

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.”.

○