

Calendar No. 154

113TH CONGRESS
1ST SESSION**S. 1392**

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

IN THE SENATE OF THE UNITED STATES

JULY 30, 2013

Mrs. SHAHEEN (for herself and Mr. PORTMAN) introduced the following bill; which was read the first time

JULY 31, 2013

Read the second time and placed on the calendar

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 2013”.

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

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

TITLE I—BUILDINGS

Subtitle A—Building Energy Codes

- Sec. 101. Greater energy efficiency in building codes.

Subtitle B—Worker Training and Capacity Building

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

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. Adoption of information and communications technology power savings techniques by Federal agencies.
 Sec. 302. Availability of funds for design updates.
 Sec. 303. Federal data center consolidation.

TITLE IV—MISCELLANEOUS

- Sec. 401. Offset.
 Sec. 402. Budgetary effects.
 Sec. 403. Advance appropriations required.

3 **SEC. 2. DEFINITION OF SECRETARY.**

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

1 **TITLE I—BUILDINGS**
2 **Subtitle A—Building Energy Codes**

3 **SEC. 101. GREATER ENERGY EFFICIENCY IN BUILDING**
4 **CODES.**

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

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

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

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

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

21 “(C) other appropriate organizations.”;

22 and

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

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

1 certify whether or not the State or Indian tribe,
2 respectively, has reviewed and updated the en-
3 ergy provisions of the building code of the State
4 or Indian tribe, respectively.

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

10 “(i) the energy savings of the updated
11 model building energy code; or

12 “(ii) the targets established under sec-
13 tion 307(b)(2).

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

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

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

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

10 “(c) IMPROVEMENTS IN COMPLIANCE WITH BUILD-
11 ING ENERGY CODES.—

12 “(1) REQUIREMENT.—

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

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

23 “(ii) made significant progress under
24 paragraph (4) toward achieving compliance
25 with the applicable certified State and In-

1 dian tribe building energy code or with the
2 associated model building energy code.

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

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

12 “(A) independent inspections of a random
13 sample of the buildings covered by the code in
14 the preceding year; or

15 “(B) an alternative method that yields an
16 accurate measure of compliance.

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

20 “(A) at least 90 percent of building space
21 covered by the code in the preceding year sub-
22 stantially meets all the requirements of the ap-
23 plicable code specified in paragraph (1), or
24 achieves equivalent or greater energy savings
25 level; or

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

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

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

20 “(B) has met the most recent target under
21 subparagraph (A).

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

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

5 “(B) if the determination is positive, vali-
6 date the certification.

7 “(d) STATES OR INDIAN TRIBES THAT DO NOT
8 ACHIEVE COMPLIANCE.—

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

13 “(A) the status of the State or Indian tribe
14 with respect to meeting the requirements and
15 submitting the certification; and

16 “(B) a plan for meeting the requirements
17 and submitting the certification.

18 “(2) FEDERAL SUPPORT.—For any State or In-
19 dian tribe for which the Secretary has not validated
20 a certification by a deadline under subsection (b) or
21 (c), the lack of the certification may be a consider-
22 ation for Federal support authorized under this sec-
23 tion for code adoption and compliance activities.

24 “(3) LOCAL GOVERNMENT.—In any State or
25 Indian tribe for which the Secretary has not vali-

1 dated a certification under subsection (b) or (c), a
2 local government may be eligible for Federal support
3 by meeting the certification requirements of sub-
4 sections (b) and (c).

5 “(4) ANNUAL REPORTS BY SECRETARY.—

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

9 “(i) the status of model building en-
10 ergy codes;

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

13 “(iii) implementation of this section;
14 and

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

18 “(B) IMPACTS.—The report shall include
19 estimates of impacts of past action under this
20 section, and potential impacts of further action,
21 on—

22 “(i) upfront financial and construction
23 costs, cost benefits and returns (using in-
24 vestment analysis), and lifetime energy use
25 for buildings;

1 “(ii) resulting energy costs to individ-
2 uals and businesses; and

3 “(iii) resulting overall annual building
4 ownership and operating costs.

