

**[DISCUSSION DRAFT]**112<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION**H. R.** \_\_\_\_\_

To promote efficient energy use in the Federal and private sectors, and  
for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

Mr. BASS of New Hampshire introduced the following bill; which was referred  
to the Committee on \_\_\_\_\_

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**A BILL**

To promote efficient energy use in the Federal and private  
sectors, 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; TABLE OF CONTENTS.**

4        (a) SHORT TITLE.—This Act may be cited as the  
5        “Smart Energy Act”.

6        (b) TABLE OF CONTENTS.—The table of contents for  
7        this Act is as follows:

Sec. 1. Short title; table of contents.

## TITLE I—FEDERAL ENERGY USE AND GENERATION

Sec. 101. Utilizing energy savings performance contracts and utility energy service contracts.

Sec. 102. Demand response programs.

Sec. 103. Federal data center consolidation.

Sec. 104. Adoption of personal computer power savings techniques by Federal agencies.

Sec. 105. Best practices for advanced metering.

Sec. 106. Federal energy management and data collection standard.

## TITLE II—PROVIDING OPPORTUNITIES FOR ENERGY EFFICIENCY IN BUSINESS AND INDUSTRY

Sec. 201. Reducing barriers to the deployment of industrial energy efficiency.

Sec. 202. Coordination of research and development of energy efficient technologies for industry.

Sec. 203. Combined heat and power and waste heat recovery.

# 1 **TITLE I—FEDERAL ENERGY USE** 2 **AND GENERATION**

## 3 **SEC. 101. UTILIZING ENERGY SAVINGS PERFORMANCE** 4 **CONTRACTS AND UTILITY ENERGY SERVICE** 5 **CONTRACTS.**

6 (a) IMPLEMENTATION OF ENERGY MANAGEMENT  
7 REQUIREMENTS.—Section 543 of the National Energy  
8 Conservation Policy Act (42 U.S.C. 8253) is amended—  
9 (1) by redesignating the second subsection (f)  
10 as subsection (g); and  
11 (2) in subsection (f)(10)—  
12 (A) in subparagraph (B)(i), by striking  
13 “To carry” and inserting “To the extent con-  
14 sistent with subparagraph (C), to carry”;  
15 (B) in subparagraph (B)(ii), by striking  
16 “A Federal” and inserting “To the extent con-  
17 sistent with subparagraph (C), a Federal”; and

1 (C) by amending subparagraph (C) to read  
2 as follows:

3 “(C) IMPLEMENTATION.—

4 “(i) GENERAL RULE.—Except as pro-  
5 vided in clause (i) or (ii) of this subpara-  
6 graph, each Federal agency shall imple-  
7 ment the requirements under this sub-  
8 section through private financing described  
9 in subparagraph (B)(i)(II).

10 “(ii) EXCEPTION.—A Federal agency  
11 may implement the requirements under  
12 this subsection using appropriated funds  
13 described in subparagraph (B)(i)(I) if im-  
14 plementation pursuant to clause (i) of this  
15 subparagraph conflicts with the primary  
16 mission of the agency or facility, or if  
17 greater cost savings can be generated  
18 under a different program. A Federal  
19 agency shall provide a written justification  
20 for any decision to implement such require-  
21 ments under this clause, including an anal-  
22 ysis of the impact of such decision on the  
23 taxpayer.

24 “(iii) FEDERAL ADMINISTRATIVE  
25 COSTS.—A Federal agency may implement

1 the requirements under this subsection  
2 using appropriated funds described in sub-  
3 paragraph (B)(i)(I) to the extent necessary  
4 to cover Federal administrative costs with  
5 respect to implementation pursuant to  
6 clause (i) of this subparagraph.”.

7 (b) TERMINATION CLAUSES.—Section 801(b)(2) of  
8 the National Energy Conservation Policy Act (42 U.S.C.  
9 8287(b)(2)) is amended—

10 (1) by striking “and” at the end of subpara-  
11 graph (B);

12 (2) by striking the period at the end of sub-  
13 paragraph (C)(iv) and inserting “; and”; and

14 (3) by adding at the end the following new sub-  
15 paragraph:

16 “(D) require each agency to include in con-  
17 tracts appropriate termination clauses for facili-  
18 ties that will or may close before the end of the  
19 term of the contract.”.

