

Climate Implementation Plan

Maryland Department of General Services

November 1, 2024





Agency Climate Implementation Plan

Maryland Department of General Services, Climate Implementation Plan required by Executive Order, “Leadership by State Government: Implementing Maryland’s Climate Pollution Reduction Plan”

In accordance with Governor Moore’s [Executive Order 01.01.2024.19](#), “Leadership by State Government: Implementing Maryland’s Climate Pollution Reduction Plan,” the Department of General Services (DGS) affirms its commitment to:

- Work to address climate change and ensure a just transition to a clean economy;
- Advance environmental justice by working to address the disproportionate impacts of climate change for underserved and overburdened communities, including the application of Justice40 goals, initiatives, and funding;
- Equitably implement all existing laws, regulations, and policies related to climate change, incorporating robust community and stakeholder engagement; and
- Continue to maximize federal funding opportunities on climate.

The Department of General Services hereby submits its own Climate Implementation Plan (CIP) to demonstrate its commitment to a whole-of-government approach to addressing climate change and fully implementing Maryland’s Climate Pollution Reduction Plan.

Part 1: Agency Actions Under the Climate Pollution Reduction Plan

Maryland's Climate Pollution Reduction Plan calls on the Department of General Services (DGS) to:

- Partner with the Maryland Public Service Commission (PSC) and other agencies to draft a plan to achieve 8,500 megawatts (MW) of offshore wind (OSW) capacity.
 - DGS' Office of Energy and Sustainability (OES) is working directly with PSC, Maryland Energy Administration (MEA) and other agencies on a draft plan, due to the General Assembly by January 2025, that includes a schedule of OSW energy procurements and proposed amounts of OSW energy for procurement through 2031.
- Issue procurements to purchase offshore wind.
 - DGS is currently working on a procurement to enter into a minimum 20-year power purchase agreement with an offshore wind developer. Per statute, DGS shall issue another procurement for offshore wind in 2025.
- Staff the Maryland Green Building Council (GBC) and oversee implementation of the High Performance Green Building Program (HPGBP) and compliance with Buy Clean.
 - DGS provides staffing and oversight to the Maryland Green Building Council (GBC), which drafts and oversees the High Performance Green Building Program.
 - The GBC manages the "Buy Green" (SFP 4-901, Buy Clean Maryland Act) program to facilitate and encourage a continuous reduction in greenhouse gas (GHG) emissions in cement used in State construction projects.
- Adopt an all-electric policy for state-owned facilities.
 - DGS is adopting a policy in 2024 to require all new construction and renovations of existing DGS buildings and DGS-supported agencies, when the renovations include fossil-fuel combusting equipment, to be designed and built with all-electric space conditioning and water heating systems.
- Purchase energy for State government operations to ensure compliance with the renewable portfolio standard and to achieve 100% clean energy for State government

operations.

- DGS partners with the University System of Maryland (USM) to purchase all electricity and natural gas used in State government operations, including from three utility-scale renewable energy facilities, which provide nearly 14% of the electricity used in state government operations.
- DGS is issuing a multi-year solicitation in CY 2025 for renewable energy purchases.
- Manage and grow the Energy Performance Contracting (EPC) program.
 - DGS oversees the development of EPC projects for state agencies and DGS expects to see two projects begin before the end of CY25. Further growth of the EPC program will include decarbonizing facilities.
 - DGS has requested FY26 funding from MEA to install solar PV at state-owned facilities. The panels will be installed at state facilities located in climate-vulnerable communities as part of EPC projects that will also decarbonize the facilities to reduce the communities' air pollution burden.
- Develop decarbonization plans for 23.4 million sq. ft. of DGS-supported facilities.
 - DGS prequalified three decarbonization consultants under a cooperative agreement available to Maryland State and local entities and not-for-profit entities within the State. DGS issued the first work order to provide multi-year budgetary estimates and technical recommendations for 23.4 million square feet of DGS and DGS-supported facilities.
- Increase sustainable green purchasing through Chairing the Statewide Green Purchasing Committee (GPC).
 - In FY24, the GPC was awarded the EPEAT purchaser award, for the purchase of electronic and IT products, for the 5th year in a row. In FY23, the State spent \$19,933,324 on Electronic and IT products. From the 29,105 Electronic Product Environmental Assessment Tool (EPEAT) certified products, the State saw a cost savings of over \$4.5 million and an energy savings of 45,190,867 kilowatt hour (kWh), equivalent to the electricity to power 3,720 average US household(s) for a year. These impacts include a greenhouse gas reduction of 29,026,291 kilograms of CO2 equivalents, equal to taking 6,215 average US passenger cars off the road for a year.
 - OES staff meets regularly with management from the Office of State Procurement (OSP) to strategize incorporating green purchasing into procurement documents and processes.
- Promote, motivate, and inform agencies of the Administration's and legislature's goals and mandates through regular working group meetings.

