

## 116TH CONGRESS 1ST SESSION H.R. 2664

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

## 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

## 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 for4 Federal Buildings.—
- "(1) IN GENERAL.—Subject to paragraph (2), 5 to the maximum extent life cycle cost-effective, each 6 7 agency shall apply energy conservation measures to, and shall improve the design for the construction of, 8 9 the Federal buildings of the agency (including each industrial or laboratory facility) so that the energy 10 11 consumption per gross square foot of the Federal 12 buildings of the agency in fiscal years 2020 through 2027 is reduced, as compared with the energy con-13 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:

"Fiscal Year	Percentage Reduction
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
l 1	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-
13 14	SEC. 3. FEDERAL BUILDING ENERGY EFFICIENCY PER- FORMANCE STANDARDS; CERTIFICATION
14	FORMANCE STANDARDS; CERTIFICATION
<ul><li>14</li><li>15</li><li>16</li></ul>	FORMANCE STANDARDS; CERTIFICATION SYSTEM AND LEVEL FOR GREEN BUILDINGS.
14 15 16 17	FORMANCE STANDARDS; CERTIFICATION SYSTEM AND LEVEL FOR GREEN BUILDINGS.  (a) DEFINITIONS.—Section 303 of the Energy Con-
14 15 16 17	FORMANCE STANDARDS; CERTIFICATION SYSTEM AND LEVEL FOR GREEN BUILDINGS.  (a) DEFINITIONS.—Section 303 of the Energy Conservation and Production Act (42 U.S.C. 6832) is amend-
14 15 16 17 18	FORMANCE STANDARDS; CERTIFICATION SYSTEM AND LEVEL FOR GREEN BUILDINGS.  (a) DEFINITIONS.—Section 303 of the Energy Conservation and Production Act (42 U.S.C. 6832) is amended—
14 15 16 17 18	FORMANCE STANDARDS; CERTIFICATION SYSTEM AND LEVEL FOR GREEN BUILDINGS.  (a) DEFINITIONS.—Section 303 of the Energy Conservation and Production Act (42 U.S.C. 6832) is amended—  (1) in each of paragraphs (1) through (16), by
14 15 16 17 18 19 20	FORMANCE STANDARDS; CERTIFICATION SYSTEM AND LEVEL FOR GREEN BUILDINGS.  (a) DEFINITIONS.—Section 303 of the Energy Conservation and Production Act (42 U.S.C. 6832) is amended—  (1) in each of paragraphs (1) through (16), by inserting a paragraph heading, the text of which is
14 15 16 17 18 19 20 21	FORMANCE STANDARDS; CERTIFICATION SYSTEM AND LEVEL FOR GREEN BUILDINGS.  (a) DEFINITIONS.—Section 303 of the Energy Conservation and Production Act (42 U.S.C. 6832) is amended—  (1) in each of paragraphs (1) through (16), by inserting a paragraph heading, the text of which is comprised of the term defined in that paragraph;

- 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 redesignated) 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-
- 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	serting 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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