in accordance with design or operating needs
22	over the useful life of the facility, while meeting
23	facility occupancy requirements.";
24	(B) in paragraph (2), by adding at the end
25	the following:

1	"(C) Energy management system.—An
2	energy manager designated under subparagraph
3	(A) shall consider use of a system to manage
4	energy use at the facility and certification of
5	the facility in accordance with the International
6	Organization for Standardization standard
7	numbered 50001 and entitled 'Energy Manage-
8	ment Systems'.";
9	(C) by striking paragraphs (3) and (4) and
10	inserting the following:
11	"(3) Energy and water evaluations and
12	COMMISSIONING.—
13	"(A) Evaluations.—Except as provided
14	in subparagraph (B), effective beginning on the
15	date that is 180 days after the date of enact-
16	ment of the Energy Savings and Industrial
17	Competitiveness Act of 2014, and annually
18	thereafter, each energy manager shall complete,
19	for each calendar year, a comprehensive energy
20	and water evaluation and recommissioning or
21	retrocommissioning for approximately 25 per-
22	cent of the facilities of each agency that meet
23	the criteria under paragraph (2)(B) in a man-
24	ner that ensures that an evaluation of each fa-
25	cility is completed at least once every 4 years.

1	"(B) Exceptions.—An evaluation and re-
2	commissioning shall not be required under sub-
3	paragraph (A) with respect to a facility that—
4	"(i) has had a comprehensive energy
5	and water evaluation during the 8-year pe-
6	riod preceding the date of the evaluation;
7	"(ii)(I) has been commissioned, re-
8	commissioned, or retrocommissioned dur-
9	ing the 10-year period preceding the date
10	of the evaluation; or
11	"(II) is under ongoing commissioning;
12	"(iii) has not had a major change in
13	function or use since the previous evalua-
14	tion and commissioning;
15	"(iv) has been benchmarked with pub-
16	lic disclosure under paragraph (8) within
17	the year preceding the evaluation; and
18	"(v)(I) based on the benchmarking,
19	has achieved at a facility level the most re-
20	cent cumulative energy savings target
21	under subsection (a) compared to the ear-
22	lier of—
23	"(aa) the date of the most recent
24	evaluation; or
25	"(bb) the date—

1	(AA) of the most recent
2	commissioning, recommissioning,
3	or retrocommissioning; or
4	"(BB) on which ongoing
5	commissioning began; or
6	"(II) has a long-term contract in
7	place guaranteeing energy savings at least
8	as great as the energy savings target under
9	subclause (I).
10	"(4) Implementation of identified energy
11	AND WATER EFFICIENCY MEASURES.—
12	"(A) In general.—Not later than 2 years
13	after the date of completion of each evaluation
14	under paragraph (3), each energy manager
15	may—
16	"(i) implement any energy- or water-
17	saving measure that the Federal agency
18	identified in the evaluation conducted
19	under paragraph (3) that is life-cycle cost
20	effective; and
21	"(ii) bundle individual measures of
22	varying paybacks together into combined
23	projects.
24	"(B) Measures not implemented.—
25	The energy manager shall, as part of the cer-

1	tification system under paragraph (7), explain
2	the reasons why any life-cycle cost effective
3	measures were not implemented under subpara-
4	graph (A) using guidelines developed by the
5	Secretary."; and
6	(D) in paragraph (7)(C), by adding at the
7	end the following:
8	"(iii) Summary Report.—The Sec-
9	retary shall make available a report that
10	summarizes the information tracked under
11	subparagraph (B)(i) by each agency and,
12	as applicable, by each type of measure.".
13	SEC. 432. FEDERAL BUILDING ENERGY EFFICIENCY PER-
14	FORMANCE STANDARDS; CERTIFICATION
15	SYSTEM AND LEVEL FOR GREEN BUILDINGS.
16	(a) Definitions.—Section 303 of the Energy Con-
	(a) DEFINITIONS.—Section 303 of the Energy Conservation and Production Act (42 U.S.C. 6832) (as
17	
17	servation and Production Act (42 U.S.C. 6832) (as
17 18	servation and Production Act (42 U.S.C. 6832) (as amended by section 101(a)) is amended—
17 18 19	servation and Production Act (42 U.S.C. 6832) (as amended by section 101(a)) is amended—  (1) in paragraph (6), by striking "to be con-
17 18 19 20	servation and Production Act (42 U.S.C. 6832) (as amended by section 101(a)) is amended—  (1) in paragraph (6), by striking "to be constructed" and inserting "constructed or altered";
17 18 19 20 21	servation and Production Act (42 U.S.C. 6832) (as amended by section 101(a)) is amended—  (1) in paragraph (6), by striking "to be constructed" and inserting "constructed or altered"; and
17 18 19 20 21 22	servation and Production Act (42 U.S.C. 6832) (as amended by section 101(a)) is amended—  (1) in paragraph (6), by striking "to be constructed" and inserting "constructed or altered"; and  (2) by adding at the end the following:
17 18 19 20 21 22 23	servation and Production Act (42 U.S.C. 6832) (as amended by section 101(a)) is amended—  (1) in paragraph (6), by striking "to be constructed" and inserting "constructed or altered"; and  (2) by adding at the end the following:  "(19) MAJOR RENOVATION.—The term 'major