- OES convenes regular meetings of a Working Group on Reducing Energy use in State Operations. The Working Group, chaired by OES, includes representatives of the 20 agencies and university campuses that consume 91% of the energy used in State operations.
- Manage and report for the State's Better Climate and Better Building partnerships with the US Department of Energy.
 - Two data analysts in OES track and report energy and carbon emissions for both partnerships.
- Manage and maintain the State Energy Database.
 - DGS maintains a comprehensive utility records database for all state government, including USM campuses.
 - OES has a contract with a database management firm to continuously maintain and update the database.
- Partner with MEA to fund energy efficiency upgrades throughout State-owned facilities.
 - Since FY20, DGS has received \$17.2 million in SEIF funds from MEA for staff support and to fund energy audits, LED lighting replacements, and EVSE installations.
 - DGS has installed nearly 300 electric vehicle charging ports out of a planned 2,000 ports to be installed by 2030. Charging stations have been installed at 42 locations for 13 agencies, with another 301 ports under development or construction.
 - DGS has lighting fixture replacement projects completed or underway at 2,843,336 square feet of state-owned buildings. By the end of these projects, nearly 50,000 fixtures will have been installed, resulting in annual savings of \$1.2 million and abatement of 4,778 tons of CO₂.
 - Since 2020, OES has performed onsite energy audits on 7,943,468 square feet. A virtual auditing tool has also been developed by partnering with a team of graduate engineering students at the University of Maryland College Park Campus. The Rapid Energy Audit tool graphically displays carbon and energy metrics for nearly 100 million square feet of facilities throughout the state.

Apply for federal funding:

DGS partnered with MDE to be a sub-awardee on a federal Environmental Protection Agency (EPA) decarbonization planning grant, which brought \$300,000 to DGS to supplement the cost of decarbonization planning for DGS-owned and supported facilities.

DGS partnered with MDE on a Maryland-District of Columbia Clean Buildings Accelerator Climate Pollution Reduction Grants (CPRG) Program from EPA, which was not awarded to the state. DGS is also working with MDE on an application to be a subawardee on a \$20 million grant from the US Department of Energy (DOE) Inflation Reduction Act (IRA) Technical Assistance for the Adoption of Building Energy Codes.

DGS partnered with MEA in 2020 to receive \$1.5 million in American Recovery and Reinvestment Act (ARRA) funding from DOE to install a building-level energy submeter system at the Annapolis Capitol Complex. The submeter system, completed in 2023, will provide DGS with visibility into the energy use of individual buildings throughout the complex.

Under the solar grant program mentioned below, DGS plans to apply for federal IRA Elective Pay Eligible Tax Credits to help support the program.

DGS is researching the availability of federal 179d tax credits for capital projects.

Part 2: Recommending Actions to Address Climate Change

State law (Maryland Code, Environment, § 2-1305) requires that each State agency shall review its planning, regulatory, and fiscal programs to identify and recommend actions to more fully integrate the consideration of Maryland's greenhouse gas reduction goal and the impacts of climate change. The review shall include the consideration of (i) sea level rise; (ii) storm surges and flooding; (iii) increased precipitation and temperature; and (iv) extreme weather events. Furthermore, each State agency shall identify and recommend specific policy, planning, regulatory, and fiscal changes to existing programs that do not currently support the State's greenhouse gas reduction efforts or address climate change.

In compliance with the law, the Department of General Services is taking or recommending the following actions to more fully integrate the consideration of Maryland's greenhouse gas reduction goal and the impacts of climate change.

The DGS Annual Report on the Status of Department of General Services Programs that Support the State's Greenhouse Gas Reduction Efforts or Address Climate Change can be found here:

<https://dgs.maryland.gov/Documents/DCE%20->

[%20Energy/DGS%20Greenhouse%20Gas%20Emissions%20Annual%20Report%20-%202024.pdf](#)

DGS adopted a decarbonization policy to ensure that the state considers electrification measures for all new construction and renovation projects overseen by the department where fossil-fueled equipment is being replaced. Over time, this policy will help the state reduce its GHG impact from state-owned facilities and serve as an opportunity for the state to "lead by example."

