

116TH CONGRESS  
1ST SESSION

# H. R. 2664

To improve energy performance in Federal buildings, and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

MAY 10, 2019

Mr. CARTER of Georgia (for himself and Mr. VEASEY) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committee on Transportation and Infrastructure, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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## A BILL

To improve energy performance in Federal buildings, 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 “All-of-the-Above Fed-  
5 eral Building Energy Conservation Act of 2019”.

6 **SEC. 2. ENERGY PERFORMANCE REQUIREMENT FOR FED-**  
7 **ERAL BUILDINGS.**

8 Section 543 of the National Energy Conservation  
9 Policy Act (42 U.S.C. 8253) is amended—

1           (1) by striking subsections (a) and (b) and in-  
2           serting the following:

3           “(a) ENERGY PERFORMANCE REQUIREMENT FOR  
4 FEDERAL BUILDINGS.—

5           “(1) IN GENERAL.—Subject to paragraph (2),  
6           to the maximum extent life cycle cost-effective, each  
7           agency shall apply energy conservation measures to,  
8           and shall improve the design for the construction of,  
9           the Federal buildings of the agency (including each  
10          industrial or laboratory facility) so that the energy  
11          consumption per gross square foot of the Federal  
12          buildings of the agency in fiscal years 2020 through  
13          2027 is reduced, as compared with the energy con-  
14          sumption per gross square foot of the Federal build-  
15          ings of the agency in fiscal year 2018, by the per-  
16          centage specified in the following table:

<b>“Fiscal Year</b>	<b>Percentage Reduction</b>
2020 .....	2.5
2021 .....	5
2022 .....	7.5
2023 .....	10
2024 .....	12.5
2025 .....	15
2026 .....	17.5
2027 .....	20.

1           “(2) EXCLUSION FOR BUILDINGS WITH ENERGY  
2 INTENSIVE ACTIVITIES.—

3           “(A) IN GENERAL.—An agency may ex-  
4 clude from the requirements of paragraph (1)  
5 any building (including the associated energy  
6 consumption and gross square footage of the  
7 building) in which energy intensive activities are  
8 carried out.

9           “(B) REPORTS.—Each agency shall iden-  
10 tify and include in each report under section  
11 548(a) each building designated by the agency  
12 for exclusion under subparagraph (A) during  
13 the period covered by the report.

14           “(3) RECOMMENDATIONS.—Not later than De-  
15 cember 31, 2026, the Secretary shall—

16           “(A) review the results of the implementa-  
17 tion of the energy performance requirement es-  
18 tablished under paragraph (1); and

19           “(B) submit to Congress recommendations  
20 concerning energy performance requirements  
21 for fiscal years 2028 through 2037.

22           “(b) ENERGY MANAGEMENT REQUIREMENT FOR  
23 FEDERAL AGENCIES.—

24           “(1) IN GENERAL.—Each agency shall—

1           “(A) not later than October 1, 2019, begin  
2 installing in Federal buildings owned by the  
3 United States all energy and water conservation  
4 measures determined by the Secretary to be  
5 life-cycle cost-effective; and

6           “(B) complete the installation described in  
7 subparagraph (A) as soon as practicable after  
8 the date referred to in that subparagraph.

9           “(2) EXPLANATION OF NONCOMPLIANCE.—

10           “(A) IN GENERAL.—If an agency fails to  
11 comply with paragraph (1), the agency shall  
12 submit to the Secretary, using guidelines devel-  
13 oped by the Secretary, an explanation of the  
14 reasons for the failure.

