

Department of Legislative Services  
Maryland General Assembly  
2021 Session

FISCAL AND POLICY NOTE  
First Reader

Senate Bill 330 (Senator West)  
Education, Health, and Environmental Affairs

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State-Funded Construction and Major Renovation Projects - Solar Panels -  
Requirement

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This bill requires specified construction and major renovation projects that are proposed after December 31, 2021, receive State funding, and are carried out by the State or local governments to be designed, engineered, and constructed in a manner that allows the roof to withstand the weight of solar panels. Such projects must include the installation of the maximum number of solar panels for which the project was designed. The Maryland Green Building Council (MGBC) must recommend design considerations consistent with the bill's intent.

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Fiscal Summary

**State Effect:** Design costs for State buildings (all funds) increase by less than 1%, as discussed below, and construction costs increase further to install solar panels; any such increase has no effect on total State capital spending, which is established annually through the capital budget process. However, fewer projects may be funded in a given year. Expenditures (all funds) on utilities for State buildings may decrease over time, but a reliable estimate is not feasible for this analysis and any savings likely occur beyond the timeframe covered by this analysis. MGBC can develop design considerations with existing resources. No effect on revenues.

**Local Effect:** Local effects are the same as the State effect, with no likely effect on overall local capital spending. No effect on local revenues.

**Small Business Effect:** Minimal.

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## Analysis

**Bill Summary:** In general, the bill applies to:

- construction projects that are proposed to have a roof expanse of at least 4,000 square feet; and
- major renovation projects in which:
  - the building is to be reconstructed and reused;
  - the heating, ventilation, and air conditioning; electrical; and plumbing systems are to be replaced; and
  - the reconstructed building will have a roof expanse of at least 4,000 square feet.

In addition to projects carried out by the State and local governments, the bill applies to projects carried out by nonpublic entities in accordance with a public-private partnership agreement.

However, the bill does not apply to:

- projects where the replacement of a roof is the only or primary objective of the project; or
- projects that receive State funds through an award of a miscellaneous grant program, a local House of Delegates initiative, or a local Senate initiative.

The bill expresses legislative intent that the design of a construction or major renovation project maximize the number and efficiency of solar panels that can be placed on the roof.

**Current Law:** Maryland's Renewable Energy Portfolio Standard was enacted in 2004 to facilitate a gradual transition to renewable sources of energy. There are specified eligible ("Tier 1" or "Tier 2") sources as well as carve-outs for solar and offshore wind. Electric companies (utilities) and other electricity suppliers must submit renewable energy credits (REC) equal to a percentage specified in statute each year or else pay an alternative compliance payment (ACP) equivalent to their shortfall. Historically, the requirements have been met almost entirely through RECs, with negligible reliance on ACPs. The Maryland Energy Administration must use ACPs to support new renewable energy sources.

Chapter 757 of 2019 significantly increased the percentage requirements, which now escalate over time to a minimum of 50% from Tier 1 sources, including 14.5% from solar, by 2030. In 2021, the requirements are 30.8% for Tier 1 sources, including at least 7.5% from solar. Tier 2, which had been extended several times, terminated after 2020.

**State Expenditures:** The Department of General Services (DGS) advises that the design and engineering changes necessary to accommodate solar panels on roofs add about 0.7% to the total design cost of a new building and potentially less for taller buildings. DGS further advises that no additional time for design or construction is needed to meet the bill's requirements, but that the purchase and installation of solar panels for a new building with a 4,000 square foot roof (the minimum size affected by the bill) generally ranges between \$12,000 and \$30,000, depending on other factors. The Maryland Department of Transportation advises that the cost of accommodating solar panels may be greater for major renovation projects because accommodations have to be made for existing structures. Total capital expenditures are determined annually through the capital budget process and are dependent on debt capacity, among other factors. As total spending is fixed each year, to the extent that total costs increase for some projects, fewer projects may be funded in a given year.

The bill is silent with respect to the allocation of energy generated by the solar panels. To the extent that it reduces nonrenewable energy consumption and/or utility bills for State buildings, the State may realize some savings. However, those savings materialize over time and cannot be reliably estimated for this fiscal and policy note.

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### **Additional Information**

**Prior Introductions:** SB 592 of 2020, a substantively identical bill, received a hearing in the Senate Education, Health, and Environmental Affairs Committee, but no further action was taken on the bill. Its cross file, HB 1370, received a hearing in the House Health and Government Operations Committee, but no further action was taken on the bill.

**Designated Cross File:** HB 469 (Delegate Forbes) - Health and Government Operations and Appropriations.

**Information Source(s):** Anne Arundel, Baltimore, Charles, Frederick, and Montgomery counties; City of Havre de Grace; Maryland State Department of Education; Public School Construction Program; Department of General Services; Department of Public Safety and Correctional Services; Maryland Department of Transportation; Maryland Energy Administration; Department of Legislative Services

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