

CLEAN BUILDINGS CASE STUDY

Dept. of General Services Develops
Statewide Facilities Decarbonization Plan



Phase I Decarbonization Goal:

20% reduction in direct greenhouse gas emissions in stateowned facilities & operations by 2030

"DGS realized the first step to decarbonize the state's building stock was to develop comprehensive plans."
David St. Jean, Office of Energy & Sustainability, DGS

As part of its <u>State Building Energy Performance Standards</u> (<u>BEPS</u>) compliance strategy, Maryland's Department of General Services (DGS) pre-qualified three vendors, who are also available to other Maryland state agencies, campuses, local government, and non-profits, to develop a decarbonization and energy reduction plan for 39 state-owned campuses (consisting of over 850 buildings) and 38 standalone buildings.

The plan provides DGS with a roadmap for triaging the decarbonization of its building portfolio. Below is a snapshot of the decarbonization plan's distinct phases.

- Phase 1: Establish Priority Buildings & Conduct Analysis.
 DGS chose 10 buildings to initially prioritize between 2025-2030 based on maintenance schedule, expected equipment end of life, greenhouse gas emissions, and energy use. Data on these buildings will be compiled, followed by the completion of site visits.
- Phase 2: Conduct Energy Analysis & Modeling in Priority Buildings. Upon completion of site visits, energy modeling for the building envelope, lighting, domestic hot water, and HVAC systems will be conducted, resulting in the recommendation of improvements to achieve BEPS performance targets.







Priority Buildings in Years 1-5

Group 1

- Silver Spring District Court
- Wabash District Court
- Hargrove District Court
- Ruhr Armory Building

Group 2

- Baltimore City Juvenile Justice Center
- Elkton District Court

Group 3

- Jessup State Complex
- Baltimore County Forensics Lab

Group 4

- Eastern Shore Hospital Center
- Salisbury District Court

More Details

- Phase 3: Design Documents for Priority Buildings. This
 phase involves compiling design documents that include
 details such as equipment sizing and selection and
 construction cost projections.
- Phase 4: Create Cost Estimates for Priority Buildings. DGS
 will pilot a cost estimate methodology and process on one
 building. Once the approach is fine-tuned, the analysis will
 be expanded to the nine other priority buildings.
- Phase 5: Conduct Analysis of Additional Buildings. In this
 phase, DGS will conduct an analysis of additional buildings
 in its portfolio using a business as usual (BAU) model as the
 basis for a life cycle cost analysis of each facility and the
 recommended systems for decarbonization.
- Phase 6: Create Project Management Plan. Finally, DGS and its vendor will establish a regular cadence of meetings and agree upon milestone deliverables and reporting metrics.

Want More Information? Contact the Hub:

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