15           “(B) REPORT TO CONGRESS.—Not later  
16 than October 1, 2021, and every 2 years there-  
17 after, the Secretary shall submit to Congress a  
18 report describing any noncompliance with the  
19 requirements of paragraph (1).”; and

20           (2) in subsection (f)—

21           (A) in paragraph (1)—

22           (i) by redesignating subparagraphs  
23 (E), (F), and (G) as subparagraphs (F),  
24 (G), and (H), respectively; and

1 (ii) by inserting after subparagraph  
2 (D) the following:

3 “(E) ONGOING COMMISSIONING.—The  
4 term ‘ongoing commissioning’ means an ongo-  
5 ing process of commissioning using monitored  
6 data, the primary goal of which is to ensure  
7 continuous optimum performance of a facility,  
8 in accordance with design or operating needs,  
9 over the useful life of the facility, while meeting  
10 facility occupancy requirements.”;

11 (B) in paragraph (2), by adding at the end  
12 the following:

13 “(C) ENERGY MANAGEMENT SYSTEM.—An  
14 energy manager designated for a facility under  
15 subparagraph (A) shall take into consider-  
16 ation—

17 “(i) the use of a system to manage  
18 energy use at the facility; and

19 “(ii) the applicability of certification  
20 of the facility in accordance with the Inter-  
21 national Organization for Standardization  
22 standard numbered 50001 and entitled  
23 ‘Energy Management Systems’.”; and

24 (C) by striking paragraphs (3) and (4) and  
25 inserting the following:

1           “(3) ENERGY AND WATER EVALUATIONS AND  
2 COMMISSIONING.—

3           “(A) EVALUATIONS.—Except as provided  
4 in subparagraph (B), not later than the date  
5 that is 180 days after the date of enactment of  
6 the All-of-the-Above Federal Building Energy  
7 Conservation Act of 2019, and annually there-  
8 after, each energy manager shall complete, for  
9 the preceding calendar year, a comprehensive  
10 energy and water evaluation and recommis-  
11 sioning or retrocommissioning for approxi-  
12 mately 25 percent of the facilities of the appli-  
13 cable agency that meet the criteria under para-  
14 graph (2)(B) in a manner that ensures that an  
15 evaluation of each such facility is completed not  
16 less frequently than once every 4 years.

17           “(B) EXCEPTIONS.—An evaluation and re-  
18 commissioning or retrocommissioning shall not  
19 be required under subparagraph (A) with re-  
20 spect to a facility that, as of the date on which  
21 the evaluation and recommissioning or  
22 retrocommissioning would otherwise occur—

23           “(i) has had a comprehensive energy  
24 and water evaluation during the preceding  
25 8-year period;

1 “(ii)(I) has been commissioned, re-  
2 commissioned, or retrocommissioned dur-  
3 ing the preceding 10-year period; or

4 “(II) is under ongoing commissioning;

5 “(iii) has not had a major change in  
6 function or use since the previous evalua-  
7 tion and recommissioning;

8 “(iv) has been benchmarked with pub-  
9 lic disclosure under paragraph (8) during  
10 the preceding calendar year; and

11 “(v)(I) based on the benchmarking de-  
12 scribed in clause (iv), has achieved at a fa-  
13 cility level the most-recent cumulative en-  
14 ergy savings target under subsection (a),  
15 as compared to the earlier of—

16 “(aa) the date of the most recent  
17 evaluation; and

18 “(bb) the date—

19 “(AA) of the most recent  
20 commissioning, recommissioning,  
21 or retrocommissioning; or

22 “(BB) on which ongoing  
23 commissioning began; or

24 “(II) has a long-term contract in  
25 place guaranteeing energy savings at least

1 as great as the energy savings target under  
2 subclause (I).

3 “(4) IMPLEMENTATION OF IDENTIFIED ENERGY  
4 AND WATER EFFICIENCY MEASURES.—Not later  
5 than 2 years after the completion of each evaluation  
6 under paragraph (3), each energy manager shall—

7 “(A) implement any energy- or water-sav-  
8 ing measure that the Federal agency identified  
9 in the evaluation conducted that is life cycle  
10 cost-effective; and

11 “(B) bundle individual measures of varying  
12 paybacks together into combined projects.”.