1	can meet energy standards for new buildings, based
2	on criteria to be established by the Secretary
3	through notice and comment rulemaking.".
4	(b) Federal Building Efficiency Standards.—
5	Section 305 of the Energy Conservation and Production
6	Act (42 U.S.C. 6834) is amended—
7	(1) in subsection (a)(3)—
8	(A) by striking "(3)(A) Not later than"
9	and all that follows through subparagraph (B)
10	and inserting the following:
11	"(3) Revised federal building energy ef-
12	FICIENCY PERFORMANCE STANDARDS; CERTIFI-
13	CATION FOR GREEN BUILDINGS.—
14	"(A) REVISED FEDERAL BUILDING EN-
15	ERGY EFFICIENCY PERFORMANCE STAND-
16	ARDS.—
17	"(i) IN GENERAL.—Not later than 1
18	year after the date of enactment of the En-
19	ergy Savings and Industrial Competitive-
20	ness Act of 2014, the Secretary shall es-
21	tablish, by rule, revised Federal building
22	energy efficiency performance standards
23	that require that—

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1	"(I) new Federal buildings and
2	alterations and additions to existing
3	Federal buildings—
4	"(aa) meet or exceed the
5	most recent revision of the Inter-
6	national Energy Conservation
7	Code (in the case of residential
8	buildings) or ASHRAE Standard
9	90.1 (in the case of commercial
10	buildings) as of the date of en-
11	actment of the Energy Savings
12	and Industrial Competitiveness
13	Act of 2014; and
14	"(bb) meet or exceed the en-
15	ergy provisions of State and local
16	building codes applicable to the
17	building, if the codes are more
18	stringent than the International
19	Energy Conservation Code or
20	ASHRAE Standard 90.1, as ap-
21	plicable;
22	"(II) unless demonstrated not to
23	be life-cycle cost effective for new
24	Federal buildings and Federal build-
25	ings with major renovations—

1	"(aa) the buildings be de-
2	signed to achieve energy con-
3	sumption levels that are at least
4	30 percent below the levels estab-
5	lished in the version of the
6	ASHRAE Standard or the Inter-
7	national Energy Conservation
8	Code, as appropriate, that is ap-
9	plied under subclause (I)(aa), in-
10	cluding updates under subpara-
11	graph (B); and
12	"(bb) sustainable design
13	principles are applied to the loca-
14	tion, siting, design, and construc-
15	tion of all new Federal buildings
16	and replacement Federal build-
17	ings;
18	"(III) if water is used to achieve
19	energy efficiency, water conservation
20	technologies shall be applied to the ex-
21	tent that the technologies are life-
22	cycle cost effective;
23	"(IV) if life-cycle cost effective,
24	as compared to other reasonably avail-
25	able technologies, not less than 30

1	percent of the hot water demand for
2	each new Federal building or Federal
3	building undergoing a major renova-
4	tion be met through the installation
5	and use of solar hot water heaters;
6	and
7	"(V) in addition to complying
8	with the other requirements under
9	this paragraph, unless found not to be
10	life-cycle cost effective, new Federal
11	buildings that are at least 5,000
12	square feet in size shall comply with
13	the Guiding Principles for Sustainable
14	New Construction and Major Renova-
15	tions (as established in the document
16	entitled High Performance and Sus-
17	tainable Buildings Guidance (Final)
18	and dated December 1, 2008).
19	"(ii) Limitation.—Clause (i)(I) shall
20	not apply to unaltered portions of existing
21	Federal buildings and systems that have
22	been added to or altered.
23	"(B) UPDATES.—Not later than 1 year
24	after the date of approval of each subsequent
25	revision of the ASHRAE Standard or the Inter-

1	national Energy Conservation Code, as appro-
2	priate, the Secretary shall determine whether
3	the revised standards established under sub-
4	paragraph (A) should be updated to reflect the
5	revisions, based on the energy savings and life-
6	cycle cost-effectiveness of the revisions.";
7	(B) in subparagraph (C), by striking "(C)
8	In the budget request" and inserting the fol-
9	lowing:
10	"(C) Budget request.—In the budget
11	request"; and
12	(C) by striking subparagraph (D) and in-
13	serting the following:
14	"(D) CERTIFICATION FOR GREEN BUILD-
15	INGS.—
16	"(i) Sustainable design prin-
17	CIPLES.—Sustainable design principles
18	shall be applied to the siting, design, and
19	construction of buildings covered by this
20	subparagraph.
21	"(ii) Selection of Certification
22	Systems.—The Secretary, after reviewing
23	the findings of the Federal Director under
24	section 436(h) of the Energy Independence
25	and Security Act of 2007 (42 U.S.C.

