## Amendment to H.R. 1268 Offered by Ms. Eshoo of California

Page 2, strike line 1 and all that follows through page 8, line 18 and insert the following:

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

3 (a) AMENDMENT.—Subtitle C of title V of the En4 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-

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#### MATION TECHNOLOGIES.

- 9 "(a) DEFINITIONS.—In this section:
- 10 "(1) DIRECTOR.—The term 'Director' means
  11 the Director of the Office of Management and Budg12 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 STRAT18 EGY.—Not later than 1 year after the date of enactment
19 of this section, each Federal agency shall coordinate with

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the Director, the Secretary, and the Administrator of the 1 2 Environmental Protection Agency to develop an implementation strategy (that includes best practices and measure-3 4 ment and verification techniques) for the maintenance, 5 purchase, and use by the Federal agency of energy-effi-6 cient and energy-saving information technologies, taking 7 into consideration the performance goals established under 8 subsection (d).

9 "(c) ADMINISTRATION.—In developing an implemen10 tation strategy under subsection (b), each Federal agency
11 shall consider—

12 "(1) advanced metering infrastructure;

"(2) energy-efficient data center strategies and
methods of increasing asset and infrastructure utilization;

16 "(3) advanced power management tools;

17 "(4) building information modeling, including18 building energy management;

19 "(5) secure telework and travel substitution20 tools; and

21 "(6) mechanisms to ensure that the agency re22 alizes the energy cost savings brought about through
23 increased efficiency and utilization.

24 "(d) Performance Goals.—

| 1  | "(1) IN GENERAL.—Not later than 180 days              |
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| 2  | after the date of enactment of this section, the Di-  |
| 3  | rector, in consultation with the Secretary, shall es- |
| 4  | tablish performance goals for evaluating the efforts  |
| 5  | of Federal agencies in improving the maintenance,     |
| 6  | purchase, and use of energy-efficient and energy-sav- |
| 7  | ing information technology.                           |
| 8  | "(2) Best practices.—The Chief Information            |
| 9  | Officers Council established under section 3603 of    |
| 10 | title 44, United States Code, shall recommend best    |
| 11 | practices for the attainment of the performance       |
| 12 | goals, which shall include Federal agency consider-   |
| 13 | ation of, to the extent applicable by law, the use    |
| 14 | of—   |
| 15 | "(A) energy savings performance con-                  |
| 16 | tracting; and   |
| 17 | "(B) utility energy services contracting.             |
| 18 | "(e) Reports.—  |
| 19 | "(1) AGENCY REPORTS.—Each Federal agency              |
| 20 | shall include in the report of the agency under sec-  |
| 21 | tion 527 a description of the efforts and results of  |
| 22 | the agency under this section.                        |
| 23 | "(2) OMB GOVERNMENT EFFICIENCY REPORTS                |
| 24 | AND SCORECARDS.—Effective beginning not later         |
| 25 | than October 1, 2017, the Director shall include in   |

| 1  | the annual report and scorecard of the Director re-                       |
|----|---|
| 2  | quired under section 528 a description of the efforts                     |
| 3  | and results of Federal agencies under this section.".                     |
| 4  | (b) Conforming Amendment.—The table of con-                               |
| 5  | tents for the Energy Independence and Security Act of                     |
| 6  | 2007 is amended by adding after the item relating to sec-                 |
| 7  | tion 529 the following:   |
|    | "Sec. 530. Energy-efficient and energy-saving information technologies.". |
| 8  | SEC. 3. ENERGY EFFICIENT DATA CENTERS.                                    |
| 9  | Section 453 of the Energy Independence and Security                       |
| 10 | Act of 2007 (42 U.S.C. 17112) is amended—                                 |
| 11 | (1) in subsection $(b)(2)(D)(iv)$ , by striking "de-                      |
| 12 | termined by the organization" and inserting "pro-                         |
| 13 | posed by the stakeholders";   |
| 14 | (2) by striking subsection $(b)(3)$ ; and                                 |
| 15 | (3) by striking subsections (c) through (g) and                           |
| 16 | inserting the following:  |
| 17 | "(c) Stakeholder Involvement.—The Secretary                               |
| 18 | and the Administrator shall carry out subsection (b) in                   |
| 19 | collaboration with the information technology industry and                |
| 20 | other key stakeholders, with the goal of producing results                |
| 21 | that accurately reflect the most relevant and useful infor-               |
| 22 | mation available. In such collaboration, the Secretary and                |
| 23 | the Administrator shall pay particular attention to organi-               |
| 24 | zations that—   |

