

117TH CONGRESS
1ST SESSION

S. 832

To amend the Energy Independence and Security Act of 2007 to fund job-creating improvements in energy and resiliency for Federal buildings managed by the General Services Administration, to enable a portfolio of clean buildings by 2030, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 18, 2021

Mr. CARDIN introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

A BILL

To amend the Energy Independence and Security Act of 2007 to fund job-creating improvements in energy and resiliency for Federal buildings managed by the General Services Administration, to enable a portfolio of clean buildings by 2030, 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 “GSA Resilient, Energy
5 Efficient, and Net-Zero Building Jobs Act of 2021” or
6 the “GREEN Building Jobs Act of 2021”.

1 **SEC. 2. FEDERAL BUILDING LEASING.**

2 (a) IN GENERAL.—Section 435 of the Energy Inde-
3 pendence and Security Act of 2007 (42 U.S.C. 17091) is
4 amended to read as follows:

5 **“SEC. 435. LEASING.**

6 “(a) DEFINITION OF LESSOR.—In this section, the
7 term ‘lessor’ means any individual, firm, partnership, lim-
8 ited liability company, trust, association, State, unit of
9 local government, or legal entity that is the rightful owner
10 of a property leased to the Federal Government.

11 “(b) LEASING REQUIREMENTS.—

12 “(1) IN GENERAL.—Except as provided in sub-
13 section (c), effective beginning on the date that is 1
14 year after the date of enactment of the GREEN
15 Building Jobs Act of 2021, no Federal agency shall
16 enter into a contract to lease space unless—

17 “(A) the space is for a building or space
18 in a building that—

19 “(i) in the most recent year, has
20 earned the Energy Star label under the
21 Energy Star program established by sec-
22 tion 324A of the Energy Policy and Con-
23 servation Act (42 U.S.C. 6294a); and

24 “(ii) has obtained or will obtain as a
25 required performance specification a green
26 building certification consistent with rec-

1 ommendations of the Administrator based
2 on the review of high-performance building
3 certification systems carried out by the Ad-
4 ministrators pursuant to section 436(h);
5 and

6 “(B) the contract includes—

7 “(i) a requirement for the lessor of
8 the building to disclose data on consump-
9 tion of utilities (energy and water)—

10 “(I) for the portion of the build-
11 ing occupied by the agency; and

12 “(II) that is provided by the les-
13 sor through submetering or an alter-
14 native method identified by the Ad-
15 ministrators for buildings lacking sub-
16 meters; and

17 “(ii) 1 or more mechanisms to ensure
18 that the lessor of the building takes rea-
19 sonable steps to maintain the requirements
20 of the building described in subparagraph
21 (A).

22 “(2) LOCATION.—In determining the geo-
23 graphic location of a space to lease under paragraph
24 (1), the Administrator shall not use as a criterion
25 the presence or absence of buildings in that location

1 that have an Energy Star label described in para-
2 graph (1)(A)(i) or a green building certification de-
3 scribed in paragraph (1)(A)(ii).

4 “(c) WAIVER.—

5 “(1) IN GENERAL.—Subject to paragraph (2), a
6 Federal agency may enter into a contract to lease
7 space that does not meet a requirement described in
8 clause (i) or (ii) of subsection (b)(1)(A) if—

9 “(A) no other space is available that can
10 meet that requirement within a reasonable pe-
11 riod and meet the functional requirements of
12 the agency, including locational needs;

13 “(B) the agency proposes to remain in a
14 building or a space in a building—

15 “(i) that the agency has occupied pre-
16 viously; and

17 “(ii) less than 50 percent of the
18 leasable space of which is leased by the
19 Federal Government;

20 “(C) the agency proposes to lease a build-
21 ing or space in a building of historical, architec-
22 tural, or cultural significance (as defined in sec-
23 tion 3306(a) of title 40, United States Code);
24 or

1 “(D) the lease is for not more than 10,000
2 gross square feet of space in a building less
3 than 50 percent of the leasable space of which
4 is leased by the Federal Government.

5 “(2) WAIVER APPROVAL.—

6 “(A) IN GENERAL.—A Federal agency may
7 enter into a contract under paragraph (1) if—

8 “(i)(I) the agency submits a request
9 to the Federal Director of the Office of
10 Federal High-Performance Green Build-
11 ings indicating the basis for the request
12 under paragraph (1); and

13 “(II) the Federal Director of that Of-
14 fice approves the request; and

15 “(ii) in the case of a waiver under
16 subparagraph (A), (B), or (C) of para-
17 graph (1), the contract includes the re-
18 quirements described in subparagraph
19 (B)(ii), which—

20 “(I) in the case of a waiver under
21 subparagraph (A) of that paragraph,
22 shall be required to be implemented
23 prior to occupancy of the building or
24 space in the building by the Federal
25 agency; and

1 “(II) in the case of a waiver
2 under subparagraph (B) or (C) of
3 that paragraph, shall be required to
4 be implemented not later than 1 year
5 after the Federal agency signs the
6 contract.

7 “(B) CONTRACT REQUIREMENTS.—

8 “(i) DEFINITION OF
9 NONBENCHMARKED SPACE.—In this sub-
10 paragraph, the term ‘nonbenchmarked
11 space’ means a building or space in a
12 building for which owners cannot access
13 whole building utility consumption data,
14 including buildings—

15 “(I) that are located in States
16 that do not require utilities to provide,
17 and utilities do not provide, such ag-
18 gregated information to multitenant
19 building owners; and

20 “(II) the tenants of which do not
21 provide energy consumption informa-
22 tion to the commercial building owner
23 in response to a request from that
24 owner.