1	17092(h)), in consultation with the Admin-
2	istrator of General Services, and in con-
3	sultation with the Secretary of Defense re-
4	lating to those facilities under the custody
5	and control of the Department of Defense,
6	shall determine those certification systems
7	for green commercial and residential build-
8	ings that the Secretary determines to be
9	the most likely to encourage a comprehen-
10	sive and environmentally sound approach
11	to certification of green buildings.
12	"(iii) Basis for selection.—The
13	determination of the certification systems
14	under clause (ii) shall be based on ongoing
15	review of the findings of the Federal Direc-
16	tor under section 436(h) of the Energy
17	Independence and Security Act of 2007
18	(42 U.S.C. 17092(h)) and the criteria de-
19	scribed in clause (v).
20	"(iv) Administration.—In deter-
21	mining certification systems under this
22	subparagraph, the Secretary shall—
23	"(I) make a separate determina-
24	tion for all or part of each system;

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1	"(II) confirm that the criteria
2	used to support the selection of build-
3	ing products, materials, brands, and
4	technologies are fair and neutral
5	(meaning that such criteria are based
6	on an objective assessment of relevant
7	technical data), do not prohibit, dis-
8	favor, or discriminate against selec-
9	tion based on technically inadequate
10	information to inform human or envi-
11	ronmental risk, and are expressed to
12	prefer performance measures when-
13	ever performance measures may rea-
14	sonably be used in lieu of prescriptive
15	measures; and
16	"(III) use environmental and
17	health criteria that are based on risk
18	assessment methodology that is gen-
19	erally accepted by the applicable sci-
20	entific disciplines.
21	"(v) Considerations.—In deter-
22	mining the green building certification sys-
23	tems under this subparagraph, the Sec-
24	retary shall take into consideration—

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1	(1) the ability and availability of
2	assessors and auditors to independ-
3	ently verify the criteria and measure-
4	ment of metrics at the scale necessary
5	to implement this subparagraph;
6	"(II) the ability of the applicable
7	certification organization to collect
8	and reflect public comment;
9	"(III) the ability of the standard
10	to be developed and revised through a
11	consensus-based process;
12	"(IV) an evaluation of the
13	robustness of the criteria for a high-
14	performance green building, which
15	shall give credit for promoting—
16	"(aa) efficient and sustain-
17	able use of water, energy, and
18	other natural resources;
19	"(bb) use of renewable en-
20	ergy sources;
21	"(cc) improved indoor envi-
22	ronmental quality through en-
23	hanced indoor air quality, ther-
24	mal comfort, acoustics, day light-
25	ing, pollutant source control, and

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1	use of low-emission materials and
2	building system controls; and
3	"(dd) such other criteria as
4	the Secretary determines to be
5	appropriate; and
6	"(V) national recognition within
7	the building industry.
8	"(vi) Review.—The Secretary, in
9	consultation with the Administrator of
10	General Services and the Secretary of De-
11	fense, shall conduct an ongoing review to
12	evaluate and compare private sector green
13	building certification systems, taking into
14	account—
15	"(I) the criteria described in
16	clause (v); and
17	"(II) the identification made by
18	the Federal Director under section
19	436(h) of the Energy Independence
20	and Security Act of 2007 (42 U.S.C.
21	17092(h)).
22	"(vii) Exclusions.—
23	"(I) In general.—Subject to
24	subclause (II), if a certification sys-
25	tem fails to meet the review require-

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1	ments of clause (v), the Secretary
2	shall—
3	"(aa) identify the portions
4	of the system, whether pre-
5	requisites, credits, points, or oth-
6	erwise, that meet the review cri-
7	teria of clause (v);
8	"(bb) determine the portions
9	of the system that are suitable
10	for use; and
11	"(cc) exclude all other por-
12	tions of the system from identi-
13	fication and use.
14	"(II) Entire systems.—The
15	Secretary shall exclude an entire sys-
16	tem from use if an exclusion under
17	subclause (I)—
18	"(aa) impedes the integrated
19	use of the system;
20	"(bb) creates disparate re-
21	view criteria or unequal point ac-
22	cess for competing materials; or
23	"(cc) increases agency costs
24	of the use.

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1	"(viii) Internal certification
2	PROCESSES.—The Secretary may by rule
3	allow Federal agencies to develop internal
4	certification processes, using certified pro-
5	fessionals, in lieu of certification by certifi-
6	cation entities identified under clause (ii).
7	"(ix) Privatized military hous-
8	ING.—With respect to privatized military
9	housing, the Secretary of Defense, after
10	consultation with the Secretary may,
11	through rulemaking, develop alternative
12	certification systems and levels than the
13	systems and levels identified under clause
14	(ii) that achieve an equivalent result in
15	terms of energy savings, sustainable de-
16	sign, and green building performance.
17	"(x) Water conservation tech-
18	NOLOGIES.—In addition to any use of
19	water conservation technologies otherwise
20	required by this section, water conservation
21	technologies shall be applied to the extent
22	that the technologies are life-cycle cost-ef-
23	fective.
24	"(xi) Effective date.—

