

113TH CONGRESS
1ST SESSION

H. R. 540

To amend the National Energy Conservation Policy Act and the Energy Independence and Security Act of 2007 to promote energy efficiency via information and computing technologies, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 6, 2013

Ms. ESHOO (for herself, Mr. ROGERS of Michigan, Mr. WELCH, Mr. MCKINLEY, Mr. TONKO, and Mr. GARDNER) introduced the following bill; which was referred to the Committee on Energy and Commerce

A BILL

To amend the National Energy Conservation Policy Act and the Energy Independence and Security Act of 2007 to promote energy efficiency via information and computing technologies, 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.**

4 This Act may be cited as the “Energy Efficient Gov-
5 ernment Technology Act”.

1 SEC. 2. ENERGY-EFFICIENT AND ENERGY-SAVING INFOR-

2 MATION AND COMMUNICATIONS TECH-

3 NOLOGIES.

4 Section 543 of the National Energy Conservation

5 Policy Act (42 U.S.C. 8253) is amended—

6 (1) by redesignating the second subsection (f)

7 (relating to large capital energy investments) as sub-
8 section (g); and

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

10 “(h) FEDERAL IMPLEMENTATION STRATEGY FOR

11 ENERGY-EFFICIENT AND ENERGY-SAVING INFORMATION

12 AND COMMUNICATIONS TECHNOLOGIES.—

13 “(1) IN GENERAL.—Not later than 1 year after
14 the date of enactment of this subsection, each Fed-
15 eral agency shall collaborate with the Director of the
16 Office of Management and Budget (referred to in
17 this subsection as the ‘Director’) to develop an im-
18 plementation strategy (including best-practices and
19 measurement and verification techniques) for the
20 maintenance, purchase, and use by the Federal
21 agency of energy-efficient and energy-saving infor-
22 mation and communications technologies and prac-
23 tices. Each implementation strategy shall be flexible,
24 cost-effective, and based on the specific operating re-
25 quirements and statutory mission of the agency.

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

3 “(A) consider information and communica-
4 tions technologies (ICT) and related infrastruc-
5 ture and practices, such as—

6 “(i) advanced metering infrastructure;

7 “(ii) ICT services and products;

8 “(iii) efficient data center strategies
9 and methods of increasing ICT asset and
10 related infrastructure utilization;

11 “(iv) ICT and related infrastructure
12 power management;

13 “(v) building information modeling,
14 including building energy management;
15 and

16 “(vi) secure telework and travel sub-
17 stitution tools; and

18 “(B) ensure that the agency realizes the
19 savings and rewards brought about through in-
20 creased efficiency and utilization.

21 “(3) PERFORMANCE GOALS.—

22 “(A) IN GENERAL.—Not later than 180
23 days after the date of enactment of this sub-
24 section, the Director, in consultation with the
25 Secretary, shall establish performance goals for

1 evaluating the efforts of Federal agencies in im-
2 proving the maintenance, purchase, and use of
3 energy-efficient and energy-saving information
4 and communications technology systems and
5 practices.

6 “(B) ENERGY EFFICIENT DATA CEN-
7 TERS.—The Director shall include within the
8 performance goals established under this para-
9 graph—

10 “(i) specifications and benchmarks
11 that will enable Federal data center opera-
12 tors to make more informed decisions
13 about the energy efficiency and cost sav-
14 ings of data centers, including an overall
15 Federal target for increased energy effi-
16 ciency, with initial reliance on the Power
17 Usage Effectiveness metric;

18 “(ii) overall ICT asset utilization and
19 related infrastructure utilization; and

20 “(iii) recommendations and best prac-
21 tices for how the benchmarks will be at-
22 tained, with such recommendations to in-
23 clude a requirement for agencies to eval-
24 uate the use of energy savings performance

1 contracting as a preferred acquisition
2 method for data center efficiency.

3 “(C) ADMINISTRATION.—The performance
4 goals established under this paragraph shall—

5 “(i) measure information technology
6 costs over a specific time period of 3 to 5
7 years;

8 “(ii) measure cost savings attained via
9 the use of energy-efficient and energy-sav-
10 ing information and communications solu-
11 tions during the same time period; and

12 “(iii) provide, to the maximum extent
13 practicable, a complete picture of all costs
14 and savings, including energy costs and
15 savings.