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

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

12 “(2) to demonstrate that the code provisions of
13 the States and Indian tribes achieve equivalent or
14 greater energy savings than the model building en-
15 ergy codes and targets;

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

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

20 “(f) AVAILABILITY OF INCENTIVE FUNDING.—

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

23 “(A) to implement the requirements of this
24 section;

1 “(B) to improve and implement residential
2 and commercial building energy codes, including
3 increasing and verifying compliance with the
4 codes and training of State, tribal, and local
5 building code officials to implement and enforce
6 the codes; and

7 “(C) to promote building energy efficiency
8 through the use of the codes.

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

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

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

20 “(3) TRAINING.—Of the amounts made avail-
21 able under this subsection, the State or Indian tribe
22 may use amounts required, but not to exceed
23 \$750,000 for a State, to train State and local build-
24 ing code officials to implement and enforce codes de-
25 scribed in paragraph (2).

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

4 “(g) STRETCH CODES AND ADVANCED STAND-
5 ARDS.—

6 “(1) IN GENERAL.—The Secretary shall provide
7 technical and financial support for the development
8 of stretch codes and advanced standards for residen-
9 tial and commercial buildings for use as—

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

13 “(B) guidelines for energy-efficient build-
14 ing design.

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

17 “(A) to achieve substantial energy savings
18 compared to the model building energy codes;
19 and

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

23 “(h) STUDIES.—The Secretary, in consultation with
24 building science experts from the National Laboratories
25 and institutions of higher education, designers and build-

1 ers of energy-efficient residential and commercial build-
2 ings, code officials, and other stakeholders, shall under-
3 take a study of the feasibility, impact, economics, and
4 merit of—

5 “(1) code improvements that would require that
6 buildings be designed, sited, and constructed in a
7 manner that makes the buildings more adaptable in
8 the future to become zero-net-energy after initial
9 construction, as advances are achieved in energy-sav-
10 ing technologies;

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

14 “(3) legislative options for increasing energy
15 savings from building energy codes, including addi-
16 tional incentives for effective State and local action,
17 and verification of compliance with and enforcement
18 of a code other than by a State or local government.

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

23 “(j) AUTHORIZATION OF APPROPRIATIONS.—There
24 are authorized to be appropriated to carry out this section

1 and section 307 \$200,000,000, to remain available until
2 expended.”.

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

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

12 **“SEC. 307. SUPPORT FOR MODEL BUILDING ENERGY**
13 **CODES.**

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

16 “(b) TARGETS.—

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

21 “(2) TARGETS.—

22 “(A) IN GENERAL.—The Secretary shall
23 work with State, Indian tribes, local govern-
24 ments, nationally recognized code and stand-
25 ards developers, and other interested parties to

1 support the updating of model building energy
2 codes by establishing one or more aggregate en-
3 ergy savings targets to achieve the purposes of
4 this section.

5 “(B) SEPARATE TARGETS.—The Secretary
6 may establish separate targets for commercial
7 and residential buildings.

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

13 “(D) SPECIFIC YEARS.—

14 “(i) IN GENERAL.—Targets for spe-
15 cific years shall be established and revised
16 by the Secretary through rulemaking and
17 coordinated with nationally recognized code
18 and standards developers at a level that—

19 “(I) is at the maximum level of
20 energy efficiency that is techno-
21 logically feasible and life-cycle cost ef-
22 fective, while accounting for the eco-
23 nomic considerations under paragraph
24 (4);

1 “(II) is higher than the preceding
2 target; and

3 “(III) promotes the achievement
4 of commercial and residential high-
5 performance buildings through high
6 performance energy efficiency (within
7 the meaning of section 401 of the En-
8 ergy Independence and Security Act
9 of 2007 (42 U.S.C. 17061)).

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

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

21 “(iv) SMALL BUSINESS.—When estab-
22 lishing targets under this paragraph
23 through rulemaking, the Secretary shall
24 ensure compliance with the Small Business
25 Regulatory Enforcement Fairness Act of

1 1996 (5 U.S.C. 601 note; Public Law 104–
2 121).

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

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

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

15 “(C) equipment improvements for heating,
16 cooling, and ventilation systems;

17 “(D) building management systems and
18 SmartGrid technologies to reduce energy use;
19 and

20 “(E) other technologies, practices, and
21 building systems that the Secretary considers
22 appropriate regarding building plug load and
23 other energy uses.

24 “(4) ECONOMIC CONSIDERATIONS.—In estab-
25 lishing and revising building code targets under

1 paragraph (2), the Secretary shall consider the eco-
2 nomic feasibility of achieving the proposed targets
3 established under this section and the potential costs
4 and savings for consumers and building owners, in-
5 cluding a return on investment analysis.