1 “(ii) REQUIREMENTS.—The require-
2 ments referred to in subparagraph (A)(ii)
3 are the following:

4 “(I) The building or space in a
5 building—

6 “(aa) meets the requirement
7 described in subsection
8 (b)(1)(A)(i); or

9 “(bb) is renovated for all
10 feasible energy efficiency and
11 conservation improvements that
12 will be cost effective over the life
13 of the lease (including any op-
14 tional and reasonably anticipated
15 extensions or renewals of the
16 lease), including improvements in
17 lighting, windows, heating, ven-
18 tilation, and air conditioning sys-
19 tems and controls.

20 “(II) The building or space in a
21 building is—

22 “(aa) benchmarked under a
23 nationally recognized, online, and
24 free benchmarking program, and

1 the benchmark is publicly dis-
2 closed; or

3 “(bb) a nonbenchmarked
4 space.

5 “(III) In the case of a building
6 or space in a building that is a
7 nonbenchmarked space, the Federal
8 agency provides to the building owner,
9 or authorizes the owner to obtain
10 from the utility, the energy consump-
11 tion data of the space to enable
12 benchmarking of the building.

13 “(C) INCORPORATION OF ASSISTANCE INTO
14 LEASE.—In the case of a contract to lease
15 space that receives a waiver under paragraph
16 (1)(A), the Administrator may—

17 “(i) include in the relevant lease pro-
18 curement documents a statement about the
19 availability of financial incentives and tech-
20 nical assistance under the pilot program
21 established under subsection (g); or

22 “(ii)(I) incorporate into the terms of
23 the lease with the lessor any financial in-
24 centive or technical assistance provided to
25 that lessor under that pilot program; and

1 “(II) if subclause (I) is carried out,
2 extend the deadline required under sub-
3 paragraph (A)(ii)(I).

4 “(d) REVISION OF FEDERAL REGULATIONS.—Not
5 later than 1 year after the date of enactment of the
6 GREEN Building Jobs Act of 2021, the Administrator
7 shall revise Part 102–73(c) of the Federal Management
8 Regulation and Part 570 of the General Services Adminis-
9 tration Acquisition Manual, as appropriate, to reflect the
10 requirements of this section.

11 “(e) REPORT.—The Administrator shall annually
12 publish on the website of the General Services Administra-
13 tion a report on the aggregate compliance of all leased
14 buildings and spaces in buildings held by the General
15 Services Administration with the most recent version of
16 the Guiding Principles for Sustainable Federal Buildings.

17 “(f) COMPLIANCE IMPROVEMENT.—Not later than
18 180 days after the date of enactment of the GREEN
19 Building Jobs Act of 2021, the Administrator shall de-
20 velop and implement a policy to improve lessor compliance
21 with energy efficiency provisions of leases, including by
22 considering a variety of approaches.

23 “(g) INCENTIVE PILOT PROGRAM.—

24 “(1) IN GENERAL.—The Administrator shall es-
25 tablish a pilot program to provide financial incen-

1 tives for lessors to achieve an Energy Star label
2 under the Energy Star program established by sec-
3 tion 324A of the Energy Policy and Conservation
4 Act (42 U.S.C. 6294a) in a building—

5 “(A) in which space is leased to a Federal
6 agency; and

7 “(B)(i) in which the total space leased by
8 the Federal Government is less than 50 percent
9 of the leasable space of the building;

10 “(ii) that is of historical, architectural, or
11 cultural significance (as defined in section
12 3306(a) of title 40, United States Code); or

13 “(iii) for which a waiver is granted under
14 subsection (c)(1)(A).

15 “(2) DIVERSITY.—In carrying out the pilot pro-
16 gram established under paragraph (1), the Adminis-
17 trator shall ensure—

18 “(A) a diversity in the buildings and
19 spaces owned by lessors provided financial as-
20 sistance under that paragraph, including build-
21 ings with multiple, separate leases that individ-
22 ually do not trigger requirements under this
23 Act; and

24 “(B) geographical diversity, including the
25 representation of rural areas.

1 “(3) TECHNICAL ASSISTANCE.—As part of the
2 pilot program established under paragraph (1), the
3 Administrator may provide technical assistance, di-
4 rectly or through contracts, to lessors receiving fi-
5 nancial assistance under that pilot program.

6 “(4) AUTHORIZATION OF APPROPRIATIONS.—
7 There is authorized to be appropriated to the Ad-
8 ministrator \$50,000,000 to carry out this sub-
9 section, to remain available until expended.”.

10 (b) REPORT ON REALTY SERVICES.—Section 102(b)
11 of the Better Buildings Act of 2015 (42 U.S.C. 17062(b))
12 is amended by adding at the end the following:

13 “(5) REPORT.—Not later than 90 days after
14 the date of enactment of the GREEN Building Jobs
15 Act of 2021, the Administrator shall submit to Con-
16 gress, and make publicly available on the website of
17 the General Services Administration, a report on the
18 implementation of paragraph (3), including—

19 “(A) the results of the policies and prac-
20 tices described in that paragraph, including the
21 number of leases implementing the measures
22 described in that paragraph;

23 “(B) a description of any barriers to
24 achieving greater energy and water efficiency;
25 and

1 “(C) recommendations to address those
2 barriers.”.