1	"(I) Determinations made
2	AFTER DECEMBER 31, 2015.—The
3	amendments made by section
4	432(b)(1)(C) of the Energy Savings
5	and Industrial Competitiveness Act of
6	2014 shall apply to any determination
7	made by a Federal agency after De-
8	cember 31, 2015.
9	"(II) Determinations made on
10	OR BEFORE DECEMBER 31, 2015.—
11	This subparagraph (as in effect on the
12	day before the date of enactment of
13	the Energy Savings and Industrial
14	Competitiveness Act of 2014) shall
15	apply to any use of a certification sys-
16	tem for green commercial and residen-
17	tial buildings by a Federal agency on
18	or before December 31, 2015."; and
19	(2) by striking subsections (c) and (d) and in-
20	serting the following:
21	"(c) Periodic Review.—The Secretary shall—
22	"(1) once every 5 years, review the Federal
23	building energy standards established under this sec-
24	tion: and

1	"(2) on completion of a review under paragraph
2	(1), if the Secretary determines that significant en-
3	ergy savings would result, upgrade the standards to
4	include all new energy efficiency and renewable en-
5	ergy measures that are technologically feasible and
6	economically justified.".
7	SEC. 433. ENHANCED ENERGY EFFICIENCY UNDER
8	WRITING.
9	(a) Definitions.—In this section:
10	(1) COVERED AGENCY.—The term "covered
11	agency''—
12	(A) means—
13	(i) an executive agency, as that term
14	is defined in section 102 of title 31, United
15	States Code; and
16	(ii) any other agency of the Federal
17	Government; and
18	(B) includes any enterprise, as that term is
19	defined under section 1303 of the Federal
20	Housing Enterprises Financial Safety and
21	Soundness Act of 1992 (12 U.S.C. 4502).
22	(2) COVERED LOAN.—The term "covered loan"
23	means a loan secured by a home that is issued, in-
24	sured, purchased, or securitized by a covered agency.
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1	(3) Homeowner.—The term "homeowner"
2	means the mortgagor under a covered loan.
3	(4) Mortgagee.—The term "mortgagee"
4	means—
5	(A) an original lender under a covered loan
6	or the holder of a covered loan at the time at
7	which that mortgage transaction is con-
8	summated;
9	(B) any affiliate, agent, subsidiary, suc-
10	cessor, or assignee of an original lender under
11	a covered loan or the holder of a covered loan
12	at the time at which that mortgage transaction
13	is consummated;
14	(C) any servicer of a covered loan; and
15	(D) any subsequent purchaser, trustee, or
16	transferee of any covered loan issued by an
17	original lender.
18	(5) Secretary.—The term "Secretary" means
19	the Secretary of Housing and Urban Development.
20	(6) Servicer.—The term "servicer" means the
21	person or entity responsible for the servicing of a
22	covered loan, including the person or entity who
23	makes or holds a covered loan if that person or enti-
24	ty also services the covered loan.

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1	(7) Servicing.—The term "servicing" has the
2	meaning given the term in section 6(i) of the Real
3	Estate Settlement Procedures Act of 1974 (12
4	U.S.C. 2605(i)).
5	(b) Findings and Purposes.—
6	(1) FINDINGS.—Congress finds that—
7	(A) energy costs for homeowners are a sig-
8	nificant and increasing portion of their house-
9	hold budgets;
10	(B) household energy use can vary sub-
11	stantially depending on the efficiency and char-
12	acteristics of the house;
13	(C) expected energy cost savings are im-
14	portant to the value of the house;
15	(D) the current test for loan affordability
16	used by most covered agencies, commonly
17	known as the "debt-to-income" test, is inad-
18	equate because it does not take into account the
19	expected energy cost savings for the homeowner
20	of an energy efficient home; and
21	(E) another loan limitation, commonly
22	known as the "loan-to-value" test, is tied to the
23	appraisal, which often does not adjust for effi-
24	ciency features of houses.

1	(2) Purposes.—The purposes of this section
2	are to—
3	(A) improve the accuracy of mortgage un-
4	derwriting by Federal mortgage agencies by en-
5	suring that energy cost savings are included in
6	the underwriting process as described below
7	and thus to reduce the amount of energy con-
8	sumed by homes and to facilitate the creation
9	of energy efficiency retrofit and construction
10	jobs;
11	(B) require a covered agency to include the
12	expected energy cost savings of a homeowner as
13	a regular expense in the tests, such as the debt
14	to-income test, used to determine the ability of
15	the loan applicant to afford the cost of home-
16	ownership for all loan programs; and
17	(C) require a covered agency to include the
18	value home buyers place on the energy effi-
19	ciency of a house in tests used to compare the
20	mortgage amount to home value, taking pre-
21	cautions to avoid double-counting and to sup-
22	port safe and sound lending.
23	(c) Enhanced Energy Efficiency Under-
24	WRITING CRITERIA.—

