117TH CONGRESS
1ST SESSION

S. _____

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

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

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.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''GSA Resilient, Energy Efficient, and Net-Zero Building Jobs Act of 2021'' or the ''GREEN Building Jobs Act of 2021''.

SEC. 2. FEDERAL BUILDING LEASING.

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

"SEC. 435. LEASING.

"(a) DEFINITION OF LESSOR.—In this section, the term 'lessor' means any individual, firm, partnership, limited liability company, trust, association, State, unit of local government, or legal entity that is the rightful owner of a property leased to the Federal Government.

"(b) LEASING REQUIREMENTS.—

"(1) IN GENERAL.—Except as provided in subsection (c), effective beginning on the date that is 1 year after the date of enactment of the GREEN Building Jobs Act of 2021, no Federal agency shall enter into a contract to lease space unless—

"(A) the space is for a building or space in a building that—

"(i) in the most recent year, has earned the Energy Star label under the Energy Star program established by section 324A of the Energy Policy and Conservation Act (42 U.S.C. 6294a); and

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

ommendations of the Administrator based on the review of high-performance building certification systems carried out by the Administrator pursuant to section 436(h); and

''(B) the contract includes—

''(i) a requirement for the lessor of the building to disclose data on consumption of utilities (energy and water)—

''(I) for the portion of the building occupied by the agency; and

''(II) that is provided by the lessor through submetering or an alternative method identified by the Administrator for buildings lacking submeters; and

''(ii) 1 or more mechanisms to ensure that the lessor of the building takes reasonable steps to maintain the requirements of the building described in subparagraph (A).

''(2) LOCATION.—In determining the geographic location of a space to lease under paragraph (1), the Administrator shall not use as a criterion the presence or absence of buildings in that location

that have an Energy Star label described in paragraph (1)(A)(i) or a green building certification described in paragraph (1)(A)(ii).

''(c) WAIVER.—

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

''(A) no other space is available that can meet that requirement within a reasonable period and meet the functional requirements of the agency, including locational needs;

''(B) the agency proposes to remain in a building or a space in a building—

''(i) that the agency has occupied previously; and

''(ii) less than 50 percent of the leasable space of which is leased by the Federal Government;

''(C) the agency proposes to lease a building or space in a building of historical, architectural, or cultural significance (as defined in section 3306(a) of title 40, United States Code); or

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

"(2) WAIVER APPROVAL.—

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

"(i)(I) the agency submits a request to the Federal Director of the Office of Federal High-Performance Green Buildings indicating the basis for the request under paragraph (1); and

"(II) the Federal Director of that Office approves the request; and

"(ii) in the case of a waiver under subparagraph (A), (B), or (C) of paragraph (1), the contract includes the requirements described in subparagraph (B)(ii), which—

"(I) in the case of a waiver under subparagraph (A) of that paragraph, shall be required to be implemented prior to occupancy of the building or space in the building by the Federal agency; and

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

''(B) CONTRACT REQUIREMENTS.—

''(i) DEFINITION OF NONBENCHMARKED SPACE.—In this subparagraph, the term 'nonbenchmarked space' means a building or space in a building for which owners cannot access whole building utility consumption data, including buildings—

''(I) that are located in States that do not require utilities to provide, and utilities do not provide, such aggregated information to multitenant building owners; and

''(II) the tenants of which do not provide energy consumption information to the commercial building owner in response to a request from that owner.

"(ii) REQUIREMENTS.—The requirements referred to in subparagraph (A)(ii) are the following:

"(I) The building or space in a building—

"(aa) meets the requirement described in subsection (b)(1)(A)(i); or

"(bb) is renovated for all feasible energy efficiency and conservation improvements that will be cost effective over the life of the lease (including any optional and reasonably anticipated extensions or renewals of the lease), including improvements in lighting, windows, heating, ventilation, and air conditioning systems and controls.

"(II) The building or space in a building is—

"(aa) benchmarked under a nationally recognized, online, and free benchmarking program, and

the benchmark is publicly disclosed; or

''(bb) a nonbenchmarked space.