13 **SEC. 3. FEDERAL BUILDING ENERGY EFFICIENCY PER-**  
14 **FORMANCE STANDARDS; CERTIFICATION**  
15 **SYSTEM AND LEVEL FOR GREEN BUILDINGS.**

16 (a) DEFINITIONS.—Section 303 of the Energy Con-  
17 servation and Production Act (42 U.S.C. 6832) is amend-  
18 ed—

19 (1) in each of paragraphs (1) through (16), by  
20 inserting a paragraph heading, the text of which is  
21 comprised of the term defined in that paragraph;

22 (2) by redesignating paragraphs (2) through  
23 (16) (as so amended) as paragraphs (3), (4), (6),  
24 (7), (8), (10), (12), (13), (14), (15), (16), (9), (17),



1 (5), and (2), respectively, and moving the para-  
2 graphs so as to appear in numerical order; and

3 (3) by inserting after paragraph (10) (as so re-  
4 designated) the following:

5 “(11) MAJOR RENOVATION.—The term ‘major  
6 renovation’ means a modification of the energy sys-  
7 tems of a building that is sufficiently extensive to  
8 ensure that the entire building can achieve compli-  
9 ance with applicable energy standards for new build-  
10 ings, based on such criteria as the Secretary shall  
11 establish, by regulation.”.

12 (b) FEDERAL BUILDING ENERGY EFFICIENCY  
13 STANDARDS.—Section 305(a)(2)(A) of the Energy Con-  
14 servation and Production Act (42 U.S.C. 6834(a)(2)(A))  
15 is amended by striking “the 2004 International Energy  
16 Conservation Code (in the case of residential buildings)  
17 or ASHRAE Standard 90.1–2004 (in the case of commer-  
18 cial buildings)” and inserting “the most recently published  
19 edition of the International Energy Conservation Code (in  
20 the case of residential buildings) or ASHRAE Standard  
21 90.1 (in the case of commercial buildings) on the date of  
22 enactment of the All-of-the-Above Federal Building En-  
23 ergy Conservation Act of 2019”.

24 (c) REVISED FEDERAL BUILDING EFFICIENCY  
25 STANDARDS.—Section 305(a)(3) of the Energy Conserva-

1 tion and Production Act (42 U.S.C. 6834(a)(3)) is amend-  
2 ed—

3 (1) by striking “(3)(A) Not later than” and all  
4 that follows through subparagraph (B) and inserting  
5 the following:

6 “(3) REVISED FEDERAL BUILDING ENERGY EF-  
7 FICIENCY PERFORMANCE STANDARDS; CERTIFI-  
8 CATION FOR GREEN BUILDINGS.—

9 “(A) REVISED FEDERAL BUILDING EN-  
10 ERGY EFFICIENCY PERFORMANCE STAND-  
11 ARDS.—

12 “(i) IN GENERAL.—Not later than 1  
13 year after the date of enactment of the All-  
14 of-the-Above Federal Building Energy  
15 Conservation Act of 2019, the Secretary  
16 shall establish, by regulation, revised Fed-  
17 eral building energy efficiency performance  
18 standards that require that—

19 “(I) unless demonstrated not to  
20 be life-cycle cost-effective for new  
21 Federal buildings and Federal build-  
22 ings with major renovations—

23 “(aa) the buildings shall be  
24 designed to achieve energy con-  
25 sumption levels that are not less

1 than 30 percent below the levels  
2 established in the most recently  
3 published version of the  
4 ASHRAE Standard or the Inter-  
5 national Energy Conservation  
6 Code, as appropriate, on the date  
7 of enactment of the All-of-the-  
8 Above Federal Building Energy  
9 Conservation Act of 2019, unless  
10 the Secretary determines, pursu-  
11 ant to subparagraph (B), that a  
12 subsequent version of such a  
13 standard or code shall apply; and

