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(Original Signature of Member)

115TH CONGRESS  
1ST SESSION

**H. R.** \_\_\_\_\_

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

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IN THE HOUSE OF REPRESENTATIVES

M\_\_\_\_. \_\_\_\_\_ introduced the following bill; which was referred to the  
Committee on \_\_\_\_\_

\_\_\_\_\_  
**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”.

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

3 (a) AMENDMENT.—Subtitle C of title V of the En-  
4 ergy Independence and Security Act of 2007 (Public Law  
5 110–140; 121 Stat. 1661) is amended by adding at the  
6 end the following:

7 **“SEC. 530. ENERGY-EFFICIENT AND ENERGY-SAVING INFOR-**  
8 **MATION TECHNOLOGIES.**

9 “(a) DEFINITIONS.—In this section:

10 “(1) DIRECTOR.—The term ‘Director’ means  
11 the Director of the Office of Management and Budg-  
12 et.

13 “(2) INFORMATION TECHNOLOGY.—The term  
14 ‘information technology’ has the meaning given that  
15 term in section 11101 of title 40, United States  
16 Code.

17 “(b) DEVELOPMENT OF IMPLEMENTATION STRAT-  
18 EGY.—Not later than 1 year after the date of enactment  
19 of this section, each Federal agency shall coordinate with  
20 the Director, the Secretary, and the Administrator of the  
21 Environmental Protection Agency to develop an implemen-  
22 tation strategy (that includes best practices and measure-  
23 ment and verification techniques) for the maintenance,  
24 purchase, and use by the Federal agency of energy-effi-  
25 cient and energy-saving information technologies, taking

1 into consideration the performance goals established under  
2 subsection (d).

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

6 “(1) advanced metering infrastructure;

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

10 “(3) advanced power management tools;

11 “(4) building information modeling, including  
12 building energy management;

13 “(5) secure telework and travel substitution  
14 tools; and

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

18 “(d) PERFORMANCE GOALS.—

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

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, 2017, 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)(2)(D)(iv), by striking “de-  
5 termined by the organization” and inserting “pro-  
6 posed by the stakeholders”;

7 (2) by striking subsection (b)(3); and

8 (3) by striking subsections (e) through (g) and  
9 inserting the following:

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

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

24 “(2) obtain and address input from Department  
25 of Energy National Laboratories or any college, uni-  
26 versity, research institution, industry association,

1 company, or public interest group with applicable ex-  
2 pertise;

3 “(3) follow—

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

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

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

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

18 “(e) STUDY.—The Secretary, in collaboration with  
19 the Administrator, shall, not later than 18 months after  
20 the date of enactment of the Energy Efficient Government  
21 Technology Act, make available to the public an update  
22 to the Report to Congress on Server and Data Center En-  
23 ergy Efficiency published on August 2, 2007, under sec-  
24 tion 1 of Public Law 109–431 (120 Stat. 2920), that pro-  
25 vides—

1           “(1) a comparison and gap analysis of the esti-  
2           mates and projections contained in the original re-  
3           port with new data regarding the period from 2008  
4           through 2015;

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

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

11          “(4) an evaluation of water usage in data cen-  
12          ters and recommendations for reductions in such  
13          water usage; and

14          “(5) updated projections and recommendations  
15          for best practices through fiscal year 2020.

16          “(f) DATA CENTER ENERGY PRACTITIONER PRO-  
17          GRAM.—The Secretary, in collaboration with key stake-  
18          holders and the Director of the Office of Management and  
19          Budget, shall maintain a data center energy practitioner  
20          program that leads to the certification of energy practi-  
21          tioners qualified to evaluate the energy usage and effi-  
22          ciency opportunities in Federal data centers. Each Federal  
23          agency shall consider having the data centers of the agen-  
24          cy evaluated every 4 years, in accordance with section  
25          543(f) of the National Energy Conservation Policy Act (42

1 U.S.C. 8253), by energy practitioners certified pursuant  
2 to such program.

3 “(g) OPEN DATA INITIATIVE.—The Secretary, in col-  
4 laboration with key stakeholders and the Director of the  
5 Office of Management and Budget, shall establish an open  
6 data initiative for Federal data center energy usage data,  
7 with the purpose of making such data available and acces-  
8 sible in a manner that encourages further data center in-  
9 novation, optimization, and consolidation. In establishing  
10 the initiative, the Secretary shall consider the use of the  
11 online Data Center Maturity Model.

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

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

22 “(j) PROTECTION OF PROPRIETARY INFORMATION.—  
23 The Secretary and the Administrator shall not disclose  
24 any proprietary information or trade secrets provided by  
25 any individual or company for the purposes of carrying



- 1 out this section or the programs and initiatives established
- 2 under this section.”.