3 **SEC. 3. ENERGY AND WATER EFFICIENCY, NET-ZERO, AND**
4 **ZERO EMISSION VEHICLE INFRASTRUCTURE**
5 **GOALS.**

6 (a) IN GENERAL.—Subtitle C of title IV of the En-
7 ergy Independence and Security Act of 2007 (Public Law
8 110–140; 121 Stat. 1607) is amended by adding at the
9 end the following:

10 **“SEC. 442. ENERGY AND WATER EFFICIENCY GOALS.**

11 “(a) ESTABLISHMENT.—Subject to subsections (b),
12 (c), and (d), the Administrator shall, for each of fiscal
13 years 2021 through 2030—

14 “(1) reduce average building energy intensity
15 (as measured in British thermal units per gross
16 square foot) at GSA facilities by 2.5 percent each
17 fiscal year so that the average building energy inten-
18 sity of GSA facilities is reduced by 25 percent or
19 greater by 2030, relative to the average building en-
20 ergy intensity of GSA facilities in fiscal year 2018;

21 “(2) improve water use efficiency and manage-
22 ment at GSA facilities by reducing average potable
23 water consumption intensity (as measured in gallons
24 per gross square foot)—

1 “(A) by 54 percent by fiscal year 2030,
2 relative to the average water consumption of
3 GSA facilities in fiscal year 2007; and

4 “(B) through reductions of 2 percent each
5 fiscal year;

6 “(3) reduce industrial, landscaping, and agricul-
7 tural water consumption at GSA facilities (as meas-
8 ured in gallons)—

9 “(A) by 20 percent by fiscal year 2030,
10 relative to the industrial, landscaping, and agri-
11 cultural water consumption of GSA facilities in
12 fiscal year 2018; and

13 “(B) through reductions of 2 percent each
14 fiscal year; and

15 “(4) to the maximum extent practicable, carry
16 out paragraphs (1) through (3) in a manner that is
17 lifecycle cost effective.

18 “(b) ENERGY AND WATER INTENSIVE FACILITY EX-
19 CLUSIONS.—

20 “(1) IN GENERAL.—The Administrator may ex-
21 clude from the requirements under paragraph (1) or
22 (2) of subsection (a), as applicable, any GSA facility
23 in which energy- or water-intensive activities are car-
24 ried out.

1 “(2) REPORT.—The Administrator shall include
2 in the report submitted to the Secretary under sec-
3 tion 548(a) of the National Energy Conservation
4 Policy Act (42 U.S.C. 8258(a)) a list identifying
5 each GSA facility excluded under paragraph (1) and
6 a statement of whether the exclusion is on the basis
7 of energy-intensive activities, water-intensive activi-
8 ties, or both energy- and water-intensive activities.

9 “(c) ALTERNATIVE METRIC FOR MEASURING POTABLE
10 WATER CONSUMPTION INTENSITY.—

11 “(1) IN GENERAL.—The Administrator may de-
12 velop an alternative metric for measuring potable
13 water consumption intensity under subsection (a)(2),
14 including by using occupancy, building use type, or
15 other attributes relevant to potable water use and
16 potential for efficiency.

17 “(2) ORIGINAL METRIC.—If the Administrator
18 develops an alternative metric under paragraph (1),
19 the Administrator shall not cease tracking and re-
20 porting potable water consumption intensity in gal-
21 lons per gross square foot.

22 “(d) STRINGENT GOALS.—In the case of a conflict
23 between a goal established under subsection (a) and a
24 Federal energy or water intensity goal established pursu-

1 ant to any other Federal law with respect to GSA facili-
2 ties, the Administrator shall apply the more stringent goal.

3 “(e) PRIVATE SECTOR FINANCING PRIORITY.—

4 “(1) IN GENERAL.—In carrying out this sec-
5 tion, the Administrator shall prioritize projects in
6 which Federal funds will be used to leverage private
7 sector financing using public-private partnerships,
8 including through energy savings performance con-
9 tracts and other mechanisms.

10 “(2) ANALYSIS.—The Administrator shall select
11 priority projects under paragraph (1) on the basis of
12 analysis that ensures a maximum beneficial use of
13 private finance for the project.

14 “(f) AUTHORIZATION OF APPROPRIATIONS.—There
15 is authorized to be appropriated to the Administrator
16 \$500,000,000 to carry out this section and section 443,
17 to remain available until expended, including—

18 “(1) to supplement project budgets beyond cost-
19 effective and minimum efficiency requirements;

20 “(2) for onsite or community renewable energy
21 and energy storage and other approaches to reduce
22 total carbon footprints of GSA facilities;

23 “(3) to achieve embodied carbon reductions on
24 new construction and major renovation projects; and

1 “(4) for pilot testing of new construction and
2 retrofit technologies that may help achieve net-zero
3 energy and net-zero carbon (as those terms are de-
4 fined in section 443(a)).

5 **“SEC. 443. NET-ZERO GOALS.**

6 “(a) DEFINITIONS.—In this section:

7 “(1) ALLOWED CARBON OFFSET.—The term
8 ‘allowed carbon offset’ means an allowed carbon off-
9 set as defined by the Federal Director of the Office
10 of Federal High-Performance Green Buildings in
11 consultation with the Administrator of the Environ-
12 mental Protection Agency.

13 “(2) ALLOWED OFFSITE RENEWABLE ENERGY
14 SOURCE.—The term ‘allowed offsite renewable en-
15 ergy source’ means an allowed offsite renewable en-
16 ergy source as defined by the Federal Director of
17 the Office of Federal High-Performance Green
18 Buildings in consultation with the Administrator of
19 the Environmental Protection Agency—

20 “(A) including requirements for district
21 energy systems, community sources, and pur-
22 chase options; and

23 “(B) taking into consideration an effi-
24 ciency-first strategy, optimization of carbon im-
25 pact, and ensuring accountability.