''(III) In the case of a building or space in a building that is a nonbenchmarked space, the Federal agency provides to the building owner, or authorizes the owner to obtain from the utility, the energy consumption data of the space to enable benchmarking of the building.

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

''(i) include in the relevant lease procurement documents a statement about the availability of financial incentives and technical assistance under the pilot program established under subsection (g); or

''(ii)(I) incorporate into the terms of the lease with the lessor any financial incentive or technical assistance provided to that lessor under that pilot program; and

"(II) if subclause (I) is carried out, extend the deadline required under subparagraph (A)(ii)(I).

"(d) REVISION OF FEDERAL REGULATIONS.—Not later than 1 year after the date of enactment of the GREEN Building Jobs Act of 2021, the Administrator shall revise Part 102-73(c) of the Federal Management Regulation and Part 570 of the General Services Administration Acquisition Manual, as appropriate, to reflect the requirements of this section.

"(e) REPORT.—The Administrator shall annually publish on the website of the General Services Administration a report on the aggregate compliance of all leased buildings and spaces in buildings held by the General Services Administration with the most recent version of the Guiding Principles for Sustainable Federal Buildings.

"(f) COMPLIANCE IMPROVEMENT.—Not later than 180 days after the date of enactment of the GREEN Building Jobs Act of 2021, the Administrator shall develop and implement a policy to improve lessor compliance with energy efficiency provisions of leases, including by considering a variety of approaches.

"(g) INCENTIVE PILOT PROGRAM.—

"(1) IN GENERAL.—The Administrator shall establish a pilot program to provide financial incen-

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

"(A) in which space is leased to a Federal agency; and

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

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

"(iii) for which a waiver is granted under subsection (c)(1)(A).

"(2) DIVERSITY.—In carrying out the pilot program established under paragraph (1), the Administrator shall ensure—

"(A) a diversity in the buildings and spaces owned by lessors provided financial assistance under that paragraph, including buildings with multiple, separate leases that individually do not trigger requirements under this Act; and

"(B) geographical diversity, including the representation of rural areas.

''(3) TECHNICAL ASSISTANCE.—As part of the pilot program established under paragraph (1), the Administrator may provide technical assistance, directly or through contracts, to lessors receiving financial assistance under that pilot program.

''(4) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Administrator $50,000,000 to carry out this subsection, to remain available until expended.''.

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

''(5) REPORT.—Not later than 90 days after the date of enactment of the GREEN Building Jobs Act of 2021, the Administrator shall submit to Congress, and make publicly available on the website of the General Services Administration, a report on the implementation of paragraph (3), including—

''(A) the results of the policies and practices described in that paragraph, including the number of leases implementing the measures described in that paragraph;

''(B) a description of any barriers to achieving greater energy and water efficiency; and

''(C) recommendations to address those barriers.''.

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

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

''SEC. 442. ENERGY AND WATER EFFICIENCY GOALS.

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

''(1) reduce average building energy intensity (as measured in British thermal units per gross square foot) at GSA facilities by 2.5 percent each fiscal year so that the average building energy intensity of GSA facilities is reduced by 25 percent or greater by 2030, relative to the average building energy intensity of GSA facilities in fiscal year 2018;

''(2) improve water use efficiency and management at GSA facilities by reducing average potable water consumption intensity (as measured in gallons per gross square foot)—

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

"(B) through reductions of 2 percent each fiscal year;

"(3) reduce industrial, landscaping, and agricultural water consumption at GSA facilities (as measured in gallons)—

"(A) by 20 percent by fiscal year 2030, relative to the industrial, landscaping, and agricultural water consumption of GSA facilities in fiscal year 2018; and

"(B) through reductions of 2 percent each fiscal year; and

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

"(b) ENERGY AND WATER INTENSIVE FACILITY EXCLUSIONS.—

"(1) IN GENERAL.—The Administrator may exclude from the requirements under paragraph (1) or (2) of subsection (a), as applicable, any GSA facility in which energy- or water-intensive activities are carried out.