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

(2) Requirements to account for energy cost savings.—The enhanced loan eligibility requirements under paragraph (1) shall require that, for all covered loans for which an energy efficiency report is voluntarily provided to the mortgagee by the mortgagor, the covered agency and the mortgagee shall take into consideration the estimated energy cost savings expected for the owner of the subject property in determining whether the loan applicant has sufficient income to service the mortgage debt plus other regular expenses. To the extent that a covered agency uses a test such as a debt-to-income test that includes certain regular expenses, such as hazard insurance and property taxes, the expected energy cost savings shall be included as an

1	offset to these expenses. Energy costs to be assessed
2	include the cost of electricity, natural gas, oil, and
3	any other fuel regularly used to supply energy to the
4	subject property.
5	(3) Determination of estimated energy
6	COST SAVINGS.—
7	(A) In general.—The guidelines to be
8	issued under paragraph (1) shall include in-
9	structions for the covered agency to calculate
10	estimated energy cost savings using—
11	(i) the energy efficiency report;
12	(ii) an estimate of baseline average
13	energy costs; and
14	(iii) additional sources of information
15	as determined by the Secretary.
16	(B) Report requirements.—For the
17	purposes of subparagraph (A), an energy effi-
18	ciency report shall—
19	(i) estimate the expected energy cost
20	savings specific to the subject property,
21	based on specific information about the
22	property;
23	(ii) be prepared in accordance with
24	the guidelines to be issued under para-
25	graph (1); and

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1	(iii) be prepared—
2	(I) in accordance with the Resi-
3	dential Energy Service Network's
4	Home Energy Rating System (com-
5	monly known as "HERS") by an indi-
6	vidual certified by the Residential En-
7	ergy Service Network, unless the Sec-
8	retary finds that the use of HERS
9	does not further the purposes of this
10	section; or
11	(II) by other methods approved
12	by the Secretary, in consultation with
13	the Secretary of Energy and the advi-
14	sory group established in subsection
15	(f)(2), for use under this section,
16	which shall include a third-party qual-
17	ity assurance procedure.
18	(C) USE BY APPRAISER.—If an energy ef-
19	ficiency report is used under paragraph (2), the
20	energy efficiency report shall be provided to the
21	appraiser to estimate the energy efficiency of
22	the subject property and for potential adjust-
23	ments for energy efficiency.
24	(4) Required disclosure to consumer for
25	A HOME WITH AN ENERGY EFFICIENCY REPORT.—

1	If an energy efficiency report is used under para-
2	graph (2), the guidelines to be issued under para-
3	graph (1) shall require the mortgagee to—
4	(A) inform the loan applicant of the ex-
5	pected energy costs as estimated in the energy
6	efficiency report, in a manner and at a time as
7	prescribed by the Secretary, and if practicable,
8	in the documents delivered at the time of loan
9	application; and
10	(B) include the energy efficiency report in
11	the documentation for the loan provided to the
12	borrower.
13	(5) Required disclosure to consumer for
14	A HOME WITHOUT AN ENERGY EFFICIENCY RE-
15	PORT.—If an energy efficiency report is not used
16	under paragraph (2), the guidelines to be issued
17	under paragraph (1) shall require the mortgagee to
18	inform the loan applicant in a manner and at a time
19	as prescribed by the Secretary, and if practicable, in
20	the documents delivered at the time of loan applica-
21	tion of—
22	(A) typical energy cost savings that would
23	be possible from a cost-effective energy upgrade
24	of a home of the size and in the region of the
25	subject property;

1	(B) the impact the typical energy cost sav-
2	ings would have on monthly ownership costs of
3	a typical home;
4	(C) the impact on the size of a mortgage
5	that could be obtained if the typical energy cost
6	savings were reflected in an energy efficiency
7	report; and
8	(D) resources for improving the energy ef-
9	ficiency of a home.
10	(6) Pricing of Loans.—
11	(A) In General.—A covered agency may
12	price covered loans originated under the en-
13	hanced loan eligibility requirements required
14	under this section in accordance with the esti-
15	mated risk of the loans.
16	(B) Imposition of certain material
17	COSTS, IMPEDIMENTS, OR PENALTIES.—In the
18	absence of a publicly disclosed analysis that
19	demonstrates significant additional default risk
20	or prepayment risk associated with the loans, a
21	covered agency shall not impose material costs,
22	impediments, or penalties on covered loans
23	merely because the loan uses an energy effi-
24	ciency report or the enhanced loan eligibility re-

quirements required under this section.