20 (c) ESPCS FOR ELECTRIC VEHICLES AND FUELING  
21 INFRASTRUCTURE.—Section 804 of the National Energy  
22 Conservation Policy Act (42 U.S.C. 8287c) is amended—

23 (1) by striking “or” at the end of subparagraph  
24 (A);

1           (2) by striking the period at the end of sub-  
2 paragraph (B) and inserting “; or”; and

3           (3) by adding at the end the following new sub-  
4 paragraph:

5                   “(C) a measure to support the use of elec-  
6 tric vehicles or the fueling or charging infra-  
7 structure necessary for electric vehicles.”.

8           (d) UESCS FOR ELECTRIC VEHICLES AND FUELING  
9 INFRASTRUCTURE.—Section 546 of the National Energy  
10 Conservation Policy Act (42 U.S.C. 8256) is amended in  
11 subsection (c)(1) by inserting “, including measures taken  
12 to finance the acquisition or use of electric-powered vehi-  
13 cles or their fueling infrastructure,” after “demand”.

14 **SEC. 102. DEMAND RESPONSE PROGRAMS.**

15           Section 543 of the National Energy Conservation  
16 Policy Act (42 U.S.C. 8253) is amended by adding at the  
17 end thereof the following new subsection:

18                   “(h) DEMAND RESPONSE PROGRAMS.—

19                           “(1) DEFINITION OF FEDERAL AGENCY.—In  
20 this subsection, the term ‘Federal agency’ does not  
21 include any Federal power marketing administra-  
22 tion.

23                           “(2) REQUIREMENTS.—To carry out this sec-  
24 tion, a Federal agency shall, as necessary in order  
25 to support electric grid reliability and security or re-

1       duce energy bills for the agency or facility, partici-  
2       pate in demand response programs, where such pro-  
3       grams are available, to the extent the agency deter-  
4       mines participation in such programs would be bene-  
5       ficial to the agency and where such participation  
6       would not conflict with the primary mission of the  
7       agency or facility, provided that such participation  
8       does not shift costs from the agency to non-Federal  
9       agency electric energy customers.”.

10 **SEC. 103. FEDERAL DATA CENTER CONSOLIDATION.**

11       (a) DEFINITION.—In this section, the term “Federal  
12 data center” means a room or space in a Federal building  
13 that is used for housing computer servers, data storage  
14 devices, or network equipment, including server closets.

15       (b) OMB REQUIREMENTS.—The Director of the Of-  
16 fice of Management and Budget shall direct the Federal  
17 Chief Information Officer to—

18           (1) require that agencies, when updating their  
19 Federal data center inventories in the third quarter  
20 of each fiscal year, state what actions have been  
21 taken to verify the inventories and to identify any  
22 limitations of this information;

23           (2) require that agencies complete the missing  
24 elements in their respective plans and submit com-  
25 plete Federal data center consolidation plans, or pro-

1       vide a schedule for when they will do so, not later  
2       than 180 days after the date of enactment of this  
3       Act;

4           (3) require agencies to consider consolidation  
5       challenges and lessons learned when updating their  
6       consolidation plans; and

7           (4) utilize the existing accountability infrastruc-  
8       ture by requiring the Data Center Consolidation  
9       Task Force to assess agency consolidation plans to  
10      ensure they are complete and to monitor the agen-  
11      cies' implementation of their plans.

12      (c) DEPARTMENT AND AGENCY REQUIREMENTS.—  
13      Each of the department secretaries and agency heads of  
14      the 23 departments and agencies participating in the Of-  
15      fice of Management and Budget's Federal data center con-  
16      solidation initiative shall—

17           (1) direct their component agencies and their  
18      Federal data center consolidation program managers  
19      to complete the missing elements in their respective  
20      Federal data center consolidation inventories and  
21      plans; and

22           (2) require their Federal data center consolida-  
23      tion program managers to consider consolidation  
24      challenges and lessons learned when updating their  
25      consolidation plans.