1 “(3) NET-ZERO CARBON.—

2 “(A) IN GENERAL.—The term ‘net-zero
3 carbon’ means, with respect to a highly energy-
4 efficient building (as determined by the Admin-
5 istrator in consultation with the Administrator
6 of the Environmental Protection Agency) or
7 group of highly energy-efficient buildings, a
8 building or group of buildings of which, for not
9 less than 1 year, the carbon emissions resulting
10 from building operations, as described in sub-
11 paragraph (B), are equal to or less than the
12 carbon emissions reduced or offset, as described
13 in subparagraph (C).

14 “(B) CARBON EMISSIONS FROM BUILDING
15 OPERATIONS.—Carbon emissions resulting from
16 building operations—

17 “(i) shall include carbon related to en-
18 ergy consumption from onsite and offsite
19 sources; and

20 “(ii) may include other sources of
21 emissions, such as occupant transpor-
22 tation, water, waste, refrigerants, and em-
23 bodied carbon of materials.

24 “(C) CARBON EMISSIONS REDUCED OR
25 OFFSET.—Carbon emissions reduced or offset—

1 “(i) shall include carbon—

2 “(I) associated with exports of
3 renewable energy generated on site;
4 and

5 “(II) substantiated with owner-
6 ship of renewable energy certificates;
7 and

8 “(ii) may include—

9 “(I) allowed offsite renewable en-
10 ergy sources substantiated with re-
11 newable energy certificates; and

12 “(II) allowed carbon offsets.

13 “(4) NET-ZERO ENERGY.—

14 “(A) IN GENERAL.—The term ‘net-zero en-
15 ergy’ means, with respect to a highly energy-ef-
16 ficient building (as determined by the Adminis-
17 trator in consultation with the Administrator of
18 the Environmental Protection Agency), a build-
19 ing for which, on a source energy basis, the an-
20 nual delivered energy is less than or equal to
21 the sum obtained by adding the onsite renew-
22 able exported energy and the allowed offsite re-
23 newable energy sources, as substantiated with
24 renewable energy certificates.

1 “(B) INCLUSION.—A highly energy-effi-
2 cient building is net-zero energy if it is located
3 within a group of buildings for which, when
4 treated as a unit, on a source energy basis, the
5 annual delivered energy is less than or equal to
6 the sum obtained by adding the onsite renew-
7 able exported energy and the allowed offsite re-
8 newable energy sources, as substantiated with
9 renewable energy certificates.

10 “(5) NET-ZERO WASTE BUILDING.—Unless oth-
11 erwise defined by the Federal Director of the Office
12 of Federal High-Performance Green Buildings, the
13 term ‘net-zero waste building’ means a building op-
14 erated to reduce, reuse, recycle, compost, or recover
15 solid waste streams that result in zero waste dis-
16 posal to landfills or incinerators (except for haz-
17 ardous and medical waste).

18 “(6) NET-ZERO WATER BUILDING.—

19 “(A) IN GENERAL.—Unless otherwise de-
20 fined by the Federal Director of the Office of
21 Federal High-Performance Green Buildings, the
22 term ‘net-zero water building’ means a building
23 that—

24 “(i) maximizes alternative water
25 sources;

1 “(ii) minimizes wastewater discharge;

2 and

3 “(iii) returns water to the original
4 water source such that, for a 1-year pe-
5 riod, the water consumption volume is
6 equivalent to the sum obtained by adding
7 the volume of alternative water use and the
8 water returned to the original source dur-
9 ing that 1-year period.

10 “(B) INCLUSION.—A building is a net-zero
11 water building if it is located within a group of
12 buildings that, when treated as a unit, meet the
13 requirements described in clauses (i) through
14 (iii) of subparagraph (A).

15 “(7) SCOPE 1 GREENHOUSE GAS EMISSIONS.—
16 The term ‘scope 1 greenhouse gas emissions’ means
17 direct emissions from sources that are owned or con-
18 trolled by a Federal agency, including—

19 “(A) emissions from generation of elec-
20 tricity;

21 “(B) emissions from combustion of fuel for
22 heating, cooling, or steam;

23 “(C) emissions from mobile sources;

24 “(D) fugitive emissions; and

25 “(E) process emissions.

1 “(8) SCOPE 2 GREENHOUSE GAS EMISSIONS.—

2 The term ‘scope 2 greenhouse gas emissions’ means
3 indirect emissions resulting from the generation of
4 electricity, heat, or steam purchased by a Federal
5 agency.

6 “(b) ESTABLISHMENT.—Subject to subsection (c),
7 the Administrator shall—

8 “(1) for each of fiscal years 2021 through
9 2030, reduce aggregate portfolio-wide scope 1 green-
10 house gas emissions and scope 2 greenhouse gas
11 emissions (as measured in MTCO₂-equivalents) at
12 GSA facilities by at least 4 percent each fiscal year,
13 so that the aggregate portfolio-wide scope 1 green-
14 house gas emissions and scope 2 greenhouse gas
15 emissions are reduced by not less than 40 percent by
16 fiscal year 2030 relative to the aggregate portfolio-
17 wide scope 1 greenhouse gas emissions and scope 2
18 greenhouse gas emissions at GSA facilities in fiscal
19 year 2018; and

20 “(2) ensure that, in the case of the construction
21 of a new GSA facility with more than 10,000 gross
22 square feet—

23 “(A) for which a prospectus is submitted
24 during the period of fiscal years 2021 through
25 2025, not less than 50 percent of cumulative