The decarbonization plan mentioned above in Part 1, for 23.4 million sq. ft. of DGS-supported facilities, will provide a budget forecast that DGS will share with the Department of Budget and Management (DBM). DGS will work with DBM on a budget plan to assign funding in future years to fund the incremental cost of decarbonizing state facilities.

Part 3: Considering Greenhouse Gas Emissions Reductions and Impact on Disproportionately Affected Communities

State law (Maryland Code, Environment, § 2-1305) requires that each State agency, when conducting long-term planning, developing policy, and drafting regulations, shall take into consideration: (1) the likely climate impact of the agency's decisions relative to Maryland's greenhouse gas emissions reduction goals; and (2) the likely impact of the agency's decisions on disproportionately affected communities identified according to the methodology adopted under § 1-702 of the Environment article. Furthermore, Governor Moore's Executive Order 01.01.2024.19 requires each agency to report on how the agency will advance environmental justice by working to address the disproportionate impacts of climate change for underserved and overburdened communities.

In compliance with the law and Executive Order 01.01.2024.19, the Department of General Services is taking the following steps to meet these requirements.

In its role supporting state agencies, DGS has a limited direct impact on disproportionately affected communities. However, as mentioned in Part 1 above and described in detail in Part 4 below, DGS is developing a partnership with MEA to create a program through block-grant funding to subsidize the installation of solar PV at State-owned facilities located in certain low-income climate-vulnerable communities.

MEA funds and IRA Direct Pay incentives will create short payback periods for solar PV. OES can then blend the short-term payback for solar PV with longer-term payback decarbonization measures, thereby making the projects viable for the Energy Performance Contracting Program (EPC), which will guarantee the projects' savings. Decarbonizing the facilities will reduce or eliminate the burning of fossil fuels, thereby decreasing air pollutants affecting local residents. This program can leverage MEA and federal funding to create projects with a total value of over \$200 million.

The renewable energy produced, combined with a reduction in energy use and GHG emissions, will help achieve the state's climate goals and the decarbonization of state-owned buildings. The decarbonization of the facilities will also have a direct positive impact on the air quality and health of the underserved and overburdened communities where the facilities are located.

Part 4: Resources for Implementation

Implementing Maryland's Climate Pollution Reduction Plan

DGS is taking the following steps and utilizing the following resources to implement Maryland's Climate Pollution Reduction Plan:

- Partner with PSC and other agencies to draft a plan to achieve 8,500 MWs of offshore wind (OSW) capacity.
 - DGS has allocated time from existing staff in OES to participate in the planning sessions. The plan is due by January 1, 2025.
- Issue procurements to purchase offshore wind (OSW).
 - DGS has allocated time from existing staff in OES to lead this procurement. DGS allocated \$340,567 in FY24 for OSW consulting and another \$119,625 in FY25 for OSW consulting services. The FY25 figure will fall short of what will be needed in FY25 by an estimated \$250,000. Another round of OSW solicitation is required under SFP 7-704.4 in FY26. DGS has requested funding from MEA for the FY26 effort.
- Staff the Maryland Green Building Council (GBC) and oversee implementation of the High Performance Green Building Program (HPGBP) and compliance with Buy Clean.
 - DGS needs to hire 1 FTE PIN (Administrator III) to support the GBC (\$80,429).