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

''(c) ALTERNATIVE METRIC FOR MEASURING POTABLE WATER CONSUMPTION INTENSITY.—

''(1) IN GENERAL.—The Administrator may develop an alternative metric for measuring potable water consumption intensity under subsection (a)(2), including by using occupancy, building use type, or other attributes relevant to potable water use and potential for efficiency.

''(2) ORIGINAL METRIC.—If the Administrator develops an alternative metric under paragraph (1), the Administrator shall not cease tracking and reporting potable water consumption intensity in gallons per gross square foot.

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

ant to any other Federal law with respect to GSA facilities, the Administrator shall apply the more stringent goal.

''(e) PRIVATE SECTOR FINANCING PRIORITY.—

''(1) IN GENERAL.—In carrying out this section, the Administrator shall prioritize projects in which Federal funds will be used to leverage private sector financing using public-private partnerships, including through energy savings performance contracts and other mechanisms.

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

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

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

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

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

''(4) for pilot testing of new construction and retrofit technologies that may help achieve net-zero energy and net-zero carbon (as those terms are defined in section 443(a)).

"SEC. 443. NET-ZERO GOALS.

''(a) DEFINITIONS.—In this section:

''(1) ALLOWED CARBON OFFSET.—The term 'allowed carbon offset' means an allowed carbon offset as defined by the Federal Director of the Office of Federal High-Performance Green Buildings in consultation with the Administrator of the Environmental Protection Agency.

''(2) ALLOWED OFFSITE RENEWABLE ENERGY SOURCE.—The term 'allowed offsite renewable energy source' means an allowed offsite renewable energy source as defined by the Federal Director of the Office of Federal High-Performance Green Buildings in consultation with the Administrator of the Environmental Protection Agency—

''(A) including requirements for district energy systems, community sources, and purchase options; and

''(B) taking into consideration an efficiency-first strategy, optimization of carbon impact, and ensuring accountability.

"(3) NET-ZERO CARBON.—

"(A) IN GENERAL.—The term 'net-zero carbon' means, with respect to a highly energy-efficient building (as determined by the Administrator in consultation with the Administrator of the Environmental Protection Agency) or group of highly energy-efficient buildings, a building or group of buildings of which, for not less than 1 year, the carbon emissions resulting from building operations, as described in subparagraph (B), are equal to or less than the carbon emissions reduced or offset, as described in subparagraph (C).

"(B) CARBON EMISSIONS FROM BUILDING OPERATIONS.—Carbon emissions resulting from building operations—

"(i) shall include carbon related to energy consumption from onsite and offsite sources; and

"(ii) may include other sources of emissions, such as occupant transportation, water, waste, refrigerants, and embodied carbon of materials.

"(C) CARBON EMISSIONS REDUCED OR OFFSET.—Carbon emissions reduced or offset—

''(i) shall include carbon—

''(I) associated with exports of renewable energy generated on site; and

''(II) substantiated with ownership of renewable energy certificates; and

''(ii) may include—

''(I) allowed offsite renewable energy sources substantiated with renewable energy certificates; and

''(II) allowed carbon offsets.

''(4) NET-ZERO ENERGY.—

''(A) IN GENERAL.—The term 'net-zero energy' means, with respect to a highly energy-efficient building (as determined by the Administrator in consultation with the Administrator of the Environmental Protection Agency), a building for which, on a source energy basis, the annual delivered energy is less than or equal to the sum obtained by adding the onsite renewable exported energy and the allowed offsite renewable energy sources, as substantiated with renewable energy certificates.

''(B) INCLUSION.—A highly energy-efficient building is net-zero energy if it is located within a group of buildings for which, when treated as a unit, on a source energy basis, the annual delivered energy is less than or equal to the sum obtained by adding the onsite renewable exported energy and the allowed offsite renewable energy sources, as substantiated with renewable energy certificates.

''(5) NET-ZERO WASTE BUILDING.—Unless otherwise defined by the Federal Director of the Office of Federal High-Performance Green Buildings, the term 'net-zero waste building' means a building operated to reduce, reuse, recycle, compost, or recover solid waste streams that result in zero waste disposal to landfills or incinerators (except for hazardous and medical waste).