1 gross floor area and not less than 25 percent of
2 cumulative building projects are designed to
3 perform as net-zero energy buildings in oper-
4 ation, and, if feasible, net-zero carbon buildings,
5 net-zero water buildings, and net-zero waste
6 buildings;

7 “(B) for which a prospectus is submitted
8 during the period of fiscal years 2026 through
9 2030, not less than 90 percent of cumulative
10 gross floor area and not less than 45 percent of
11 cumulative building projects are designed to
12 perform as net-zero energy buildings in oper-
13 ation and, if feasible, net-zero carbon buildings,
14 net-zero water buildings, and net-zero waste
15 buildings; and

16 “(C) for which a prospectus is submitted
17 in fiscal year 2031 or any fiscal year thereafter,
18 not less than 100 percent of cumulative gross
19 floor area and not less than 100 percent of cu-
20 mulative building projects are designed to per-
21 form as net-zero energy buildings in operation
22 and, if feasible, net-zero carbon buildings, net-
23 zero water buildings, and net-zero waste build-
24 ings.

25 “(c) BUILDING EXCLUSION.—

1 “(1) IN GENERAL.—The Administrator may ex-
2 clude from the requirements of subsection (b)(1) any
3 new GSA facility for which net-zero energy is tech-
4 nically infeasible.

5 “(2) REPORT.—The Administrator shall include
6 in the report submitted to the Secretary under sec-
7 tion 548(a) of the National Energy Conservation
8 Policy Act (42 U.S.C. 8258(a)) a list identifying
9 each GSA facility excluded under paragraph (1).

10 “(d) INNOVATIVE BUILDING TECHNOLOGIES.—In
11 carrying out subsection (b), the Administrator may use
12 lifecycle cost effective (including the cost of carbon) inno-
13 vative building technologies, including onsite energy stor-
14 age, all-electric buildings, building-grid integration tech-
15 nologies, electric construction vehicles, and other tech-
16 nologies.

17 “(e) PRIVATE SECTOR FINANCING PRIORITY.—In
18 carrying out renovation projects under this section, the
19 Administrator shall prioritize projects in which Federal
20 funds will be used to leverage private sector financing
21 using public-private partnerships, including through en-
22 ergy savings performance contracts and other mecha-
23 nisms.

1 “(f) FUNDS.—The Administrator shall use a portion
2 of the funds made available under section 442(f) to carry
3 out this section.

4 **“SEC. 444. ZERO EMISSION VEHICLE INFRASTRUCTURE**
5 **GOALS.**

6 “(a) ANNUAL GOALS.—The Administrator shall—

7 “(1) develop annual goals for deployment of
8 zero emission vehicle infrastructure, including elec-
9 tric vehicle supply equipment, at GSA facilities such
10 that by December 31, 2030, at least 50 percent of
11 GSA facilities with 200 or more daily employees and
12 visitors offer zero emission vehicle charging or fuel-
13 ing; and

14 “(2) develop guidance to ensure progress to-
15 wards those annual goals.

16 “(b) PLAN.—The Administrator shall prepare a de-
17 tailed plan—

18 “(1) to achieve the goals described in subsection
19 (a)(1); and

20 “(2) that—

21 “(A) identifies particular GSA facilities or
22 campuses as priority facilities or campuses, as
23 applicable, at which to achieve those goals, in-
24 cluding by considering demand for zero emis-
25 sion vehicle charging and fueling, locations of

1 zero emission vehicle fleets of the General Serv-
2 ices Administration and tenant Federal agen-
3 cies, locations relevant to State zero emission
4 vehicle charging and fueling needs, geographical
5 gaps in zero emission vehicle charging infra-
6 structure, availability of incentives, and other
7 factors; and

8 “(B) includes a requirement that all appli-
9 cable electric vehicle supply equipment is cer-
10 tified under the Energy Star program estab-
11 lished by section 324A of the Energy Policy
12 and Conservation Act (42 U.S.C. 6294a).

13 “(c) INCLUSION IN PROJECTS.—The Administrator
14 shall, to the maximum extent practicable, ensure that ap-
15 propriate zero emission vehicle infrastructure, including
16 electric vehicle supply equipment and electric vehicle infra-
17 structure, are included in, with respect to a GSA facility—

18 “(1) any prospectus for a construction, alter-
19 ation, or lease project;

20 “(2) any prospectus for an alteration of a
21 leased building;

22 “(3) any contract for parking lot paving or re-
23 paving; and

24 “(4) any other appropriate project.

1 “(d) PRIVATE SECTOR FINANCING.—In carrying out
2 this section, the Administrator is encouraged to use funds
3 to leverage private sector financing if doing so is advan-
4 tageous to the General Services Administration.

5 “(e) REPORT.—Not later than 2 years after the date
6 of enactment of this section, the Administrator shall sub-
7 mit to Congress a report describing the progress made in
8 meeting the goals described in subsection (a)(1).

9 “(f) AUTHORIZATION OF APPROPRIATIONS.—There
10 is authorized to be appropriated to the Administrator
11 \$50,000,000—

12 “(1) to achieve the zero emission vehicle infra-
13 structure goals developed under subsection (a)(1),
14 including through projects in support of those goals;
15 and

16 “(2) for the cost of any additional employees,
17 contractors, and training needed to support those
18 goals.

19 **“SEC. 445. DEEP ENERGY RETROFIT GOALS.**

20 “(a) DEFINITION OF DEEP ENERGY RETROFIT
21 PROJECT.—In this section, the term ‘deep energy retrofit
22 project’ means a project that—

23 “(1) reduces the energy consumption of a GSA
24 facility by not less than 35 percent as compared to

1 the energy consumption of the GSA facility before
2 the project;

3 “(2) moves a facility toward net-zero energy (as
4 defined in section 443(a)); and

5 “(3) may include water efficiency and distrib-
6 uted energy resources.