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1	(7) Limitations.—
2	(A) IN GENERAL.—A covered agency may
3	price covered loans originated under the en-
4	hanced loan eligibility requirements required
5	under this section in accordance with the esti-
6	mated risk of those loans.
7	(B) Prohibited actions.—A covered
8	agency shall not—
9	(i) modify existing underwriting cri-
10	teria or adopt new underwriting criteria
11	that intentionally negate or reduce the im-
12	pact of the requirements or resulting bene-
13	fits that are set forth or otherwise derived
14	from the enhanced loan eligibility require-
15	ments required under this subsection; or
16	(ii) impose greater buy back require-
17	ments, credit overlays, or insurance re-
18	quirements, including private mortgage in-
19	surance, on covered loans merely because
20	the loan uses an energy efficiency report or
21	the enhanced loan eligibility requirements
22	required under this subsection.
23	(8) Applicability and implementation
24	DATE.—Not later than 3 years after the date of en-
25	actment of this Act, and before December 31, 2016,

1	the enhanced loan eligibility requirements required
2	under this subsection shall be implemented by each
3	covered agency to—
4	(A) apply to any covered loan for the sale,
5	or refinancing of any loan for the sale, of any
6	home;
7	(B) be available on any residential real
8	property (including individual units of con-
9	dominiums and cooperatives) that qualifies for
10	a covered loan; and
11	(C) provide prospective mortgagees with
12	sufficient guidance and applicable tools to im-
13	plement the required underwriting methods.
14	(d) Enhanced Energy Efficiency Under-
15	WRITING VALUATION GUIDELINES.—
16	(1) IN GENERAL.—Not later than 1 year after
17	the date of enactment of this Act, the Secretary
18	shall—
19	(A) in consultation with the Federal Fi-
20	nancial Institutions Examination Council and
21	the advisory group established in subsection
22	(f)(2), develop and issue guidelines for a cov-
23	ered agency to determine the maximum per-
24	mitted loan amount based on the value of the
25	property for all covered loans made on prop-

1	erties with an energy efficiency report that
2	meets the requirements of subsection (c)(3)(B);
3	and
4	(B) in consultation with the Secretary of
5	Energy, issue guidelines for a covered agency to
6	determine the estimated energy savings under
7	paragraph (3) for properties with an energy ef-
8	ficiency report.
9	(2) Requirements.—The enhanced energy ef-
10	ficiency underwriting valuation guidelines required
11	under paragraph (1) shall include—
12	(A) a requirement that if an energy effi-
13	ciency report that meets the requirements of
14	subsection (c)(3)(B) is voluntarily provided to
15	the mortgagee, such report shall be used by the
16	mortgagee or covered agency to determine the
17	estimated energy savings of the subject prop-
18	erty; and
19	(B) a requirement that the estimated en-
20	ergy savings of the subject property be added to
21	the appraised value of the subject property by
22	a mortgagee or covered agency for the purpose
23	of determining the loan-to-value ratio of the
24	subject property, unless the appraisal includes
25	the value of the overall energy efficiency of the

1	subject property, using methods to be estab-
2	lished under the guidelines issued under para-
3	graph (1).
4	(3) Determination of estimated energy
5	SAVINGS.—
6	(A) Amount of energy savings.—The
7	amount of estimated energy savings shall be de-
8	termined by calculating the difference between
9	the estimated energy costs for the average com-
10	parable houses, as determined in guidelines to
11	be issued under paragraph (1), and the esti-
12	mated energy costs for the subject property
13	based upon the energy efficiency report.
14	(B) Duration of energy savings.—The
15	duration of the estimated energy savings shall
16	be based upon the estimated life of the applica-
17	ble equipment, consistent with the rating sys-
18	tem used to produce the energy efficiency re-
19	port.
20	(C) Present value of energy sav-
21	INGS.—The present value of the future savings
22	shall be discounted using the average interest
23	rate on conventional 30-year mortgages, in the
24	manner directed by guidelines issued under
25	paragraph (1).

1	(4) Ensuring consideration of energy ef-
2	FICIENT FEATURES.—Section 1110 of the Financial
3	Institutions Reform, Recovery, and Enforcement Act
4	of 1989 (12 U.S.C. 3339) is amended—
5	(A) in paragraph (2), by striking "; and"
6	and inserting a semicolon; and
7	(B) in paragraph (3), by striking the pe-
8	riod at the end and inserting "; and" and in-
9	serting after paragraph (3) the following:
10	"(4) that State certified and licensed appraisers
11	have timely access, whenever practicable, to informa-
12	tion from the property owner and the lender that
13	may be relevant in developing an opinion of value re-
14	garding the energy- and water-saving improvements
15	or features of a property, such as—
16	"(A) labels or ratings of buildings;
17	"(B) installed appliances, measures, sys-
18	tems or technologies;
19	"(C) blueprints;
20	"(D) construction costs;
21	"(E) financial or other incentives regard-
22	ing energy- and water-efficient components and
23	systems installed in a property;
24	"(F) utility bills;

1	"(G) energy consumption and
2	benchmarking data; and
3	"(H) third-party verifications or represen-
4	tations of energy and water efficiency perform-
5	ance of a property, observing all financial pri-
6	vacy requirements adhered to by certified and
7	licensed appraisers, including section 501 of the
8	Gramm-Leach-Bliley Act (15 U.S.C. 6801).
9	Unless a property owner consents to a lender, an ap-
10	praiser, in carrying out the requirements of para-
11	graph (4), shall not have access to the commercial
12	or financial information of the owner that is privi-
13	leged or confidential.".
14	(5) Transactions requiring state cer-
15	TIFIED APPRAISERS.—Section 1113 of the Financial
16	Institutions Reform, Recovery, and Enforcement Act
17	of 1989 (12 U.S.C. 3342) is amended—
18	(A) in paragraph (1), by inserting before
19	the semicolon the following: ", or any real prop-
20	erty on which the appraiser makes adjustments
21	using an energy efficiency report"; and
22	(B) in paragraph (2), by inserting after
23	"atypical" the following: ", or an appraisal on
24	which the appraiser makes adjustments using
25	an energy efficiency report.".