''(6) NET-ZERO WATER BUILDING.—

''(A) IN GENERAL.—Unless otherwise defined by the Federal Director of the Office of Federal High-Performance Green Buildings, the term 'net-zero water building' means a building that—

''(i) maximizes alternative water sources;

"(ii) minimizes wastewater discharge; and

"(iii) returns water to the original water source such that, for a 1-year period, the water consumption volume is equivalent to the sum obtained by adding the volume of alternative water use and the water returned to the original source during that 1-year period.

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

"(7) SCOPE 1 GREENHOUSE GAS EMISSIONS.—The term 'scope 1 greenhouse gas emissions' means direct emissions from sources that are owned or controlled by a Federal agency, including—

"(A) emissions from generation of electricity;

"(B) emissions from combustion of fuel for heating, cooling, or steam;

"(C) emissions from mobile sources;

"(D) fugitive emissions; and

"(E) process emissions.

''(8) SCOPE 2 GREENHOUSE GAS EMISSIONS.—The term 'scope 2 greenhouse gas emissions' means indirect emissions resulting from the generation of electricity, heat, or steam purchased by a Federal agency.

''(b) ESTABLISHMENT.—Subject to subsection (c), the Administrator shall—

''(1) for each of fiscal years 2021 through 2030, reduce aggregate portfolio-wide scope 1 greenhouse gas emissions and scope 2 greenhouse gas emissions (as measured in MTCO2-equivalents) at GSA facilities by at least 4 percent each fiscal year, so that the aggregate portfolio-wide scope 1 greenhouse gas emissions and scope 2 greenhouse gas emissions are reduced by not less than 40 percent by fiscal year 2030 relative to the aggregate portfolio-wide scope 1 greenhouse gas emissions and scope 2 greenhouse gas emissions at GSA facilities in fiscal year 2018; and

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

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

gross floor area and not less than 25 percent of cumulative building projects are designed to perform as net-zero energy buildings in operation, and, if feasible, net-zero carbon buildings, net-zero water buildings, and net-zero waste buildings;

''(B) for which a prospectus is submitted during the period of fiscal years 2026 through 2030, not less than 90 percent of cumulative gross floor area and not less than 45 percent of cumulative building projects are designed to perform as net-zero energy buildings in operation and, if feasible, net-zero carbon buildings, net-zero water buildings, and net-zero waste buildings; and

''(C) for which a prospectus is submitted in fiscal year 2031 or any fiscal year thereafter, not less than 100 percent of cumulative gross floor area and not less than 100 percent of cumulative building projects are designed to perform as net-zero energy buildings in operation and, if feasible, net-zero carbon buildings, net-zero water buildings, and net-zero waste buildings.

''(c) BUILDING EXCLUSION.—

''(1) IN GENERAL.—The Administrator may exclude from the requirements of subsection (b)(1) any new GSA facility for which net-zero energy is technically infeasible.

''(2) REPORT.—The Administrator shall include in the report submitted to the Secretary under section 548(a) of the National Energy Conservation Policy Act (42 U.S.C. 8258(a)) a list identifying each GSA facility excluded under paragraph (1).

''(d) INNOVATIVE BUILDING TECHNOLOGIES.—In carrying out subsection (b), the Administrator may use lifecycle cost effective (including the cost of carbon) innovative building technologies, including onsite energy storage, all-electric buildings, building-grid integration technologies, electric construction vehicles, and other technologies.

''(e) PRIVATE SECTOR FINANCING PRIORITY.—In carrying out renovation projects under this section, the Administrator shall prioritize projects in which Federal funds will be used to leverage private sector financing using public-private partnerships, including through energy savings performance contracts and other mechanisms.

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

"SEC. 444. ZERO EMISSION VEHICLE INFRASTRUCTURE GOALS.

''(a) ANNUAL GOALS.—The Administrator shall—

''(1) develop annual goals for deployment of zero emission vehicle infrastructure, including electric vehicle supply equipment, at GSA facilities such that by December 31, 2030, at least 50 percent of GSA facilities with 200 or more daily employees and visitors offer zero emission vehicle charging or fueling; and

''(2) develop guidance to ensure progress towards those annual goals.

