

116TH CONGRESS
1ST SESSION

H. R. 1420

To amend 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 28, 2019

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

A BILL

To amend 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”.

6 **SEC. 2. ENERGY-EFFICIENT AND ENERGY-SAVING INFOR-**
7 **MATION TECHNOLOGIES.**

8 (a) IN GENERAL.—Subtitle C of title V of the Energy
9 Independence and Security Act of 2007 (Public Law 110–

1 140; 121 Stat. 1661) is amended by adding at the end
2 the following:

3 **“SEC. 530. ENERGY-EFFICIENT AND ENERGY-SAVING INFOR-**
4 **MATION TECHNOLOGIES.**

5 “(a) DEFINITIONS.—In this section:

6 “(1) DIRECTOR.—The term ‘Director’ means
7 the Director of the Office of Management and Budg-
8 et.

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

13 “(b) DEVELOPMENT OF IMPLEMENTATION STRAT-
14 EGY.—Not later than 1 year after the date of enactment
15 of this section, each Federal agency shall coordinate with
16 the Director, the Secretary, and the Administrator of the
17 Environmental Protection Agency to develop an implemen-
18 tation strategy (that includes best practices and measure-
19 ment and verification techniques) for the maintenance,
20 purchase, and use by the Federal agency of energy-effi-
21 cient and energy-saving information technologies at or for
22 federally owned and operated facilities, taking into consid-
23 eration the performance goals established under sub-
24 section (d).

1 “(c) ADMINISTRATION.—In developing an implemen-
2 tation strategy under subsection (b), each Federal agency
3 shall consider—

4 “(1) advanced metering infrastructure;

5 “(2) energy-efficient data center strategies and
6 methods of increasing asset and infrastructure utili-
7 zation;

8 “(3) advanced power management tools;

9 “(4) building information modeling, including
10 building energy management;

11 “(5) secure telework and travel substitution
12 tools; and

13 “(6) mechanisms to ensure that the agency re-
14 alizes the energy cost savings brought about through
15 increased efficiency and utilization.

16 “(d) PERFORMANCE GOALS.—

17 “(1) IN GENERAL.—Not later than 180 days
18 after the date of enactment of this section, the Di-
19 rector, in consultation with the Secretary, shall es-
20 tablish performance goals for evaluating the efforts
21 of Federal agencies in improving the maintenance,
22 purchase, and use of energy-efficient and energy-sav-
23 ing information technology at or for federally owned
24 and operated facilities.

1 “(2) BEST PRACTICES.—The Chief Information
2 Officers Council established under section 3603 of
3 title 44, United States Code, shall recommend best
4 practices for the attainment of the performance
5 goals, which shall include Federal agency consider-
6 ation of, to the extent applicable by law, the use
7 of—

8 “(A) energy savings performance con-
9 tracting; and

10 “(B) utility energy services contracting.

11 “(e) REPORTS.—

12 “(1) AGENCY REPORTS.—Each Federal agency
13 shall include in the report of the agency under sec-
14 tion 527 a description of the efforts and results of
15 the agency under this section.

16 “(2) OMB GOVERNMENT EFFICIENCY REPORTS
17 AND SCORECARDS.—Effective beginning not later
18 than October 1, 2019, the Director shall include in
19 the annual report and scorecard of the Director re-
20 quired under section 528 a description of the efforts
21 and results of Federal agencies under this section.”.

22 (b) CONFORMING AMENDMENT.—The table of con-
23 tents for the Energy Independence and Security Act of
24 2007 is amended by adding after the item relating to sec-
25 tion 529 the following:

“Sec. 530. Energy-efficient and energy-saving information technologies.”.

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

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

4 (1) in subsection (b)—

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

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

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

11 “(c) **STAKEHOLDER INVOLVEMENT.**—The Secretary
12 and the Administrator shall carry out subsection (b) in
13 collaboration with information technology industry and
14 other key stakeholders, with the goal of producing results
15 that accurately reflect the most relevant and useful infor-
16 mation. In such collaboration, the Secretary and the Ad-
17 ministrator shall pay particular attention to organizations
18 that—

19 “(1) have members with expertise in energy ef-
20 ficiency and in the development, operation, and
21 functionality of data centers, information technology
22 equipment, and software, such as representatives of
23 hardware manufacturers, data center operators, and
24 facility managers;

25 “(2) obtain and address input from Department
26 of Energy National Laboratories or any college, uni-

1 iversity, research institution, industry association,
2 company, or public interest group with applicable ex-
3 pertise;

4 “(3) follow—

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

7 “(B) accredited standards development
8 processes; and

9 “(4) have a mission to promote energy effi-
10 ciency for data centers and information technology.

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

19 “(e) STUDY.—The Secretary, in collaboration with
20 the Administrator, shall, not later than 4 years after the
21 date of enactment of the Energy Efficient Government
22 Technology Act, make available to the public an update
23 to the report of the Lawrence Berkeley National Labora-
24 tory entitled ‘United States Data Center Energy Usage
25 Report’ and dated June, 2016 (prepared as an update to

1 the Report to Congress on Server and Data Center Energy
2 Efficiency, published on August 2, 2007, under section 1
3 of Public Law 109–431 (120 Stat. 2920)), that includes—

4 “(1) a comparison and gap analysis of the esti-
5 mates and projections contained in the report with
6 new data regarding the period from 2015 through
7 2019;

8 “(2) an analysis considering the impact of in-
9 formation technologies, including virtualization and
10 cloud computing, in the public and private sectors;

11 “(3) an evaluation of the impact of the com-
12 bination of cloud platforms, mobile devices, social
13 media, and big data on data center energy usage;

14 “(4) an evaluation of water usage in data cen-
15 ters and recommendations for reductions in such
16 water usage; and

17 “(5) updated projections and recommendations
18 for best practices through fiscal year 2025.

19 “(f) DATA CENTER ENERGY PRACTITIONER PRO-
20 GRAM.—The Secretary, in collaboration with key stake-
21 holders and the Director of the Office of Management and
22 Budget, shall maintain a data center energy practitioner
23 program that leads to the certification of energy practi-
24 tioners qualified to evaluate the energy usage and effi-
25 ciency opportunities in federally owned and operated data

1 centers. Each Federal agency shall consider having the
2 data centers of the agency evaluated every 4 years, in ac-
3 cordance with section 543(f) of the National Energy Con-
4 servation Policy Act, by energy practitioners certified pur-
5 suant to such program.

6 “(g) OPEN DATA INITIATIVE.—The Secretary, in col-
7 laboration with key stakeholders and the Office of Man-
8 agement and Budget, shall establish an open data initia-
9 tive relating to energy usage at federally owned and oper-
10 ated data centers, with the purpose of making such data
11 available and accessible in a manner that encourages fur-
12 ther data center innovation, optimization, and consolida-
13 tion. In establishing the initiative, the Secretary shall con-
14 sider the use of the online Data Center Maturity Model.

15 “(h) INTERNATIONAL SPECIFICATIONS AND
16 METRICS.—The Secretary, in collaboration with key
17 stakeholders, shall actively participate in efforts to har-
18 monize global specifications and metrics for data center
19 energy and water efficiency.

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

1 “(j) PROTECTION OF PROPRIETARY INFORMATION.—
2 The Secretary and the Administrator shall not disclose
3 any proprietary information or trade secrets provided by
4 any individual or company for the purposes of carrying
5 out this section or the programs and initiatives established
6 under this section.”.

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