7 “(b) ESTABLISHMENT.—Subject to the availability of
8 appropriated funds, the Administrator shall, for each of
9 fiscal years 2021 through 2030, obligate funds for deep
10 energy retrofit projects that, in total, are carried out at
11 not less than 3 percent of GSA facilities, which shall rep-
12 resent not less than 5 percent of the total square footage
13 of all GSA facilities.

14 “(c) RENOVATIONS.—The Administrator shall—

15 “(1) seek to coordinate deep energy retrofit
16 projects with other building renovations and capital
17 projects; and

18 “(2) in conducting preplanning for a prospec-
19 tive capital project, evaluate the appropriateness,
20 and the costs and benefits, of including a deep en-
21 ergy retrofit project.

22 “(d) PRIVATE SECTOR FINANCING PRIORITY.—

23 “(1) IN GENERAL.—In carrying out this sec-
24 tion, the Administrator shall prioritize projects in
25 which Federal funds will be used to leverage private

1 sector financing using public-private partnerships,
 2 including through energy savings performance con-
 3 tracts and other mechanisms.

4 “(2) ANALYSIS.—The Administrator shall select
 5 priority projects under paragraph (1) on the basis of
 6 analysis that ensures a maximum beneficial use of
 7 private finance for the project.”.

8 (b) CLERICAL AMENDMENT.—The table of contents
 9 for the Energy Independence and Security Act of 2007
 10 (Public Law 110–140; 121 Stat. 1494) is amended by
 11 adding after the item relating to section 441 the following:

“Sec. 442. Energy and water efficiency goals.

“Sec. 443. Net-zero goals.

“Sec. 444. Zero emission vehicle infrastructure goals.

“Sec. 445. Deep energy retrofit goals.”.

12 **SEC. 4. RESILIENT AND HEALTHY BUILDINGS.**

13 (a) IN GENERAL.—Subtitle C of title IV of the En-
 14 ergy Independence and Security Act of 2007 (Public Law
 15 110–140; 121 Stat. 1607) (as amended by section 3(a))
 16 is amended by adding at the end the following:

17 **“SEC. 446. RESILIENT AND HEALTHY BUILDINGS.**

18 “(a) DEFINITIONS.—In this section:

19 “(1) FLOOD RISK AREA.—

20 “(A) IN GENERAL.—Subject to subpara-
 21 graph (B), the term ‘flood risk area’ means—

1 “(i) an area delineated by an elevation
2 of 2 feet above the 100-year floodplain;
3 and

4 “(ii) an area delineated by an ele-
5 vation equal to the 500-year floodplain.

6 “(B) CLIMATE SCIENCE.—In applying the
7 definition of the term ‘flood risk area’ for pur-
8 poses of carrying out this section, the Adminis-
9 trator shall consider current climate science in
10 identifying the elevation of the 100-year and
11 500-year floodplain.

12 “(2) RESILIENCE.—The term ‘resilience’ means
13 the ability to adapt to changing conditions and with-
14 stand and rapidly recover from disruption due to an
15 emergency.

16 “(b) FLOOD PROTECTION.—For any construction or
17 rehabilitation project administered by the Administrator,
18 the Administrator shall—

19 “(1) determine whether there is a flood risk
20 area in the location of the project; and

21 “(2) in the case of a positive determination
22 under paragraph (1)—

23 “(A) to the extent possible, avoid new con-
24 struction in the flood risk area; and

1 “(B) if new construction cannot be avoided
2 under subparagraph (A)—

3 “(i) ensure that the new construction
4 will—

5 “(I) raise all essential services 5
6 feet above the applicable floodplain;
7 and

8 “(II) include a design for quick
9 recovery in a flooding event;

10 “(ii) rehabilitate existing buildings lo-
11 cated in the flood risk area to better with-
12 stand flood risk; and

13 “(iii) develop a flood vulnerability as-
14 sessment and mitigation plan to protect
15 life and property.

16 “(c) RESILIENCE METRICS.—The Administrator
17 shall—

18 “(1) pilot test metrics to measure and improve
19 the resilience of GSA facilities, including the phys-
20 ical aspects of the facilities, the health and wellness
21 of occupants of the facilities, and communities and
22 systems serving or served by the facilities; and

23 “(2) in carrying out paragraph (1), consider
24 emerging resilience tools and rating systems for re-
25 silience, including building-grid optimization.

1 “(d) GREEN INFRASTRUCTURE.—The Administrator
2 shall prioritize the use of appropriate green infrastructure
3 features on federally owned property—

4 “(1) to improve stormwater and wastewater
5 management;

6 “(2) to alleviate onsite and offsite flooding and
7 water quality impacts; and

8 “(3) to reduce and mitigate risks of climate
9 change to GSA facilities and proximate communities.

10 “(e) OPERATING BUILDINGS FOR HEALTH.—

11 “(1) METRICS AND DATA.—The Administrator
12 shall—

13 “(A) implement human-centric metrics and
14 measurement tools to improve the indoor envi-
15 ronmental qualities, including air and water
16 quality, that support improved health and
17 wellness of Federal employees; and

18 “(B) collect, manage, and analyze the data
19 generated by the metrics and tools implemented
20 under subparagraph (A).