''(b) PLAN.—The Administrator shall prepare a detailed plan—

''(1) to achieve the goals described in subsection (a)(1); and

''(2) that—

''(A) identifies particular GSA facilities or campuses as priority facilities or campuses, as applicable, at which to achieve those goals, including by considering demand for zero emission vehicle charging and fueling, locations of

zero emission vehicle fleets of the General Services Administration and tenant Federal agencies, locations relevant to State zero emission vehicle charging and fueling needs, geographical gaps in zero emission vehicle charging infrastructure, availability of incentives, and other factors; and

''(B) includes a requirement that all applicable electric vehicle supply equipment is certified under the Energy Star program established by section 324A of the Energy Policy and Conservation Act (42 U.S.C. 6294a).

''(c) INCLUSION IN PROJECTS.—The Administrator shall, to the maximum extent practicable, ensure that appropriate zero emission vehicle infrastructure, including electric vehicle supply equipment and electric vehicle infrastructure, are included in, with respect to a GSA facility—

''(1) any prospectus for a construction, alteration, or lease project;

''(2) any prospectus for an alteration of a leased building;

''(3) any contract for parking lot paving or repaving; and

''(4) any other appropriate project.

''(d) PRIVATE SECTOR FINANCING.—In carrying out this section, the Administrator is encouraged to use funds to leverage private sector financing if doing so is advantageous to the General Services Administration.

''(e) REPORT.—Not later than 2 years after the date of enactment of this section, the Administrator shall submit to Congress a report describing the progress made in meeting the goals described in subsection (a)(1).

''(f) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Administrator $50,000,000—

''(1) to achieve the zero emission vehicle infrastructure goals developed under subsection (a)(1), including through projects in support of those goals; and

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

''SEC. 445. DEEP ENERGY RETROFIT GOALS.

''(a) DEFINITION OF DEEP ENERGY RETROFIT PROJECT.—In this section, the term 'deep energy retrofit project' means a project that—

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

the energy consumption of the GSA facility before the project;

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

''(3) may include water efficiency and distributed energy resources.

''(b) ESTABLISHMENT.—Subject to the availability of appropriated funds, the Administrator shall, for each of fiscal years 2021 through 2030, obligate funds for deep energy retrofit projects that, in total, are carried out at not less than 3 percent of GSA facilities, which shall represent not less than 5 percent of the total square footage of all GSA facilities.

''(c) RENOVATIONS.—The Administrator shall—

''(1) seek to coordinate deep energy retrofit projects with other building renovations and capital projects; and

''(2) in conducting preplanning for a prospective capital project, evaluate the appropriateness, and the costs and benefits, of including a deep energy retrofit project.

''(d) PRIVATE SECTOR FINANCING PRIORITY.—

''(1) IN GENERAL.—In carrying out this section, the Administrator shall prioritize projects in which Federal funds will be used to leverage private

sector financing using public-private partnerships, including through energy savings performance contracts and other mechanisms.

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

(b) CLERICAL AMENDMENT.—The table of contents for the Energy Independence and Security Act of 2007 (Public Law 110–140; 121 Stat. 1494) is amended by 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.''.

SEC. 4. RESILIENT AND HEALTHY BUILDINGS.

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

''SEC. 446. RESILIENT AND HEALTHY BUILDINGS.

''(a) DEFINITIONS.—In this section:

''(1) FLOOD RISK AREA.—

''(A) IN GENERAL.—Subject to subparagraph (B), the term 'flood risk area' means—

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

"(ii) an area delineated by an elevation equal to the 500-year floodplain.

"(B) CLIMATE SCIENCE.—In applying the definition of the term 'flood risk area' for purposes of carrying out this section, the Administrator shall consider current climate science in identifying the elevation of the 100-year and 500-year floodplain.

"(2) RESILIENCE.—The term 'resilience' means the ability to adapt to changing conditions and withstand and rapidly recover from disruption due to an emergency.