6 “(c) TECHNICAL ASSISTANCE TO MODEL BUILDING
7 ENERGY CODE-SETTING AND STANDARD DEVELOPMENT
8 ORGANIZATIONS.—

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

14 “(2) ASSISTANCE.—The assistance shall in-
15 clude, as requested by the organizations, technical
16 assistance in—

17 “(A) evaluating code or standards pro-
18 posals or revisions;

19 “(B) building energy analysis and design
20 tools;

21 “(C) building demonstrations;

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

1 “(E) performance-based standards;

2 “(F) evaluating economic considerations
3 under subsection (b)(4); and

4 “(G) developing model building energy
5 codes by Indian tribes in accordance with tribal
6 law.

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

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

19 “(d) DETERMINATION.—

20 “(1) REVISION OF MODEL BUILDING ENERGY
21 CODES.—If the provisions of the IECC or ASHRAE
22 Standard 90.1 regarding building energy use are re-
23 vised, the Secretary shall make a preliminary deter-
24 mination not later than 90 days after the date of the
25 revision, and a final determination not later than 15

1 months after the date of the revision, on whether or
2 not the revision will—

3 “(A) improve energy efficiency in buildings
4 compared to the existing model building energy
5 code; and

6 “(B) meet the applicable targets under
7 subsection (b)(2).

8 “(2) CODES OR STANDARDS NOT MEETING TAR-
9 GETS.—

10 “(A) IN GENERAL.—If the Secretary
11 makes a preliminary determination under para-
12 graph (1)(B) that a code or standard does not
13 meet the targets established under subsection
14 (b)(2), the Secretary may at the same time pro-
15 vide the model building energy code or standard
16 developer with proposed changes that would re-
17 sult in a model building energy code that meets
18 the targets and with supporting evidence, tak-
19 ing into consideration—

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

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

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

1 “(B) INCORPORATION OF CHANGES.—

2 “(i) IN GENERAL.—On receipt of the
3 proposed changes, the model building en-
4 ergy code or standard developer shall have
5 an additional 270 days to accept or reject
6 the proposed changes of the Secretary to
7 the model building energy code or standard
8 for the Secretary to make a final deter-
9 mination.

10 “(ii) FINAL DETERMINATION.—A
11 final determination under paragraph (1)
12 shall be on the modified model building en-
13 ergy code or standard.

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

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

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

1 “(f) VOLUNTARY CODES AND STANDARDS.—Not-
2 withstanding any other provision of this section, any
3 model building code or standard established under section
4 304 shall not be binding on a State, local government, or
5 Indian tribe as a matter of Federal law.”.

6 **Subtitle B—Worker Training and**
7 **Capacity Building**

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

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

15 (1) to identify opportunities for optimizing en-
16 ergy efficiency and environmental performance in
17 buildings;

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

21 (3) to train engineers, architects, building sci-
22 entists, building energy permitting and enforcement
23 officials, and building technicians in energy-efficient
24 design and operation;

1 (4) to assist institutions of higher education
2 and Tribal Colleges or Universities in training build-
3 ing technicians;

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

8 (6) to coordinate with and assist State-accred-
9 ited technical training centers, community colleges,
10 Tribal Colleges or Universities, and local offices of
11 the National Institute of Food and Agriculture and
12 ensure appropriate services are provided under this
13 section to each region of the United States.

14 (b) COORDINATION AND NONDUPLICATION.—

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

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

23 (c) AUTHORIZATION OF APPROPRIATIONS.—There is
24 authorized to be appropriated to carry out this section
25 \$10,000,000, to remain available until expended.

1 **SEC. 112. CAREER SKILLS TRAINING.**

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

11 (b) ELIGIBILITY.—To be eligible to obtain a grant
12 under subsection (a), an entity shall be a nonprofit part-
13 nership described in section 171(e)(2)(B)(ii) of the Work-
14 force Investment Act of 1998 (29 U.S.C.
15 2916(e)(2)(B)(ii)).