1 **SEC. 104. ADOPTION OF PERSONAL COMPUTER POWER**  
2 **SAVINGS TECHNIQUES BY FEDERAL AGEN-**  
3 **CIES.**

4 (a) IN GENERAL.—Not later than 360 days after the  
5 date of enactment of this Act, the Secretary of Energy,  
6 in consultation with the Secretary of Defense, the Sec-  
7 retary of Veterans Affairs, and the Administrator of Gen-  
8 eral Services, shall issue guidance for Federal agencies to  
9 employ advanced tools allowing energy savings through  
10 the use of computer hardware, energy efficiency software,  
11 and power management tools.

12 (b) REPORTS ON PLANS AND SAVINGS.—Not later  
13 than 180 days after the date of the issuance of the guid-  
14 ance under subsection (a), each Federal agency shall sub-  
15 mit to the Secretary of Energy a report that describes—

16 (1) the plan of the agency for implementing the  
17 guidance within the agency; and

18 (2) estimated energy and financial savings from  
19 employing the tools described in subsection (a).

20 **SEC. 105. BEST PRACTICES FOR ADVANCED METERING.**

21 Section 543(e) of the National Energy Conservation  
22 Policy Act (42 U.S.C. 8253(e)) is amended by striking  
23 paragraph (3) and inserting the following:

24 “(3) PLAN.—

25 “(A) IN GENERAL.—Not later than 180  
26 days after the date on which guidelines are es-



1           tablished under paragraph (2), in a report sub-  
2           mitted by the agency under section 548(a), each  
3           agency shall submit to the Secretary a plan de-  
4           scribing the manner in which the agency will  
5           implement the requirements of paragraph (1),  
6           including—

7                   “(i) how the agency will designate  
8                   personnel primarily responsible for achiev-  
9                   ing the requirements; and

10                   “(ii) a demonstration by the agency,  
11                   complete with documentation, of any find-  
12                   ing that advanced meters or advanced me-  
13                   tering devices (as those terms are used in  
14                   paragraph (1)), are not practicable.

15                   “(B) UPDATES.—Reports submitted under  
16                   subparagraph (A) shall be updated annually.

17                   “(4) BEST PRACTICES REPORT.—

18                   “(A) IN GENERAL.—Not later than 180  
19                   days after the date of enactment of the Smart  
20                   Energy Act, the Secretary of Energy, in con-  
21                   sultation with the Secretary of Defense and the  
22                   Administrator of General Services, shall de-  
23                   velop, and issue a report on, best practices for  
24                   the use of advanced metering of energy use in

1 Federal facilities, buildings, and equipment by  
2 Federal agencies.

3 “(B) UPDATING.—The report described  
4 under subparagraph (A) shall be updated annu-  
5 ally.

6 “(C) COMPONENTS.—The report shall in-  
7 clude, at a minimum—

8 “(i) summaries and analysis of the re-  
9 ports by agencies under paragraph (3);

10 “(ii) recommendations on standard re-  
11 quirements or guidelines for automated en-  
12 ergy management systems, including—

13 “(I) potential common commu-  
14 nications standards to allow data  
15 sharing and reporting;

16 “(II) means of facilitating contin-  
17 uous commissioning of buildings and  
18 evidence-based maintenance of build-  
19 ings and building systems; and

20 “(III) standards for sufficient  
21 levels of security and protection  
22 against cyber threats to ensure sys-  
23 tems cannot be controlled by unau-  
24 thorized persons; and

25 “(iii) an analysis of—

1                   “(I) the types of advanced meter-  
2                   ing and monitoring systems being pi-  
3                   loted, tested, or installed in Federal  
4                   buildings; and

5                   “(II) existing techniques used  
6                   within the private sector or other non-  
7                   Federal government buildings.”.