"(b) FLOOD PROTECTION.—For any construction or rehabilitation project administered by the Administrator, the Administrator shall—

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

"(2) in the case of a positive determination under paragraph (1)—

"(A) to the extent possible, avoid new construction in the flood risk area; and

''(B) if new construction cannot be avoided under subparagraph (A)—

''(i) ensure that the new construction will—

''(I) raise all essential services 5 feet above the applicable floodplain; and

''(II) include a design for quick recovery in a flooding event;

''(ii) rehabilitate existing buildings located in the flood risk area to better withstand flood risk; and

''(iii) develop a flood vulnerability assessment and mitigation plan to protect life and property.

''(c) RESILIENCE METRICS.—The Administrator shall—

''(1) pilot test metrics to measure and improve the resilience of GSA facilities, including the physical aspects of the facilities, the health and wellness of occupants of the facilities, and communities and systems serving or served by the facilities; and

''(2) in carrying out paragraph (1), consider emerging resilience tools and rating systems for resilience, including building-grid optimization.

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

''(1) to improve stormwater and wastewater management;

''(2) to alleviate onsite and offsite flooding and water quality impacts; and

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

''(e) OPERATING BUILDINGS FOR HEALTH.—

''(1) METRICS AND DATA.—The Administrator shall—

''(A) implement human-centric metrics and measurement tools to improve the indoor environmental qualities, including air and water quality, that support improved health and wellness of Federal employees; and

''(B) collect, manage, and analyze the data generated by the metrics and tools implemented under subparagraph (A).

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

design, construction, and operation of GSA facilities that—

"(A) is based on the data described in paragraph (1)(B);

"(B) provides for implementation of priority practices by the end of fiscal year 2022; and

"(C) may provide for phased implementation of additional effective practices.

"(3) ADMINISTRATION.—In carrying out paragraphs (1) and (2), the Administrator shall—

"(A) consider emerging occupant-centric environmental health monitoring tools and building control systems for improved health and wellness, including approaches such as measurement of accumulated daily circadian light dosage, surveys of occupant satisfaction and perceptions, assessments of physical activity, social interaction, and mobility, and measurement of reduced exposure to contaminants in air and drinking water;

"(B) incorporate strategies to reduce risk of transmission of viruses and other pathogens; and

''(C)(i) benchmark health and well-being management performance to leadership standards; and

''(ii) include in certification activities the strategies and performance measures considered and used under this subsection as tools to monitor and improve outcomes.

''(f) GUIDANCE; TRAINING.—The Administrator, acting through the Federal Director of the Office of Federal High-Performance Green Buildings, may issue guidance and provide training to implement this section.

''(g) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Administrator $300,000,000 to carry out this section, to remain available until expended.''.

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

''Sec. 446. Resilient and healthy buildings.''.

SEC. 5. FEDERAL BUILDING IMPROVEMENTS.

(a) DEFINITIONS.—In this section:

(1) ADMINISTRATOR.—The term ''Administrator'' means the Administrator of General Services.

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

(b) ENERGY EFFICIENCY IMPROVEMENTS.—

(1) IN GENERAL.—The Administrator shall carry out energy efficiency improvements to GSA facilities, including—

(A) actionable energy projects—

(i) identified in the most recent energy and water evaluation for a facility conducted—

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

(II) prior to 2020; and

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

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

(C) additional measures to support activities under section 445 of the Energy Independence and Security Act of 2007 (Public Law 110–140); and

(D) combining projects to reduce cost, administration, or implementation time, or otherwise add value.

(2) LEVERAGING PRIVATE SECTOR FUNDS.—

(A) IN GENERAL.—In carrying out improvements under paragraph (1) in a fiscal-year period, the Administrator shall, to the maximum extent practicable, use not less than the amount made available under paragraph (3) for that fiscal year to leverage private sector financing using public-private partnerships, including through energy savings performance contracts and other mechanisms.

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

(3) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Administrator to carry out this subsection $1,000,000,000, to remain available until expended.