(6) Protections.—

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

(B) Additional authority.—At the end of the 7-year period following the implementation of enhanced eligibility and underwriting valuation requirements under this section, the Secretary may modify or apply additional exceptions to the approach described in paragraph (2), where the Secretary finds that the unadjusted appraisal will reflect an accurate market value of the efficiency of the subject property or that a modified approach will better reflect an accurate market value.

(7) APPLICABILITY AND IMPLEMENTATION DATE.—Not later than 3 years after the date of enactment of this Act, and before December 31, 2016,

1	each covered agency shall implement the guidelines
2	required under this subsection, which shall—
3	(A) apply to any covered loan for the sale,
4	or refinancing of any loan for the sale, of any
5	home; and
6	(B) be available on any residential real
7	property, including individual units of con-
8	dominiums and cooperatives, that qualifies for a
9	covered loan.
10	(e) Monitoring.—Not later than 1 year after the
11	date on which the enhanced eligibility and underwriting
12	valuation requirements are implemented under this sec-
13	tion, and every year thereafter, each covered agency with
14	relevant activity shall issue and make available to the pub-
15	lic a report that—
16	(1) enumerates the number of covered loans of
17	the agency for which there was an energy efficiency
18	report, and that used energy efficiency appraisal
19	guidelines and enhanced loan eligibility require-
20	ments;
21	(2) includes the default rates and rates of fore-
22	closures for each category of loans; and
23	(3) describes the risk premium, if any, that the
24	agency has priced into covered loans for which there
25	was an energy efficiency report.

## (f) Rulemaking.—

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

- out this section, the Secretary shall establish an advisory group, consisting of individuals representing the interests of—
- (A) mortgage lenders;
- 18 (B) appraisers;
- 19 (C) energy raters and residential energy 20 consumption experts;
- 21 (D) energy efficiency organizations;
- 22 (E) real estate agents;
- 23 (F) home builders and remodelers;
- 24 (G) State energy officials; and
- 25 (H) others as determined by the Secretary.

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## (g) Additional Study.—

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

(2) RECOMMENDATIONS.—The advisory group established in subsection (f)(2) shall provide recommendations to the Secretary on any revisions or additions to the enhanced energy efficiency underwriting criteria deemed necessary by the group, which may include alternate methods to better account for home energy costs and additional factors to account for substantial and regular costs of homeownership such as location-based transportation costs and water costs. The Secretary shall forward any legislative recommendations from the advisory group to Congress for its consideration.

1	Subtitle	<b>E</b> —	-Third	<b>Party</b>	<b>Testing</b>
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2	SEC. 441. VOLUNTARY CERTIFICATION PROGRAMS FOR AIR
3	CONDITIONING, FURNACE, BOILER, HEAT
4	PUMP, AND WATER HEATER PRODUCTS.
5	Section 326(b) of the Energy Policy and Conserva-
6	tion Act (42 U.S.C. 6296(b)) is amended by adding at
7	the end the following:
8	"(6) Voluntary certification programs
9	FOR AIR CONDITIONING, FURNACE, BOILER, HEAT
10	PUMP, AND WATER HEATER PRODUCTS.—
11	"(A) DEFINITION OF BASIC MODEL
12	GROUP.—In this paragraph, the term 'basic
13	model group' means a set of models—
14	"(i) that share characteristics that
15	allow the performance of 1 model to be
16	generally representative of the performance
17	of other models within the group; and
18	"(ii) in which the group of products
19	does not necessarily have to share discrete
20	performance.
21	"(B) Reliance on voluntary certifi-
22	CATION PROGRAMS.—For the purpose of testing
23	to verify the performance rating of, or receiving
24	test reports from manufacturers certifying com-
25	pliance with energy conservation standards and

1	Energy Star specifications established under
2	sections 324A, 325, and 342, the covered prod-
3	ucts described in paragraphs (3), (4), (5), (9),
4	and (11) of section 322(a) and covered equip-
5	ment described in subparagraphs (B), (C), (D),
6	(F), $(I)$ , $(J)$ , and $(K)$ of section $340(1)$ , the
7	Secretary and Administrator shall rely on vol-
8	untary certification programs that—
9	"(i) are nationally recognized;
10	"(ii) maintain a publicly available list
11	of all certified products and equipment;
12	"(iii) as determined by the Secretary,
13	annually test not less than 10 percent and
14	not more than 30 percent of the basic
15	model group of a program participant
16	"(iv) require the changing of the per-
17	formance rating or removal of the product
18	or equipment from the program, if
19	verification testing determines that the
20	performance rating does not meet the lev-
21	els the manufacturer has certified to the
22	Secretary;
23	"(v) require the qualification of new
24	participants in the program through test-
25	ing and production of test reports;