8   **SEC. 106. FEDERAL ENERGY MANAGEMENT AND DATA COL-**  
9                   **LECTION STANDARD.**

10           Section 543(f)(7) of the National Energy Conserva-  
11   tion Policy Act (42 U.S.C. 8253(f)(7)) is amended by  
12   striking subparagraph (A) and inserting the following:

13                   “(A) IN GENERAL.—For each facility that  
14                   meets the criteria established by the Secretary  
15                   under paragraph (2)(B), the energy manager  
16                   shall use the web-based tracking system under  
17                   subparagraph (B)—

18                   “(i) to certify compliance with the re-  
19                   quirements for—

20                   “(I) energy and water evalua-  
21                   tions under paragraph (3);

22                   “(II) implementation of identified  
23                   energy and water measures under  
24                   paragraph (4); and

1                   “(III) follow-up on implemented  
2                   measures under paragraph (5); and  
3                   “(ii) to publish energy and water con-  
4                   sumption data on an individual facility  
5                   basis.”.

6 **TITLE II—PROVIDING OPPORTU-**  
7 **NITIES FOR ENERGY EFFI-**  
8 **CIENCY IN BUSINESS AND IN-**  
9 **DUSTRY**

10 **SEC. 201. REDUCING BARRIERS TO THE DEPLOYMENT OF**  
11 **INDUSTRIAL ENERGY EFFICIENCY.**

12       (a) REPORT ON THE DEPLOYMENT OF INDUSTRIAL  
13 ENERGY EFFICIENCY.—

14           (1) IN GENERAL.—Not later than one year  
15 after the date of enactment of this Act, the Sec-  
16 retary shall submit to the Committee on Energy and  
17 Commerce of the House of Representatives and the  
18 Committee on Energy and Natural Resources of the  
19 Senate a report containing—

20                   (A) the results of the study conducted  
21                   under paragraph (2); and

22                   (B) recommendations and guidance devel-  
23                   oped under paragraph (3).

1           (2) STUDY.—The Secretary, in coordination  
2 with the industrial sector, shall conduct a study of  
3 the following:

4           (A) The legal, regulatory, and economic  
5 barriers to the deployment of industrial energy  
6 efficiency in all electricity markets (including  
7 organized wholesale electricity markets and reg-  
8 ulated electricity markets), including, as appli-  
9 cable, the following:

10           (i) Transmission and distribution  
11 interconnection requirements.

12           (ii) Standby, back-up, and mainte-  
13 nance fees (including demand ratchets).

14           (iii) Exit fees.

15           (iv) Life of contract demand ratchets.

16           (v) Net metering.

17           (vi) Calculation of avoided cost rates.

18           (vii) Power purchase agreements.

19           (viii) Energy market structures.

20           (ix) Capacity market structures.

21           (x) Other barriers as may be identi-  
22 fied by the Secretary, in coordination with  
23 the industrial sector.

24           (B) Examples of—

1 (i) successful State and Federal poli-  
2 cies that resulted in greater use of indus-  
3 trial energy efficiency; and

4 (ii) cost-effective policies used by for-  
5 eign countries to foster industrial energy  
6 efficiency.

7 (C) The estimated economic benefits to the  
8 national economy of providing the industrial  
9 sector with energy efficiency matching grants of  
10 \$5 billion per year for 5- and 10-year periods,  
11 including benefits related to estimated energy  
12 and emission reductions, direct and indirect  
13 jobs saved or created, direct and indirect capital  
14 investment, the gross domestic product, and  
15 trade balance impacts.

16 (3) RECOMMENDATIONS AND GUIDANCE.—The  
17 Secretary, in coordination with the industrial sector,  
18 shall develop policy recommendations regarding the  
19 deployment of industrial energy efficiency, including  
20 proposed regulatory guidance to States and relevant  
21 Federal agencies to address barriers to such deploy-  
22 ment.

23 (b) DEFINITIONS.—In this section:

24 (1) INDUSTRIAL SECTOR.—The term “indus-  
25 trial sector” means any subsector of the manufac-

1 turing sector (as defined in North American Indus-  
2 try Classification System codes 31–33) establish-  
3 ments of which have, or could have, thermal host fa-  
4 cilities with electricity requirements met in whole, or  
5 in part, by onsite electricity generation, including di-  
6 rect and indirect combined heat and power or waste  
7 heat recovery.