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

(a) DEFINITIONS.—In this section:

(1) COGENERATION FACILITY.—The term ''cogeneration facility'' has the meaning given the term in section 3 of the Federal Power Act (16 U.S.C. 796).

(2) RENEWABLE ENERGY SOURCE.—The term ''renewable energy source'' has the meaning given the term ''renewable energy'' in section 203(b) of the Energy Policy Act of 2005 (42 U.S.C. 15852(b)).

(b) CONTRACTS.—

(1) IN GENERAL.—The Administrator of General Services may enter into a contract for the acquisition of energy generated from renewable energy sources or from cogeneration facilities.

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

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

(B) secure by other means renewable energy certificates of equal term and quantity to the term and quantity of energy procured under the contract.

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

the term of a contract entered into under this subsection shall be not more than 30 years.

SEC. 7. RECOMMENDATIONS.

(a) DEFINITION OF ADMINISTRATOR.—In this section, the term ''Administrator'' means the Administrator of General Services, acting through the Federal Director of the Office of High-Performance Green Buildings.

(b) SUSTAINABILITY AND RESILIENCE.—The Administrator, in consultation with the Secretary of Health and Human Services, the Secretary of Homeland Security, the Administrator of the Federal Emergency Management Agency, the Secretary of Veterans Affairs, the Administrator of the Environmental Protection Agency, the Secretary of Energy, and the Chair of the Council on Environmental Quality, shall develop recommendations for sustainability and resilience at hospitals and health care facilities, including by—

(1) incorporating building and health sciences research related to health and wellness;

(2) identifying relevant metrics;

(3) prioritizing proven strategies;

(4) referencing, as appropriate, criteria in the Guiding Principles for Sustainable Federal Buildings; and

(5) developing corresponding recommended contract provisions and other templates for use in procurement.

(c) COMPLIANCE WITH GUIDING PRINCIPLES FOR SUSTAINABLE FEDERAL BUILDINGS.—The Administrator, in consultation with the Administrator of the Environmental Protection Agency, the Director of the Federal Energy Management Program, and the Chair of the Council on Environmental Quality, shall develop recommendations for systems, including customized Energy Star Portfolio Manager fields and dashboards, for use by Federal facilities in tracking compliance and progress of new and existing buildings with the Guiding Principles for Sustainable Federal Buildings, including by considering—

(1) campus, installation, and portfolio approaches;

(2) suggested targets; and

(3) relevant metrics.

SEC. 8. STUDY ON FEDERAL BUILDINGS FUND LENDING PROGRAM.

Not later than 1 year after the date of enactment of this Act, the Administrator of General Services, acting through the Federal Director of the Office of High-Performance Green Buildings (referred to in this section as the ''Administrator''), shall make publicly available a re-

port that evaluates and describes the potential efficacy, costs, and benefits of a program under which the Administrator would—

(1) borrow funds from the Federal Buildings Fund for building energy and water efficiency and resilience retrofits, including through projects that use funds to leverage private sector financing, including through energy savings performance contracts; and

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

SEC. 9. ANNUAL REPORTING ON LEVERAGED PRIVATE FINANCING.

(a) IN GENERAL.—For each of fiscal years 2021 through 2030, the Administrator of General Services, acting through the Federal Director of the Office of High-Performance Green Buildings (referred to in this section as the ''Administrator''), shall include the information described in subsection (b)—

(1) in the annual report submitted to the Secretary of Energy pursuant to section 548(a) of the National Energy Conservation Policy Act (42 U.S.C. 8258(a));

(2) as a summary in the annual report prepared by the Administrator pursuant to section 527

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

(3) as a summary in the annual General Services Administration Sustainability Report and Implementation Plan.

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

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

(2) the investment value and number of other forms of public-private partnerships that leverage private sector financing entered into by the Administrator for energy efficiency projects;

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

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

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

SEC. 10. COORDINATION WITH STATES.

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

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

(2) coordinating with multistate organizations on charging infrastructure technology, procurement, and strategic locations relating to zero-emission vehicles;

(3) allowing State officials to participate in appropriate training opportunities; and

(4) coordinating with States on renewable energy procurement benefitting a Federal facility and local communities.