114TH CONGRESS
1ST SESSION

S. 1706

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 SENATE OF THE UNITED STATES

JULY 7, 2015

Mr. RISCH (for himself and Mr. HEINRICH) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

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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".

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

Subtitle C of title V of the Energy Independence and Security Act of 2007 (Public Law 110–140; 121 Stat. 1661) is amended by adding at the end the following:

"SEC. 530. ENERGY-EFFICIENT AND ENERGY-SAVING INFOR-
MATION TECHNOLOGIES.

"(a) DEFINITIONS.—In this section:

"(1) DIRECTOR.—The term 'Director' means the Director of the Office of Management and Budget.

"(2) INFORMATION TECHNOLOGY.—The term 'information technology' has the meaning given that term in section 11101 of title 40, United States Code.

"(b) DEVELOPMENT OF IMPLEMENTATION STRATEGY.—Not later than 1 year after the date of enactment of this section, each Federal agency shall coordinate with the Director, the Secretary, and the Administrator of the Environmental Protection Agency to develop an implementation strategy (that includes best practices and measurement and verification techniques) for the maintenance, purchase, and use by the Federal agency of energy-efficient and energy-saving information technologies, taking into consideration the performance goals established under subsection (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.

24   "(2) BEST PRACTICES.—The Chief Information

25   Officers Council established under section 3603 of

1   title 44, United States Code, shall recommend best

2   practices for the attainment of the performance

3   goals, which shall include Federal agency consider-

4   ation of the use of—

5   "(A) energy savings performance con-

6   tracting; and

7   "(B) utility energy services contracting.

8   "(e) REPORTS.—

9   "(1) AGENCY REPORTS.—Each Federal agency

10   shall include in the report of the agency under sec-

11   tion 527 a description of the efforts and results of

12   the agency under this section.

13   "(2) OMB GOVERNMENT EFFICIENCY REPORTS

14   AND SCORECARDS.—Effective beginning not later

15   than October 1, 2016, the Director shall include in

16   the annual report and scorecard of the Director re-

17   quired under section 528 a description of the efforts

18   and results of Federal agencies under this section.".

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

20   Section 453 of the Energy Independence and Security

21 Act of 2007 (42 U.S.C. 17112) is amended—

22   (1) in subsection (b), by striking paragraph (3);

23   and

24   (2) by striking subsections (c) through (g) and

25   inserting the following:

1   ''(c) STAKEHOLDER INVOLVEMENT.—

2   ''(1) IN GENERAL.—The Secretary and the Ad-

3   ministrator shall carry out subsection (b) in collabo-

4   ration with information technology industry and

5   other key stakeholders, with the goal of producing

6   results that accurately reflect the best knowledge in

7   the most pertinent domains.

8   ''(2) ORGANIZATIONS.—In collaborating under

9   paragraph (1), the Secretary and the Administrator

10   shall pay particular attention to organizations

11   that—

12   ''(A) have members with expertise in en-

13   ergy efficiency and in the development, oper-

14   ation, and functionality of data centers, infor-

15   mation technology equipment, and software,

16   such as representatives of hardware manufac-

17   turers, data center operators, and facility man-

18   agers;

19   ''(B) obtain and address input from De-

20   partment of Energy National Laboratories or

21   any college, university, research institution, in-

22   dustry association, company, or public interest

23   group with applicable expertise;

24   ''(C) follow—

1   ''(i) commonly accepted procedures

2   for the development of specifications; and

3   ''(ii) accredited standards development

4   processes; and

5   ''(D) have a mission to promote energy ef-

6   ficiency for data centers and information tech-

7   nology.

8   ''(d) MEASUREMENTS AND SPECIFICATIONS.—The

9 Secretary and the Administrator shall consider and assess

10 the adequacy of the specifications, measurements, and

11 benchmarks described in subsection (b) for use by—

12   ''(1) the Federal Energy Management Program;

13   ''(2) the Energy Star program established by

14   section 324A of the Energy Policy and Conservation

15   Act (42 U.S.C. 6294a); and

16   ''(3) other efficiency programs of the Depart-

17   ment of Energy or the Environmental Protection

18   Agency.

19   ''(e) STUDY.—Not later than 1 year after the date

20 of enactment of this Act, the Secretary, in collaboration

21 with the Administrator, shall make available to the public

22 an update to the Report to Congress on Server and Data

23 Center Energy Efficiency published on August 2, 2007,

24 under section 1 of Public Law 109–431 (120 Stat. 2920),

25 that provides—

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 2007
4 through 2014;

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 and

12 "(4) updated projections and recommendations
13 for best practices through fiscal year 2020.

14 "(f) DATA CENTER ENERGY PRACTITIONER PRO-
15 GRAM.—

16 "(1) IN GENERAL.—The Secretary, in collabo-
17 ration with key stakeholders and the Director of the
18 Office of Management and Budget, shall carry out
19 a data center energy practitioner program that leads
20 to the certification of energy practitioners qualified
21 to evaluate the energy usage and efficiency opportu-
22 nities in Federal data centers.

23 "(2) PERIODIC EVALUATIONS.—Each Federal
24 agency shall consider having the data centers of the
25 agency evaluated every 4 years by energy practi-

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1 tioners certified pursuant to the program, whenever
2 practicable, using certified practitioners employed by
3 the agency.

4 "(g) OPEN DATA INITIATIVE.—

5 "(1) IN GENERAL.—The Secretary, in collabo-
6 ration with key stakeholders and the Office of Man-
7 agement and Budget, shall carry out an open data
8 initiative for Federal data center energy usage data
9 to make such data available and accessible in a man-
10 ner that encourages further data center innovation,
11 optimization, and consolidation.

12 "(2) MODEL.—In carrying out the initiative,
13 the Secretary shall consider the use of the online
14 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 efficiency.

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

6 under this section.".

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