8 (2) INDUSTRIAL ENERGY EFFICIENCY.—The  
9 term “industrial energy efficiency” means commer-  
10 cial technologies and measures to improve energy ef-  
11 ficiency or to generate or transmit electric power  
12 and heat, including electric motor efficiency improve-  
13 ments, demand response, direct or indirect combined  
14 heat and power, and waste heat recovery.

15 (3) SECRETARY.—The term “Secretary” means  
16 the Secretary of Energy.

17 **SEC. 202. COORDINATION OF RESEARCH AND DEVELOP-**  
18 **MENT OF ENERGY EFFICIENT TECH-**  
19 **NOLOGIES FOR INDUSTRY.**

20 (a) IN GENERAL.—As part of the research and devel-  
21 opment activities of the Advanced Manufacturing Office  
22 of the Department of Energy, the Secretary of Energy  
23 shall establish, as appropriate, collaborative research and  
24 development partnerships with other programs within the  
25 Office of Energy Efficiency and Renewable Energy (in-

1 cluding the Building Technologies Program), the Office of  
2 Electricity Delivery and Energy Reliability, and the Office  
3 of Science that—

4 (1) leverage the research and development ex-  
5 pertise of those programs to promote early stage en-  
6 ergy efficiency technology development;

7 (2) support the use of innovative manufacturing  
8 processes and applied research for development,  
9 demonstration, and commercialization of new tech-  
10 nologies and processes to improve efficiency, reduce  
11 emissions, reduce industrial waste, and improve in-  
12 dustrial cost-competitiveness; and

13 (3) apply the knowledge and expertise of the  
14 Advanced Manufacturing Office to help achieve the  
15 program goals of the other programs.

16 (b) REPORTS.—Not later than 2 years after the date  
17 of enactment of this Act and biennially thereafter, the Sec-  
18 retary of Energy shall submit to Congress a report that  
19 describes actions taken to carry out subsection (a) and the  
20 results of those actions.

21 **SEC. 203. COMBINED HEAT AND POWER AND WASTE HEAT**  
22 **RECOVERY.**

23 (a) GOAL.—It is the goal of the United States to,  
24 not later than December 31, 2020, achieve a doubling of  
25 the production of electricity from combined heat and



1 power and waste heat recovery in the United States and  
2 thereby improve the energy efficiency of the industrial sec-  
3 tor.

4 (b) STRATEGIC PLAN.—

5 (1) IN GENERAL.—Not later than 1 year after  
6 the date of enactment of this Act, and biennially  
7 thereafter, the Secretary of Energy (referred to in  
8 this section as the “Secretary”), in cooperation with  
9 the heads of other appropriate Federal agencies,  
10 shall transmit to the Congress and make available to  
11 the public a strategic plan, or update thereof, to  
12 achieve the national goal established under sub-  
13 section (a).

14 (2) PUBLIC INPUT AND COMMENT.—The Sec-  
15 retary shall develop the strategic plan in a manner  
16 that provides appropriate opportunities for public  
17 input and comment.

18 (3) PLAN CONTENTS.—The strategic plan  
19 shall—

20 (A) establish policy priorities and identify  
21 measures to achieve the national goal estab-  
22 lished under subsection (a);

23 (B) include estimates for achievable in-  
24 creases in combined heat and power and waste

1 heat recovery production and for energy savings  
2 that will be achieved by those increases; and

3 (C) include data collection and compilation  
4 methodologies used to establish baselines and  
5 document energy savings data.

6 (4) PLAN UPDATES.—

7 (A) INCLUSION IN NATIONAL ENERGY POL-  
8 ICY PLAN.—The Secretary shall include each  
9 updated strategic plan in the National Energy  
10 Policy Plan required by section 801 of the De-  
11 partment of Energy Organization Act (42  
12 U.S.C. 7321).

13 (B) CONTENTS.—In updating the strategic  
14 plan, the Secretary shall—

15 (i) report on progress made toward  
16 implementing combined heat and power  
17 and waste heat recovery policies to achieve  
18 the national goal established under sub-  
19 section (a); and

20 (ii) verify, to the maximum extent  
21 practicable, energy savings resulting from  
22 those policies.