



January 27, 2023

The Honorable Wes Moore
Governor
State House
100 State Circle
Annapolis, MD 21401

The Honorable Bill Ferguson
President
Senate of Maryland
State House, H-107
Annapolis, MD 21401

The Honorable Adrienne A. Jones
Speaker
Maryland House of Delegates
State House, H-101
Annapolis, MD 21401

Re: Report required by Education Article § 5-319 (MSAR #11572) - Report on the Evaluation and Intended Use of Solar Technologies

Dear Governor Hogan, President Ferguson, and Speaker Jones,

Education Article § 5-319, HB 1783/Chapter 14, 2018 requires that:

- (A) *The Interagency Commission shall adopt regulations that require the design development documents for the construction or major renovation of school buildings submitted by a county board to the Interagency Commission to include:*
- (1) *An evaluation of the use of solar technologies, including photovoltaic or solar water heating, based on life cycle costs; and*
 - (2) *If an evaluation determines that solar technologies are not appropriate for a construction or major renovation project, a report that explains why the use of the technology is not appropriate.*
- (B) *On or before December 31 of each year, the Interagency Commission shall submit a report on the number of public school construction and major renovation projects in each jurisdiction that use solar technologies to the Governor and, in accordance with §2-1246 of the State Government Article, the General Assembly.*

The Maryland Department of General Services (MDGS) or the Maryland State Department of Education (MSDE) reviews the required evaluations and reports during the course of design review. Comments on the inclusion of the evaluations are a standard component of the review letters for new construction or major renovation projects. The primary limitation cited for determining that solar technologies are not appropriate is the lengthy payback for roof mounted photovoltaic panels¹. Power production is calculated to be low relative to the

¹ Some LEAs have been able to utilize power purchase agreements (PPAs). Typically, these are attractive to the industry only when an LEA installs solar panels at a number of locations as the power generation by an array on a single school is limited. In PPAs, the space for solar panels is leased to someone else, in which case they are not owned by the LEA and are not reported to the IAC in the scope of this report. However, the IAC recommends that LEAs review and carefully consider opportunities for PPAs and their costs and benefits.

requirements of a school and to the extent that solar technologies are pursued, it is more for demonstration and educational purposes. The evaluation requirement of the statute keeps solar technologies at the forefront of design thinking and use of solar is one potential component in ongoing efforts to improve the performance of school facilities.

The school systems have performed evaluations in accordance with the statute, and MDGS and MSDE have reviewed the evaluations. This report covers the period from the effective date of the statute through December 31, 2022.

The report only covers projects subject to the provisions of the statute, and reflects the evaluation of solar technologies as expressed in the design development submissions. It therefore does not include solar installations on schools designed prior to the effective date of the statute, or solar projects undertaken independently of construction or renovation projects. For instance, Caroline, Dorchester, and Kent Counties have major ground-mounted (exceeding 2 acres per installation) solar photovoltaic projects that provide significant power for some of their schools. Harford and Montgomery Counties have pursued roof mounted photovoltaic projects independent of construction or renovation projects.

| Number of Projects with Solar Technologies in Design Development Document Submissions | | | | | | | | | | | |
|---|------|------|------|------|------|------|------|------|------|----------------|-------|
| LEA | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
| Allegany | N/A | 1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 1 |
| Anne Arundel | N/A | N/A | N/A | 0 | N/A | N/A | N/A | 0 | 0 | 0 | 0 |
| Baltimore City | N/A | N/A | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Baltimore | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 ² | 5 |
| Calvert | N/A | 0 | N/A | N/A | N/A | N/A | N/A | N/A | 0 | N/A | 0 |
| Caroline** | N/A | N/A | N/A | N/A | N/A | 0 | N/A | N/A | N/A | N/A | 0 |
| Carroll | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0 | 0 | N/A | 0 |
| Cecil | 0 | 0 | 0 | N/A | N/A | 0 | N/A | N/A | N/A | N/A | 0 |
| Charles | N/A | N/A | N/A | 0 | N/A | 0 | N/A | N/A | 0 | 0 | 0 |
| Dorchester** | N/A | N/A | 1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 1 |
| Frederick*** | N/A | 1 | 2 | N/A | N/A | 0 | 0 | N/A | 0 | 0 | 3 |
| Garrett | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Harford* | N/A | 1 | N/A | N/A | N/A | N/A | N/A | N/A | 0 | 0 | 1 |
| Howard | 0 | 1 | 0 | N/A | N/A | N/A | 0 | N/A | N/A | N/A | 1 |
| Kent** | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Montgomery* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Prince George's | 0 | N/A | N/A | N/A | 0 | 0 | 0 | N/A | 0 | 0 | 0 |
| Queen Anne's | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| St. Mary's | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0 | N/A | 0 |

² Deer Park Elementary School Replacement project did not have solar technology in their design document submissions but was included in their construction document submission as a bid alternative with solar panels on the building roof and parking canopy.

| LEA | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------------------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Somerset | N/A | N/A | N/A | 0 | N/A | N/A | N/A | N/A | N/A | N/A | 0 |
| Talbot | N/A | N/A | N/A | N/A | 0 | N/A | N/A | N/A | N/A | N/A | 0 |
| Washington | 0 | N/A | N/A | N/A | 0 | N/A | N/A | N/A | N/A | N/A | 0 |
| Wicomico*** | N/A | N/A | N/A | 1 | N/A | 0 | N/A | N/A | 0 | 0 | 1 |
| Worcester | N/A | N/A | N/A | N/A | 0 | N/A | N/A | N/A | N/A | N/A | 0 |
| Maryland School for the Blind | 0 | N/A | N/A | 0 | N/A | N/A | N/A | N/A | 0 | 0 | 0 |

N/A = No major construction projects reviewed

* School system has instituted solar projects independent of construction and renovation projects

** School system has major ground mounted solar photovoltaic installation

*** Solar water heating

Any questions can be directed to MDGS Program Manager of Public Schools & Community Colleges Craig Curtis at craig.curtis@maryland.gov or (410) 767-3615 or MSDE Office School Facilities Acting Director Jillian Storms at jillian.storms@maryland.gov or (410) 767-0615.

Best Regards,



Alex Donahue
Executive Director
Interagency Commission on School Construction

cc: Sarah Albert, Department of Legislative Services (5 copies)