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

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

1 **TITLE II—INDUSTRIAL EFFI-**
2 **CIENCY AND COMPETITIVE-**
3 **NESS**

4 **Subtitle A—Manufacturing Energy**
5 **Efficiency**

6 **SEC. 201. PURPOSES.**

7 The purposes of this subtitle are—

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

10 (2) to establish a clear and consistent authority
11 for industrial efficiency programs of the Depart-
12 ment;

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

16 (4) to accelerate the development and dem-
17 onstration of technologies that will assist the deploy-
18 ment goals of the industrial efficiency programs of
19 the Department and increase manufacturing effi-
20 ciency;

21 (5) to stimulate domestic economic growth and
22 improve industrial productivity and competitiveness;
23 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
4 U.S.C. 631 et seq.) to implement recommendations
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
15 Policy and Conservation Act (42 U.S.C. 6341) is amended
16 by adding at the end the following:

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

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 a
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 IMPACT ON CLIMATE CHANGE.—
10 For purposes of this section, the impact on climate change
11 shall not be a factor in determining supply chain effi-
12 ciency.

13 “(h) EFFECT OF OUTSOURCING OF AMERICAN
14 JOBS.—For purposes of this section, the outsourcing of
15 American jobs in the production of a product shall not
16 count as a positive factor in determining supply chain effi-
17 ciency.

18 “(i) AUTHORIZATION OF APPROPRIATIONS.—There is
19 authorized to be appropriated to carry out this section
20 \$10,000,000 for the period of fiscal years 2014 through
21 2023.”.

1 **Subtitle C—Electric Motor Rebate**
2 **Program**

3 **SEC. 221. ENERGY SAVING MOTOR CONTROL, ELECTRIC**
4 **MOTOR, AND ADVANCED MOTOR SYSTEMS**
5 **REBATE PROGRAM.**

6 (a) DEFINITIONS.—In this section:

7 (1) ADVANCED MOTOR AND DRIVE SYSTEM.—

8 The term “advanced motor and drive system” means
9 an electric motor and any required associated elec-
10 tronic control that—

11 (A) offers variable or multiple speed oper-
12 ation;

13 (B) offers efficiency at a rated full load
14 that is greater than the efficiency described for
15 the equivalent rating in—

16 (i) table 12–12 of National Electrical
17 Manufactures Association (NEMA MG 1–
18 2011); or

19 (ii) section 431.446 of National Elec-
20 trical Manufactures Association (2012);
21 and

22 (C) uses—

23 (i) permanent magnet alternating cur-
24 rent synchronous motor technology;

- 1 (ii) electronically commutated motor
2 technology;
3 (iii) switched reluctance motor tech-
4 nology;
5 (iv) synchronous reluctance motor
6 technology; or
7 (v) such other motor that has greater
8 than 1 horsepower and uses a drive sys-
9 tems technology, as determined by the Sec-
10 retary.

11 (2) **ELECTRIC MOTOR.**—The term “electric
12 motor” has the meaning given the term in section
13 431.12 of title 10, Code of Federal Regulations (as
14 in effect on the date of enactment of this Act).

15 (3) **QUALIFIED PRODUCT.**—The term “qualified
16 product” means—

17 (A) a new constant speed electric motor
18 control that—

19 (i) is attached to an electric motor;
20 and

21 (ii) reduces the energy use of the elec-
22 tric motor by not less than 5 percent; and

23 (B) commercial or industrial machinery or
24 equipment that—

1 (i) is manufactured and incorporates
2 an advanced motor and drive system that
3 has greater than 1 horsepower into a rede-
4 signed machine or equipment that did not
5 previously make use of the advanced motor
6 and drive system; or

7 (ii) was previously used and placed
8 back into service in calendar year 2014 or
9 2015 that upgrades the existing machine
10 or equipment with an advanced motor and
11 drive system.

12 (b) ESTABLISHMENT.—Not later than 90 days after
13 the date of enactment of this Act, the Secretary shall es-
14 tablish a program to provide rebates for expenditures
15 made by qualified entities for the purchase and installa-
16 tion of qualified products.

17 (c) QUALIFIED ENTITIES.—A qualified entity under
18 this section shall be—

19 (1) in the case of a qualified product described
20 in subsection (a)(3)(A), the purchaser of the quali-
21 fied product for whom the qualified product is in-
22 stalled; and

23 (2) in the case of a qualified product described
24 in subsection (a)(3)(B)), the manufacturer of the
25 machine or equipment that incorporated the ad-

1 vanced motor and drive system into the machine or
2 equipment.