21 “(2) STRATEGIC PLAN.—Not later than 1 year
22 after the date of enactment of the GREEN Building
23 Jobs Act of 2021, the Administrator shall develop
24 and make publicly available a strategic plan for the

1 design, construction, and operation of GSA facilities
2 that—

3 “(A) is based on the data described in
4 paragraph (1)(B);

5 “(B) provides for implementation of pri-
6 ority practices by the end of fiscal year 2022;
7 and

8 “(C) may provide for phased implementa-
9 tion of additional effective practices.

10 “(3) ADMINISTRATION.—In carrying out para-
11 graphs (1) and (2), the Administrator shall—

12 “(A) consider emerging occupant-centric
13 environmental health monitoring tools and
14 building control systems for improved health
15 and wellness, including approaches such as
16 measurement of accumulated daily circadian
17 light dosage, surveys of occupant satisfaction
18 and perceptions, assessments of physical activ-
19 ity, social interaction, and mobility, and meas-
20 urement of reduced exposure to contaminants
21 in air and drinking water;

22 “(B) incorporate strategies to reduce risk
23 of transmission of viruses and other pathogens;
24 and

1 “(C)(i) benchmark health and well-being
2 management performance to leadership stand-
3 ards; and

4 “(ii) include in certification activities the
5 strategies and performance measures considered
6 and used under this subsection as tools to mon-
7 itor and improve outcomes.

8 “(f) GUIDANCE; TRAINING.—The Administrator, act-
9 ing through the Federal Director of the Office of Federal
10 High-Performance Green Buildings, may issue guidance
11 and provide training to implement this section.

12 “(g) AUTHORIZATION OF APPROPRIATIONS.—There
13 is authorized to be appropriated to the Administrator
14 \$300,000,000 to carry out this section, to remain available
15 until expended.”.

16 (b) CLERICAL AMENDMENT.—The table of contents
17 for the Energy Independence and Security Act of 2007
18 (Public Law 110–140; 121 Stat. 1494) (as amended by
19 section 3(b)) is amended by adding after the item relating
20 to section 445 the following:

 “Sec. 446. Resilient and healthy buildings.”.

21 **SEC. 5. FEDERAL BUILDING IMPROVEMENTS.**

22 (a) DEFINITIONS.—In this section:

23 (1) ADMINISTRATOR.—The term “Adminis-
24 trator” means the Administrator of General Serv-
25 ices.

1 (2) GSA FACILITY.—The term “GSA facility”
2 has the meaning given the term in section 401 of the
3 Energy Independence and Security Act of 2007 (42
4 U.S.C. 17061).

5 (b) ENERGY EFFICIENCY IMPROVEMENTS.—

6 (1) IN GENERAL.—The Administrator shall
7 carry out energy efficiency improvements to GSA fa-
8 cilities, including—

9 (A) actionable energy projects—

10 (i) identified in the most recent en-
11 ergy and water evaluation for a facility
12 conducted—

13 (I) under section 543(f)(3) of the
14 National Energy Conservation Policy
15 Act (42 U.S.C. 8253(f)(3)); and

16 (II) prior to 2020; and

17 (ii) that are life-cycle cost-effective;

18 (B) additional measures to support the
19 goals of each of sections 442 through 444 of
20 the Energy Independence and Security Act of
21 2007 (Public Law 110–140);

22 (C) additional measures to support activi-
23 ties under section 445 of the Energy Independ-
24 ence and Security Act of 2007 (Public Law
25 110–140); and

1 (D) combining projects to reduce cost, ad-
2 ministration, or implementation time, or other-
3 wise add value.

4 (2) LEVERAGING PRIVATE SECTOR FUNDS.—

5 (A) IN GENERAL.—In carrying out im-
6 provements under paragraph (1) in a fiscal-year
7 period, the Administrator shall, to the max-
8 imum extent practicable, use not less than the
9 amount made available under paragraph (3) for
10 that fiscal year to leverage private sector fi-
11 nancing using public-private partnerships, in-
12 cluding through energy savings performance
13 contracts and other mechanisms.

14 (B) PERFORMANCE REQUIREMENT.—Any
15 public-private partnership entered into pursuant
16 to subparagraph (A) shall include a perform-
17 ance component that ensures effective use of
18 funds, lasting energy and cost savings, and job
19 creation.

20 (3) AUTHORIZATION OF APPROPRIATIONS.—

21 There is authorized to be appropriated to the Ad-
22 ministrator to carry out this subsection
23 \$1,000,000,000, to remain available until expended.

24 **SEC. 6. LONG-TERM CONTRACTS FOR RENEWABLE ENERGY.**

25 (a) DEFINITIONS.—In this section:

1 (1) COGENERATION FACILITY.—The term “co-
2 generation facility” has the meaning given the term
3 in section 3 of the Federal Power Act (16 U.S.C.
4 796).

5 (2) RENEWABLE ENERGY SOURCE.—The term
6 “renewable energy source” has the meaning given
7 the term “renewable energy” in section 203(b) of
8 the Energy Policy Act of 2005 (42 U.S.C.
9 15852(b)).

10 (b) CONTRACTS.—

11 (1) IN GENERAL.—The Administrator of Gen-
12 eral Services may enter into a contract for the acqui-
13 sition of energy generated from renewable energy
14 sources or from cogeneration facilities.

15 (2) RENEWABLE ENERGY CERTIFICATES.—In
16 entering into a contract under paragraph (1), the
17 Administrator of General Services shall—

18 (A) include in the contract the acquisition
19 of renewable energy certificates; or

20 (B) secure by other means renewable en-
21 ergy certificates of equal term and quantity to
22 the term and quantity of energy procured under
23 the contract.

24 (3) TERM OF CONTRACT.—Notwithstanding
25 section 501(b)(1)(B) of title 40, United States Code,

1 the term of a contract entered into under this sub-
2 section shall be not more than 30 years.