14 “(bb) sustainable design  
15 principles are applied to the loca-  
16 tion, siting, design, and construc-  
17 tion of all new Federal buildings  
18 and replacement Federal build-  
19 ings;

20 “(II) if water is used to achieve  
21 energy efficiency, water conservation  
22 technologies shall be applied to the ex-  
23 tent that the technologies are life-  
24 cycle cost-effective; and

1                   “(III) if life-cycle cost-effective,  
2                   as compared to other reasonably avail-  
3                   able technologies, not less than 30  
4                   percent of the hot water demand for  
5                   each new Federal building or Federal  
6                   building undergoing a major renova-  
7                   tion shall be met through the installa-  
8                   tion and use of solar hot water heat-  
9                   ers.

10                   “(B) UPDATES.—Not later than 1 year  
11                   after the date of approval of each subsequent  
12                   revision of the ASHRAE Standard or the Inter-  
13                   national Energy Conservation Code, as appro-  
14                   priate, the Secretary shall determine whether  
15                   the revised standards established under sub-  
16                   paragraph (A) and the Federal building energy  
17                   standards established under paragraph (1)  
18                   should be updated to reflect the revisions, based  
19                   on the energy savings and life-cycle cost-effec-  
20                   tiveness of the revisions.”;

21                   (2) in subparagraph (C)—

22                   (A) by striking “(C) In the budget re-  
23                   quest” and inserting the following:

24                   “(C) BUDGET REQUEST.—In the budget  
25                   request”; and

1 (B) by indenting clauses (i) and (ii) appro-  
2 priately; and

3 (3) in subparagraph (D)—

4 (A) in the matter preceding clause (i), by  
5 striking “that require that:” and inserting  
6 “that require the following:”;

7 (B) in clause (i), by striking “annually for  
8 inflation for other buildings:” in the matter pre-  
9 ceding subclause (I) and all that follows  
10 through “(III) Sustainable design principles”  
11 and inserting “annually for inflation for other  
12 buildings, sustainable design principles”;

13 (C) in clause (v), by striking “clause  
14 (i)(III)” each place it appears and inserting  
15 “clause (i)”; and

16 (D) in clause (vi)—

17 (i) by striking “subclauses (I) and  
18 (III) of”; and

19 (ii) by striking “energy savings, sus-  
20 tainable design, and green building per-  
21 formance” and inserting “sustainable de-  
22 sign and green building performance”.

23 (d) FEDERAL COMPLIANCE.—Section 306 of the En-  
24 ergy Conservation and Production Act (42 U.S.C. 6835)  
25 is amended—

1 (1) in subsection (a)—

2 (A) in paragraph (1)—

3 (i) by striking “(1) The head” and in-  
4 sserting the following:

5 “(1) IN GENERAL.—The head”; and

6 (ii) by striking “assure that new Fed-  
7 eral buildings” and inserting “ensure that  
8 new Federal buildings and Federal build-  
9 ings with major renovations”; and

10 (B) in paragraph (2)—

11 (i) by striking the second sentence  
12 and inserting the following:

13 “(B) PROCEDURES.—The Architect of the  
14 Capitol shall adopt procedures necessary to en-  
15 sure that the buildings referred to in subpara-  
16 graph (A) meet or exceed the standards de-  
17 scribed in that subparagraph.”; and

18 (ii) in the first sentence—

19 (I) by inserting “and Federal  
20 buildings with major renovations”  
21 after “new buildings”; and

22 (II) by striking “(2) The Fed-  
23 eral” and inserting the following:

24 “(2) APPLICABILITY.—

25 “(A) IN GENERAL.—The Federal”; and

1           (2) in subsection (b), by striking the subsection  
2           designation and heading and all that follows through  
3           “new Federal building” and inserting the following:  
4           “(b) EXPENDITURES.—The head of a Federal agency  
5           may expend Federal funds for the construction of a new  
6           Federal building or a Federal building with major renova-  
7           tions”.

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