3 (d) REQUIREMENTS.—

4 (1) APPLICATION.—To be eligible to receive a
5 rebate under this section, a qualified entity shall
6 submit to the Secretary or an entity designated by
7 the Secretary an application and certification in
8 such form, at such time, and containing such infor-
9 mation as the Secretary may require, including dem-
10 onstrated evidence that the qualified entity pur-
11 chased a qualified product and—

12 (A) in the case of a qualified product de-
13 scribed in subsection (a)(3)(A)—

14 (i) demonstrated evidence that the
15 qualified entity installed the qualified prod-
16 uct in calendar year 2014 or 2015;

17 (ii) demonstrated evidence that the
18 qualified product reduces motor energy use
19 by not less than 5 percent, in accordance
20 with procedures approved by the Secretary;
21 and

22 (iii) the serial number, manufacturer,
23 and model number from the nameplate of
24 the installed motor of the qualified entity

1 on which the qualified product was in-
2 stalled; and

3 (B) in the case of a qualified product de-
4 scribed in subsection (a)(3)(B)—

5 (i) demonstrated evidence that the
6 manufacturer—

7 (I) redesigned a machine or
8 equipment of a manufacturer that did
9 not previously make use of an ad-
10 vanced motor and drive system; or

11 (II) upgraded a used machine or
12 equipment to incorporate an advanced
13 motor and drive system;

14 (ii) demonstrated evidence that the
15 qualified product was sold, installed, or
16 placed back into service in calendar year
17 2014 or 2015; and

18 (iii) the serial number, manufacturer,
19 and model number from the nameplate of
20 the installed motor of the qualified entity
21 with which the advanced motor and drive
22 system is integrated.

23 (2) AUTHORIZED AMOUNT OF REBATE.—The
24 Secretary may provide to a qualified entity that has
25 satisfied the requirements of paragraph (1) a rebate

1 the amount of which shall be equal to the product
2 obtained by multiplying—

3 (A) the nameplate rated horsepower of—

4 (i) the electric motor to which the new
5 constant speed electric motor control is at-
6 tached;

7 (ii) the new electric motor that re-
8 placed a previously installed electric motor;
9 or

10 (iii) the advanced electric motor con-
11 trol system; and

12 (B) \$25.

13 (3) MAXIMUM AGGREGATE AMOUNT.—No entity
14 shall be entitled to aggregate rebates under this sec-
15 tion in excess of \$250,000.

16 (e) AUTHORIZATION OF APPROPRIATIONS.—There is
17 authorized to be appropriated to carry out this section
18 \$5,000,000 for each of fiscal years 2014 and 2015, to re-
19 main available until expended.

20 **Subtitle D—Transformer Rebate** 21 **Program**

22 **SEC. 231. ENERGY EFFICIENT TRANSFORMER REBATE PRO-** 23 **GRAM.**

24 (a) DEFINITION OF QUALIFIED TRANSFORMER.—In
25 this section, the term “qualified transformer” means a

1 transformer that meets or exceeds the National Electrical
2 Manufacturers Association (NEMA) Premium Efficiency
3 designation, calculated to 2 decimal points, as having 30
4 percent fewer losses than the NEMA TP-1-2002 effi-
5 ciency standard for a transformer of the same number of
6 phases and capacity, as measured in kilovolt-amperes.

7 (b) ESTABLISHMENT.—Not later than January 1,
8 2014, the Secretary shall establish a program under which
9 rebates are provided for expenditures made by owners of
10 industrial or manufacturing facilities, commercial build-
11 ings, and multifamily residential buildings for the pur-
12 chase and installation of a new energy efficient trans-
13 formers.

14 (c) REQUIREMENTS.—

15 (1) APPLICATION.—To be eligible to receive a
16 rebate under this section, an owner shall submit to
17 the Secretary an application in such form, at such
18 time, and containing such information as the Sec-
19 retary may require, including demonstrated evidence
20 that the owner purchased a qualified transformer.

21 (2) AUTHORIZED AMOUNT OF REBATE.—For
22 qualified transformers, rebates, in dollars per kilo-
23 volt-ampere (referred to in this paragraph as
24 “kVA”) shall be—

25 (A) for 3-phase transformers—

1 (i) with a capacity of not greater than
2 10 kVA, 15;

3 (ii) with a capacity of not less than 10
4 kVA and not greater than 100 kVA, the
5 difference between 15 and the quotient ob-
6 tained by dividing—

7 (I) the difference between—

8 (aa) the capacity of the
9 transformer in kVA; and

10 (bb) 10; by

11 (II) 9; and

12 (iii) with a capacity greater than or
13 equal to 100 kVA, 5; and

14 (B) for single-phase transformers, 75 per-
15 cent of the rebate for a 3-phase transformer of
16 the same capacity.