- Adopt an all-electric policy for state-owned facilities.
 - Implementing the policy will not require additional resources, but the electrification projects themselves will require significant funding, which will be estimated in the decarbonization plan.
- Purchase energy for State government operations to ensure compliance with the renewable portfolio standard and to achieve 100% clean energy for State government operations.
 - DGS staffs this effort in OES. No additional resources are required at this time.
- Manage and grow the Energy Performance Contracting (EPC) program.
 - DGS has submitted an OTT request for two additional Capital Construction project managers to manage the additional expected workload. The estimated total annual cost for these two positions, inclusive of benefits, is \$298,000.
- Develop decarbonization plans for 23.4 million sq. ft. of DGS-supported facilities.
 - DGS requires \$1.9 million in FY25 to pay for the initial plan.
- Oversee sustainable green purchasing by Chairing the Statewide Green Purchasing Committee.
 - DGS staffs this effort in OES. DGS has submitted through an over-the-target request that one existing contractual employee be converted to permanent PIN status. There is a Key Performance Indicator (KPI) to increase the percentage of green purchases throughout state government. DGS sees the strong potential to need additional staffing to achieve any significant increase in green purchases as well as the need for a data platform to track purchases. (Administrator III @ \$80,429).
- Promote, motivate, and inform agencies of the Administration's and legislature's goals and mandates through regular working group meetings.
 - DGS staffs this effort in OES. No additional resources are required at this time.
- Manage and report for the State's Better Climate and Better Building partnerships with the US Department of Energy.
 - DGS staffs this effort in OES. No additional resources are required at this time.
- Manage and maintain the State Energy Database.
 - DGS staffs this effort in OES. No additional resources are required at this time.
- Partner with MEA to fund energy efficiency upgrades throughout State-owned facilities.

- DGS staffs this effort in OES. OES has requested funding from MEA to cover the costs of efficiency projects.

A priority for DGS in FY26 is to partner with MEA on funding for a block grant to install solar photovoltaic systems on selected State-owned facilities. The selected State-owned facilities include 24 campuses and 26 stand-alone buildings totaling 17,646,830 square feet that fall within overburdened and underserved communities.

DGS proposes to use funds from the block grant and the federal investment tax credit (ITC) of the IRA to subsidize each solar installation to achieve a 5-year simple payback period. DGS would then evaluate each site for the potential to blend the short payback period of the solar system with longer-term payback periods of capital-intensive equipment to allow for decarbonization measures that would reduce local air pollutants in the communities. DGS proposes to engage the Energy Service Companies (ESCO) prequalified under the energy performance contract (EPC) program to perform evaluations to develop projects focused on decarbonizing the facilities. DGS sees several advantages to this approach:

- Leveraging a 5-year payback for the solar component of the projects provides an opportunity to finance longer payback measures and larger projects.
- Expanding the scope beyond solar to replace fossil fuel-burning equipment at the chosen sites will reduce the amount of local airborne pollutants.
- The EPC program has pre-qualified contractors who are ready to perform the work.
- Projects can be bundled so that the short payback period from solar installations on several projects can be used to reduce the payback of decarbonization measures.
- The EPC program includes maintenance for the term of the contract.
- The EPC program includes M&V for the term of the contract.
- ESCOs compete against each other for projects, ensuring competitive pricing.
- The EPC program is allowed up to a 30-year contract term.
- The EPC program comes with savings guaranteed by the ESCOs.
- Well-established State Treasury leases for EPCs use “off book” financing that does not affect the credit rating or borrowing limit of the State.

If DGS is provided with 2 additional Capital Construction project managers, then DGS will have adequate resources to manage the MEA-funded solar/EPC grant project.

Implementing this Climate Implementation Plan

DGS has 68 KPIs, several of which are focused on reducing GHG emissions, energy

reduction, and sustainable operations, including the following:

- Increase in the amount of renewable energy purchased by the State.
- Reduction in the carbon intensity level for district steam and chilled water.
- Reduction in agency-wide energy consumption.
- Increase in total square footage (above the baseline of 2M square feet annually) of state-owned facilities for which energy audits have been performed annually.
- Increase the number of Energy Performance Contracts (EPC) and other energy-saving projects being initiated by state agencies.
- Increase the percentage of state procurement that meets the recommendations of the Green Purchasing Committee.

Virtually all OES' funding is directed toward accomplishing the state's climate goals. OES has 15 FTEs and an FY25 budget for salaries of \$2,551,230. All but two of those positions are paid through special or reimbursable funds. OES' special fund revenue comes from MEA, and the reimbursable funds come primarily from a small monthly line-item fee tied to electricity usage that DGS charges on every utility bill account. OES needs additional resources to respond to legislation and executive orders issued over the past three years. OES' staff should also be funded through general funds so that positions are secure and insulated from annual variations in special and reimbursable revenue.