16 “(4) FEDERAL DATA CENTERS TASK FORCE.—
17 The Director shall maintain a Government-wide
18 Data Center Task Force comprised of Federal data
19 center program managers, facilities managers, and
20 sustainability officers. The members of such task
21 force shall be responsible for working together to
22 share progress toward individual agency goals and
23 the overall Federal target for increased energy effi-
24 ciency, and shall regularly exchange best practices

1 and other strategic information related to energy ef-
2 ficiency with the private sector.

3 “(5) REPORTS.—

4 “(A) AGENCY REPORTS.—Each Federal
5 agency subject to the requirements of this sub-
6 section shall include in the report of the agency
7 under section 527 of the Energy Independence
8 and Security Act of 2007 (42 U.S.C. 17143) a
9 description of the efforts and results of the
10 agency under this subsection.

11 “(B) OMB GOVERNMENT EFFICIENCY RE-
12 PORTS AND SCORECARDS.—Effective beginning
13 not later than October 1, 2013, the Director
14 shall include in the annual report and scorecard
15 of the Director required under section 528 of
16 the Energy Independence and Security Act of
17 2007 (42 U.S.C. 17144) a description of the ef-
18 forts and results of Federal agencies under this
19 subsection.”.

20 **SEC. 3. ENERGY EFFICIENT DATA CENTERS.**

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

23 (1) by amending subsection (c)(1) to read as
24 follows:

1 “(1) IN GENERAL.—Not later than 30 days
2 after the date of enactment of the Energy Efficient
3 Government Technology Act, the Secretary and the
4 Administrator shall designate an established infor-
5 mation technology industry organization to coordi-
6 nate the program described in subsection (b), and
7 shall make such designation public, including on an
8 appropriate website.”;

9 (2) by amending subsections (e) and (f) to read
10 as follows:

11 “(e) STUDY.—The Secretary, with assistance from
12 the Administrator, shall—

13 “(1) not later than December 31, 2013, make
14 available to the public an update to the Report to
15 Congress on Server and Data Center Energy Effi-
16 ciency published on August 2, 2007, under Public
17 Law 109–431, providing—

18 “(A) a comparison and gap analysis of the
19 estimates and projections contained in the origi-
20 nal report with new data regarding the period
21 from 2007 though 2012;

22 “(B) an analysis considering the impact of
23 ICT asset and related infrastructure utilization
24 solutions, to include virtualization and cloud

1 computing-based solutions, in the public and
2 private sectors; and

3 “(C) updated projections and recommenda-
4 tions for best practices; and

5 “(2) collaborate with the organization des-
6 ignated under subsection (e) in preparing such re-
7 port.

8 “(f) DATA CENTER ENERGY PRACTITIONER PRO-
9 GRAM.—The Secretary, in collaboration with the organiza-
10 tion designated under subsection (e) and the United
11 States Chief Information Officer in the Office of Manage-
12 ment and Budget, shall maintain a data center energy
13 practitioner program that leads to the certification of en-
14 ergy practitioners qualified to evaluate the energy usage
15 and efficiency opportunities in data centers. Each Federal
16 agency shall have its data centers evaluated annually by
17 energy practitioners certified pursuant to such program,
18 whenever practicable using certified practitioners em-
19 ployed by that agency.”;

20 (3) by redesignating subsection (g) as sub-
21 section (j); and

22 (4) by inserting after subsection (f) the fol-
23 lowing new subsections:

24 “(g) OPEN DATA INITIATIVE.—The Secretary, in col-
25 laboration with the organization designated under sub-

1 section (c) and the United States Chief Information Offi-
2 cer in the Office of Management and Budget, shall estab-
3 lish an open data initiative for Federal data center energy
4 usage data, with the purpose of making such data avail-
5 able and accessible in a manner that empowers further
6 data center innovation while protecting United States na-
7 tional security interests. In establishing this initiative, the
8 Secretary shall consider use of the online Data Center Ma-
9 turity Model.

10 “(h) INTERNATIONAL SPECIFICATIONS AND
11 METRICS.—The Secretary, in collaboration with the orga-
12 nization designated under subsection (c), shall actively
13 participate in efforts to harmonize global specifications
14 and metrics for data center energy efficiency.

15 “(i) ICT ASSET UTILIZATION METRIC.—The Sec-
16 retary, in collaboration with the organization designated
17 under subsection (c), shall assist in the development of
18 an efficiency metric that measures the energy efficiency
19 of the overall data center, including information tech-
20 nology systems and related infrastructure.”.