17 (d) AUTHORIZATION OF APPROPRIATIONS.—There is
18 authorized to be appropriated to carry out this section
19 \$5,000,000 for each of fiscal years 2014 and 2015, to re-
20 main available until expended.

21 (e) TERMINATION OF EFFECTIVENESS.—The author-
22 ity provided by this section terminates effective December
23 31, 2015.

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

3 **SEC. 301. ADOPTION OF INFORMATION AND COMMUNICA-**
4 **TIONS TECHNOLOGY POWER SAVINGS TECH-**
5 **NIQUES BY FEDERAL AGENCIES.**

6 (a) IN GENERAL.—Not later than 360 days after the
7 date of enactment of this Act, the Secretary, in consulta-
8 tion with the Secretary of Defense, the Secretary of Vet-
9 erans Affairs, and the Administrator of General Services,
10 shall issue guidance for Federal agencies to employ ad-
11 vanced tools promoting energy efficiency and energy sav-
12 ings through the use of information and communications
13 technologies, including computer hardware, operation and
14 maintenance processes, energy efficiency software, and
15 power management tools.

16 (b) REPORTS ON PLANS AND SAVINGS.—Not later
17 than 180 days after the date of the issuance of the guid-
18 ance under subsection (a), each Federal agency shall sub-
19 mit to the Secretary a report that describes—

20 (1) the plan of the agency for implementing the
21 guidance within the agency; and

22 (2) estimated energy and financial savings from
23 employing the tools and processes described in sub-
24 section (a).

1 **SEC. 302. AVAILABILITY OF FUNDS FOR DESIGN UPDATES.**

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

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

6 (2) by inserting after subsection (c) the fol-
7 lowing:

8 “(d) AVAILABILITY OF FUNDS FOR DESIGN UP-
9 DATES.—

10 “(1) IN GENERAL.—Subject to paragraph (2),
11 for any project for which congressional approval is
12 received under subsection (a) and for which the de-
13 sign has been substantially completed but construc-
14 tion has not begun, the Administrator of General
15 Services may use appropriated funds to update the
16 project design to meet applicable Federal building
17 energy efficiency standards established under section
18 305 of the Energy Conservation and Production Act
19 (42 U.S.C. 6834) and other requirements estab-
20 lished under section 3312.

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

1 **SEC. 303. FEDERAL DATA CENTER CONSOLIDATION.**

2 (a) IN GENERAL.—Not later than 180 days after the
3 date of enactment of this Act, the Administrator for the
4 Office of E-Government and Information Technology with-
5 in the Office of Management and Budget shall develop and
6 publish a goal for the total amount of planned energy and
7 cost savings and increased productivity by the Federal
8 Government through the consolidation of Federal data
9 centers during the 5-year period beginning on the date of
10 enactment of this Act, which shall include a breakdown
11 on a year-by-year basis of the projected savings and pro-
12 ductivity gains.

13 (b) ADMINISTRATION.—Nothing in this section ap-
14 plies to the High Performance Computing Modernization
15 Program (HPCMP) of the Department of Defense.

16 **TITLE IV—MISCELLANEOUS**

17 **SEC. 401. OFFSET.**

18 Section 422(f) of the Energy Independence and Secu-
19 rity Act of 2007 (42 U.S.C. 17082(f)) is amended—

20 (1) in paragraph (3), by striking “and” after
21 the semicolon at the end; and

22 (2) by striking paragraph (4) and inserting the
23 following:

24 “(4) \$200,000,000 for each of fiscal years 2013
25 and 2014;

26 “(5) \$150,000,000 for fiscal year 2015; and

1 “(6) \$100,000,000 for each of fiscal years 2016
2 through 2018.”.

3 **SEC. 402. BUDGETARY EFFECTS.**

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

12 **SEC. 403. ADVANCE APPROPRIATIONS REQUIRED.**

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

Calendar No. 154

113TH CONGRESS
1ST Session

S. 1392

A BILL

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

JULY 31, 2013

Read the second time and placed on the calendar