1	"(vi) allow for challenge testing of
2	products and equipment within the scope
3	of the program;
4	"(vii) require program participants to
5	certify the performance rating of all cov-
6	ered products and equipment within the
7	scope of the program;
8	"(viii) are conducted by a certification
9	body that is accredited under International
10	Organization for Standardization/ Inter-
11	national Electrotechnical Commission
12	(ISO/IEC) Standard 17065;
13	"(ix) provide to the Secretary—
14	"(I) an annual report of all test
15	results;
16	"(II) prompt notification when
17	program testing results in—
18	"(aa) the rerating of the
19	performance rating of a product
20	or equipment; or
21	"(bb) the delisting of a
22	product or equipment; and
23	"(III) test reports, on the request
24	of the Secretary or the Administrator,
25	for Energy Star compliant products,

1	which shall be treated as confidential
2	business information as provided for
3	under section 552(b)(4) of title 5,
4	United States Code (commonly known
5	as the "Freedom of Information
6	Act'');
7	"(x) use verification testing that—
8	"(I) is conducted by an inde-
9	pendent test laboratory that is accred-
10	ited under International Organization
11	for Standardization/International
12	Electrotechnical Commission (ISO/
13	IEC) Standard 17025 with a scope
14	covering the tested products or equip-
15	ment;
16	"(II) follows the test procedures
17	established under this title; and
18	"(III) notes in each test report
19	any instructions specified by the man-
20	ufacturer or the representative of the
21	manufacturer for the purpose of con-
22	ducting the verification testing; and
23	"(xi) satisfy such other requirements
24	as the Secretary has determined—

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1	"(I) are essential to ensure
2	standards compliance; or
3	"(II) have consensus support
4	achieved through a negotiated rule-
5	making process.
6	"(C) Administration.—
7	"(i) In General.—The Secretary
8	shall not require—
9	"(I) manufacturers to participate
10	in a voluntary certification program
11	described in subparagraph (B); or
12	"(II) participating manufacturers
13	to provide information that can be ob-
14	tained through a voluntary certifi-
15	cation program described in subpara-
16	graph (B).
17	"(ii) List of covered products.—
18	The Secretary or the Administrator may
19	maintain a publicly available list of covered
20	products and equipment certified under a
21	program described in subparagraph (B)
22	that distinguishes between—
23	"(I) covered products and equip-
24	ment verified by the program; and

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1	"(11) products not verified by the
2	program.
3	"(iii) Reduction of Require-
4	MENTS.—Any rules promulgated by the
5	Secretary that require testing of products
6	or equipment for certification of perform-
7	ance ratings shall on average reduce re-
8	quirements and burdens for manufacturers
9	participating in a voluntary certification
10	program described in subparagraph (B) for
11	the products or equipment relative to other
12	manufacturers.
13	"(iv) Periodic testing by program
14	NONPARTICIPANTS.—In addition to certifi-
15	cation requirements, the Secretary shall re-
16	quire a manufacturer that does not partici-
17	pate in a voluntary certification program
18	described in subparagraph (B)—
19	"(I) to verify the accuracy of the
20	performance rating of the product or
21	equipment through periodic testing
22	using the testing methods described in
23	clause (iii) or (x) of subparagraph
24	(B); and

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1	"(II) to provide to the Secretary
2	test results and, on request, test re-
3	ports verifying the certified perform-
4	ance for each basic model group of
5	the manufacturer.
6	"(v) Restrictions on test labora-
7	TORIES.—
8	"(I) IN GENERAL.—Subject to
9	subclause (II), with respect to covered
10	products and equipment, a voluntary
11	certification program described in
12	subparagraph (B) shall not be a test
13	laboratory that conducts the testing
14	on products or equipment within the
15	scope of the program.
16	"(II) Limitation.—Subclause
17	(I) shall not apply to Energy Star
18	specifications established under sec-
19	tion 324A.
20	"(vi) Effect on other author-
21	ITY.—Nothing in this paragraph limits the
22	authority of the Secretary or the Adminis-
23	trator to test products or equipment or to
24	enforce compliance with any law (including
25	regulations).".

## 1 TITLE V—MISCELLANEOUS

2	SEC. 501. OFFSET.
3	Section 422(f) of the Energy Independence and Secu-
4	rity Act of 2007 (42 U.S.C. 17082(f)) is amended—
5	(1) in paragraph (3), by striking "and" after
6	the semicolon at the end; and
7	(2) by striking paragraph (4) and inserting the
8	following:
9	"(4) \$200,000,000 for each of fiscal year 2013;
10	"(5) \$197,500,000 for each of fiscal year 2014;
11	"(6) $$147,500,000$ for fiscal year 2015; and
12	" $(7)$ \$97,500,000 for each of fiscal years 2016
13	through 2018.".
14	SEC. 502. 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. 503. 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.