3 **SEC. 7. RECOMMENDATIONS.**

4 (a) DEFINITION OF ADMINISTRATOR.—In this sec-
5 tion, the term “Administrator” means the Administrator
6 of General Services, acting through the Federal Director
7 of the Office of High-Performance Green Buildings.

8 (b) SUSTAINABILITY AND RESILIENCE.—The Admin-
9 istrator, in consultation with the Secretary of Health and
10 Human Services, the Secretary of Homeland Security, the
11 Administrator of the Federal Emergency Management
12 Agency, the Secretary of Veterans Affairs, the Adminis-
13 trator of the Environmental Protection Agency, the Sec-
14 retary of Energy, and the Chair of the Council on Envi-
15 ronmental Quality, shall develop recommendations for sus-
16 tainability and resilience at hospitals and health care fa-
17 cilities, including by—

- 18 (1) incorporating building and health sciences
19 research related to health and wellness;
20 (2) identifying relevant metrics;
21 (3) prioritizing proven strategies;
22 (4) referencing, as appropriate, criteria in the
23 Guiding Principles for Sustainable Federal Build-
24 ings; and

1 (5) developing corresponding recommended con-
2 tract provisions and other templates for use in pro-
3 curement.

4 (c) COMPLIANCE WITH GUIDING PRINCIPLES FOR
5 SUSTAINABLE FEDERAL BUILDINGS.—The Adminis-
6 trator, in consultation with the Administrator of the Envi-
7 ronmental Protection Agency, the Director of the Federal
8 Energy Management Program, and the Chair of the Coun-
9 cil on Environmental Quality, shall develop recommenda-
10 tions for systems, including customized Energy Star Port-
11 folio Manager fields and dashboards, for use by Federal
12 facilities in tracking compliance and progress of new and
13 existing buildings with the Guiding Principles for Sustain-
14 able Federal Buildings, including by considering—

15 (1) campus, installation, and portfolio ap-
16 proaches;

17 (2) suggested targets; and

18 (3) relevant metrics.

19 **SEC. 8. STUDY ON FEDERAL BUILDINGS FUND LENDING**
20 **PROGRAM.**

21 Not later than 1 year after the date of enactment
22 of this Act, the Administrator of General Services, acting
23 through the Federal Director of the Office of High-Per-
24 formance Green Buildings (referred to in this section as
25 the “Administrator”), shall make publicly available a re-

1 port that evaluates and describes the potential efficacy,
2 costs, and benefits of a program under which the Adminis-
3 trator would—

4 (1) borrow funds from the Federal Buildings
5 Fund for building energy and water efficiency and
6 resilience retrofits, including through projects that
7 use funds to leverage private sector financing, in-
8 cluding through energy savings performance con-
9 tracts; and

10 (2) repay the Federal Buildings Fund from
11 utility savings.

12 **SEC. 9. ANNUAL REPORTING ON LEVERAGED PRIVATE FI-**
13 **NANCING.**

14 (a) IN GENERAL.—For each of fiscal years 2021
15 through 2030, the Administrator of General Services, act-
16 ing through the Federal Director of the Office of High-
17 Performance Green Buildings (referred to in this section
18 as the “Administrator”), shall include the information de-
19 scribed in subsection (b)—

20 (1) in the annual report submitted to the Sec-
21 retary of Energy pursuant to section 548(a) of the
22 National Energy Conservation Policy Act (42 U.S.C.
23 8258(a));

24 (2) as a summary in the annual report pre-
25 pared by the Administrator pursuant to section 527

1 of the Energy Independence and Security Act of
2 2007 (42 U.S.C. 17143); and

3 (3) as a summary in the annual General Serv-
4 ices Administration Sustainability Report and Imple-
5 mentation Plan.

6 (b) INFORMATION.—The information referred to in
7 subsection (a) is, with respect to the fiscal year covered
8 by a report—

9 (1) the investment value and number of energy
10 savings performance contracts entered into by the
11 Administrator;

12 (2) the investment value and number of other
13 forms of public-private partnerships that leverage
14 private sector financing entered into by the Adminis-
15 trator for energy efficiency projects;

16 (3) for each of the 2 fiscal years following the
17 fiscal year covered by the report, the projected value
18 and number described in each of paragraphs (1) and
19 (2);

20 (4) the total estimated implementation costs
21 and estimated lifecycle cost savings of outstanding
22 energy conservation measures at facilities that meet
23 the criteria described in section 543(f)(2)(B) of the
24 National Energy Conservation Policy Act (42 U.S.C.
25 8253(f)(2)(B)); and

1 (5) recommendations to increase the aggregate
2 benefits and value provided to the General Services
3 Administration through public-private partnerships
4 with respect to energy efficiency, renewable energy,
5 and energy resilience.

6 **SEC. 10. COORDINATION WITH STATES.**

7 The Administrator of General Services, acting
8 through the Federal Director of the Office of High-Per-
9 formance Green Buildings, is encouraged to carry out this
10 Act and the amendments made by this Act in coordination
11 with States, including by—

12 (1) sharing resources and providing technical
13 advice to States regarding net-zero buildings and
14 carbon reducing technologies;

15 (2) coordinating with multistate organizations
16 on charging infrastructure technology, procurement,
17 and strategic locations relating to zero-emission ve-
18 hicles;

19 (3) allowing State officials to participate in ap-
20 propriate training opportunities; and

21 (4) coordinating with States on renewable en-
22 ergy procurement benefitting a Federal facility and
23 local communities.

○