

Calendar No. 265

116TH CONGRESS
1ST SESSION**H. R. 1420****[Report No. 116–145]**

IN THE SENATE OF THE UNITED STATES

SEPTEMBER 10, 2019

Received; read twice and referred to the Committee on Energy and Natural
Resources

OCTOBER 23, 2019

Reported by Ms. MURKOWSKI, without amendment

AN ACT

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) IN GENERAL.—Subtitle C of title V of the Energy
4 Independence and Security Act of 2007 (Public Law 110–
5 140; 121 Stat. 1661) is amended by adding at the end
6 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 at or for
26 federally owned and operated facilities, taking into consid-

1 eration the performance goals established under sub-
2 section (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-

1 ing information technology at or for federally owned
2 and operated facilities.

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

10 “(A) energy savings performance con-
11 tracting; and

12 “(B) utility energy services contracting.

13 “(e) REPORTS.—

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

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

24 (b) CONFORMING AMENDMENT.—The table of con-
25 tents for the Energy Independence and Security Act of

1 2007 is amended by adding after the item relating to sec-
2 tion 529 the following:

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

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

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

6 (1) in subsection (b)—

7 (A) in paragraph (2)(D)(iv), by striking

8 “determined by the organization” and inserting

9 “proposed by the stakeholders”; and

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

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

12 inserting the following:

13 “(c) **STAKEHOLDER INVOLVEMENT.**—The Secretary

14 and the Administrator shall carry out subsection (b) in

15 collaboration with information technology industry and

16 other key stakeholders, with the goal of producing results

17 that accurately reflect the most relevant and useful infor-

18 mation. In such collaboration, the Secretary and the Ad-

19 ministrator shall pay particular attention to organizations

20 that—

21 “(1) have members with expertise in energy ef-

22 ficiency and in the development, operation, and

23 functionality of data centers, information technology

24 equipment, and software, such as representatives of

1 hardware manufacturers, data center operators, and
2 facility managers;

3 “(2) obtain and address input from Department
4 of Energy National Laboratories or any college, uni-
5 versity, research institution, industry association,
6 company, or public interest group with applicable ex-
7 pertise;

8 “(3) follow—

9 “(A) commonly accepted procedures for
10 the development of specifications; and

11 “(B) accredited standards development
12 processes; and

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

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

23 “(e) STUDY.—The Secretary, in collaboration with
24 the Administrator, shall, not later than 4 years after the
25 date of enactment of the Energy Efficient Government

1 Technology Act, make available to the public an update
2 to the report of the Lawrence Berkeley National Labora-
3 tory entitled ‘United States Data Center Energy Usage
4 Report’ and dated June, 2016 (prepared as an update to
5 the Report to Congress on Server and Data Center Energy
6 Efficiency, published on August 2, 2007, under section 1
7 of Public Law 109–431 (120 Stat. 2920)), that includes—

8 “(1) a comparison and gap analysis of the esti-
9 mates and projections contained in the report with
10 new data regarding the period from 2015 through
11 2019;

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

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

18 “(4) an evaluation of water usage in data cen-
19 ters and recommendations for reductions in such
20 water usage; and

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

23 “(f) DATA CENTER ENERGY PRACTITIONER PRO-
24 GRAM.—The Secretary, in collaboration with key stake-
25 holders and the Director of the Office of Management and

1 Budget, shall maintain a data center energy practitioner
2 program that leads to the certification of energy practi-
3 tioners qualified to evaluate the energy usage and effi-
4 ciency opportunities in federally owned and operated data
5 centers. Each Federal agency shall consider having the
6 data centers of the agency evaluated every 4 years, in ac-
7 cordance with section 543(f) of the National Energy Con-
8 servation Policy Act, by energy practitioners certified pur-
9 suant to such program.

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

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

24 “(i) DATA CENTER UTILIZATION METRIC.—The Sec-
25 retary, in collaboration with key stakeholders, shall facili-

1 tate in the development of an efficiency metric that meas-
2 ures the energy efficiency of a data center (including
3 equipment and facilities).

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

10 **SEC. 4. DETERMINATION OF BUDGETARY EFFECTS.**

11 The budgetary effects of this Act, for the purpose of
12 complying with the Statutory Pay-As-You-Go Act of 2010,
13 shall be determined by reference to the latest statement
14 titled “Budgetary Effects of PAYGO Legislation” for this
15 Act, submitted for printing in the Congressional Record
16 by the Chairman of the House Budget Committee, pro-
17 vided that such statement has been submitted prior to the
18 vote on passage.

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