Current funds are adequate for DGS to continue on a business-as-usual basis. Still, additional resources will be required to achieve the obligations under Governor Moore's Executive Order 01.01.2024.19, "Leadership by State Government: Implementing Maryland's Climate Pollution Reduction Plan." In particular, DGS does not have the resources to adequately plan for decarbonizing buildings in compliance with BEPS, nor does DGS have the resources to expand the energy performance contracting program, increase green purchasing, provide support to the Green Building Council, or continue soliciting for offshore wind and other renewable energy contracts. To achieve those obligations, DGS requests a total of five permanent positions (\$444,539 annually), \$120,000 for a green purchasing data platform, and \$2,220,000 in FY26 for consulting services, decarbonization planning and a green purchasing data platform to track the state's green purchasing spend.

- Total of 5 PINs - \$444,539 annually.
 - 1 FTE PIN (Administrator III) at \$80,429 to support the Green Building Council.
 - 2 additional Capital Construction project managers at \$203,792 to support the energy performance contracting program.
 - 1 FTE PIN (Administrator III) at \$80,429 for the Green Purchasing Committee

to expand green purchasing specifications and tracking to include the climate impacts of food products and waste.

- 1 FTE PIN (Administrator III) at \$80,429 to support procurements at OES.
- Total of \$2,220,000 for consulting services, planning, and a data platform.
 - \$1.9 million in FY26 to pay for decarbonization planning
 - \$200,000 in FY26 for OSW consulting services.
 - \$120,000 annually for a green purchasing data platform.

As mentioned, DGS has initiated a \$1.9 million decarbonization planning process to cover 23.4 million square feet of state-owned facilities. One of the deliverables from that process will be short—and long-range (5 to 15 years) budget forecasts for implementation. The funds required for decarbonization implementation are not included in the abovementioned funding gap.

Part 5: Outcomes from Implementation

DGS' actions under the Climate Pollution Reduction Plan are listed below with possible outcomes.

- Partner with PSC and other agencies to draft a plan to achieve 8,500 megawatts (MW) of OSW capacity.
 - Reaching 8,500 MWs of capacity in the existing offshore wind leases will have significant health, economic, and employment benefits for the state.
- Issue procurements to purchase offshore wind.
 - Purchasing OSW will have significant health, economic and employment benefits for the state.
- Staff the Maryland Green Building Council (GBC) and oversee implementation of the High Performance Green Building Program (HPGBP) and compliance with Buy Clean.
 - The HPGBP determines the carbon and energy intensity of nearly every new building and major renovation of a state-owned building and has a decades-long impact. The HPGBP has significant health and economic benefits for the state.
- Adopt an all-electric policy for state-owned facilities.
 - An all-electric policy will reduce air pollution in the state and, more significantly, the air quality in the neighborhoods where the facilities are

located.

- Purchase energy for State government operations to ensure compliance with the renewable portfolio standard and to achieve 100% clean energy for State government operations.
 - State government operations generated 738,302 tons of scope 1 and scope 2 GHG emissions in 2023 (not including transportation emissions). Cleaning up those emissions through purchasing clean energy will have significant health benefits for Maryland residents.
- Manage and grow the Energy Performance Contracting (EPC) program.
 - Increasing the number of EPC projects will provide significant health, economic and employment benefits for the state by reducing the EUI and carbon footprint of state-owned facilities.
- Develop decarbonization plans for 28.3 million sq. ft. of DGS-supported facilities.
 - As the first step in decarbonizing state-owned facilities, the plans will provide significant health, economic, and employment benefits for the state by reducing the EUI and carbon footprint of state-owned facilities.
- Increase sustainable green purchasing through Chairing the Statewide Green Purchasing Committee.
 - Every incremental increase of purchasing environmentally friendly products will have significant health benefits for the state.
- Promote, motivate, and inform agencies of the Administration's and legislature's goals and mandates through regular working group meetings.
 - Helping state agencies understand and comply with state climate and energy reduction goals will reduce the EUI and carbon footprint of state-owned facilities, providing significant health, economic, and employment benefits for the state.
- Manage and report for the State's Better Climate and Better Building partnerships with the US Department of Energy.
 - This effort has little direct impact on the state's health, economic, and employment benefits. However, it is a way for the state to promote and publicize its climate efforts.
- Manage and maintain the State Energy Database.
 - Although managing the database has no direct impact on health, economic, and employment benefits for the state, the data is essential for tracking our progress toward our goals and gaining insight into the energy use and carbon intensity of the state's facilities.
- Partner with MEA to fund energy efficiency upgrades throughout State-owned facilities.

- DGS' partnership with MEA provides funding for various projects, all of which benefit the state in terms of health, economics, and employment.