| 1  | "(1) have members with expertise in energy ef-  |
|--|---|
| 2  | ficiency and in the development, operation, and   |
| 3  | functionality of data centers, information technology   |
| 4  | equipment, and software, such as representatives of   |
| 5  | hardware manufacturers, data center operators, and  |
| 6  | facility managers;  |
| 7  | ((2) obtain and address input from Department   |
| 8  | of Energy National Laboratories or any college, uni-  |
| 9  | versity, research institution, industry association,  |
| 10   | company, or public interest group with applicable ex-   |
| 11   | pertise;  |
| 12   | "(3) follow—  |
|  |   |
| 13   | "(A) commonly accepted procedures for   |
| 13<br>14   | "(A) commonly accepted procedures for<br>the development of specifications; and   |
|  |   |
| 14   | the development of specifications; and  |
| 14<br>15   | the development of specifications; and<br>"(B) accredited standards development   |
| 14<br>15<br>16   | the development of specifications; and<br>"(B) accredited standards development<br>processes; and   |
| 14<br>15<br>16<br>17   | the development of specifications; and  |
| 14<br>15<br>16<br>17<br>18   | the development of specifications; and<br>"(B) accredited standards development<br>processes; and<br>"(4) have a mission to promote energy effi-<br>ciency for data centers and information technology.   |
| 14<br>15<br>16<br>17<br>18<br>19   | the development of specifications; and<br>"(B) accredited standards development<br>processes; and<br>"(4) have a mission to promote energy effi-<br>ciency for data centers and information technology.<br>"(d) MEASUREMENTS AND SPECIFICATIONS.—The  |
| <ol> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> </ol>             | the development of specifications; and<br>"(B) accredited standards development<br>processes; and<br>"(4) have a mission to promote energy effi-<br>ciency for data centers and information technology.<br>"(d) MEASUREMENTS AND SPECIFICATIONS.—The<br>Secretary and the Administrator shall consider and assess   |
| <ol> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> </ol> | the development of specifications; and<br>"(B) accredited standards development<br>processes; and<br>"(4) have a mission to promote energy effi-<br>ciency for data centers and information technology.<br>"(d) MEASUREMENTS AND SPECIFICATIONS.—The<br>Secretary and the Administrator shall consider and assess<br>the adequacy of the specifications, measurements, best |

Department of Energy or the Environmental Protection
 Agency.

3 "(e) STUDY.—The Secretary, in collaboration with 4 the Administrator, shall, not later than 18 months after 5 the date of enactment of the Energy Efficient Government 6 Technology Act, make available to the public an update 7 to the Report to Congress on Server and Data Center En-8 ergy Efficiency published on August 2, 2007, under sec-9 tion 1 of Public Law 109–431 (120 Stat. 2920), that provides-10

"(1) a comparison and gap analysis of the estimates and projections contained in the original report with new data regarding the period from 2008
through 2015;

"(2) an analysis considering the impact of information technologies, including virtualization and
cloud computing, in the public and private sectors;
"(3) an evaluation of the impact of the combination of cloud platforms, mobile devices, social
media, and big data on data center energy usage;

21 "(4) an evaluation of water usage in data cen22 ters and recommendations for reductions in such
23 water usage; and

24 "(5) updated projections and recommendations25 for best practices through fiscal year 2020.

1 "(f) DATA CENTER ENERGY PRACTITIONER PRO-GRAM.—The Secretary, in collaboration with key stake-2 holders and the Director of the Office of Management and 3 4 Budget, shall maintain a data center energy practitioner program that leads to the certification of energy practi-5 tioners qualified to evaluate the energy usage and effi-6 7 ciency opportunities in Federal data centers. Each Federal 8 agency shall consider having the data centers of the agen-9 cy evaluated every 4 years, in accordance with section 543(f) of the National Energy Conservation Policy Act (42 10 U.S.C. 8253), by energy practitioners certified pursuant 11 12 to such program.

13 "(g) OPEN DATA INITIATIVE.—The Secretary, in collaboration with key stakeholders and the Director of the 14 15 Office of Management and Budget, shall establish an open data initiative for Federal data center energy usage data, 16 with the purpose of making such data available and acces-17 sible in a manner that encourages further data center in-18 novation, optimization, and consolidation. In establishing 19 the initiative, the Secretary shall consider the use of the 20 21 online Data Center Maturity Model.

22 "(h) INTERNATIONAL SPECIFICATIONS AND
23 METRICS.—The Secretary, in collaboration with key
24 stakeholders, shall actively participate in efforts to har-

monize global specifications and metrics for data center
 energy and water efficiency.

3 "(i) DATA CENTER UTILIZATION METRIC.—The Sec4 retary, in collaboration with key stakeholders, shall facili5 tate the development of an efficiency metric that measures
6 the energy efficiency of a data center (including equipment
7 and facilities).

8 "(j) PROTECTION OF PROPRIETARY INFORMATION.— 9 The Secretary and the Administrator shall not disclose 10 any proprietary information or trade secrets provided by 11 any individual or company for the purposes of carrying 12 out this section or the programs and initiatives established 13 under this section.".

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