Wes Moore, Governor
Aruna Miller, Lt. Governor
Paul G. Pinsky, Director

Funding Opportunity Announcement ("FOA")

FY25 Solar Canopy and Dual Use Technology Grant Program

DEFINITIONS: Defined terms used in this FOA can be found in Appendix 1: Glossary.

Program Description:	This program provides grants to support the installation of solar photovoltaic systems that provide multiple uses for land and water. By focusing solar development on areas used for other functions, the program encourages efficiency in land use. The grant may be used for Solar Canopies on parking lots and parking garages, which include the installation of at least four (4) Level 2 or Level 3 electric vehicle chargers under or around the solar canopy. Floating solar arrays located on bodies of water and connected permanently to the utility grid are also eligible. As a pilot for FY25, the Maryland Energy Administration (MEA) has added a new incentive category: a parking lot solar canopy used as a community solar array, that provides resilient power to critical infrastructure, or to one or more business(es) or organization(s) that are important for community continuity and wellbeing in power outage and emergency situations. Community solar arrays that support Maryland Low-to-Moderate Income (LMI), overburdened, and disadvantaged communities are strongly preferred.
Type of Grant Program:	**Statewide Competitive**
Application Deadline:	**3:00 P.M. ET, Wednesday, October 30, 2024**
Eligible Applicants:	● Businesses and Nonprofit Organizations ● Nonprofit Educational Institutions ● State of Maryland Agencies ● Local Governments ● Public Universities… *(continues on next page)*

- Community Colleges
- Public Schools
- Farmers / Agricultural Operations with Sole Proprietorships (individuals that file a Schedule F with their Federal Income Tax and have an Agricultural Nutrient Management Plan on file with the State of Maryland)

Eligible Activities:

Funds are provided for solar photovoltaic ("PV") systems that will provide a dual-use to parking lots, parking garages, or bodies of water. Other dual-use opportunities may also be proposed for consideration. The **minimum eligible solar PV system size is 75 kilowatts of direct current ("kW_{DC}").**

Program Budget:

Up to **$4,798,603** is available from the Strategic Energy Investment Fund (SEIF) for this Program, **subject to the <u>following funding restrictions</u>:**

- Solar PV canopy systems must either be owned by or directly benefit low-to-moderate income communities located in a census tract with an average median income at or below eighty percent (80%) of the average median income for the State of Maryland; or

- Solar PV canopy systems must either be owned by or directly benefit overburdened or underserved communities[1].

Grant Formula:

MEA will provide up to **$800 per kW_{DC}** of new canopy mounted or floating solar PV installed per project, with a maximum award of $400,000 per project.

The final grant amount for each Grantee will be determined after review of all proposals received and is subject to funding availability for the Program and any relevant statutory requirement applicable at that time.

[1] *"Overburdened" and "underserved" communities are defined by §1-701 of the Environment Article, Annotated Code of Maryland.*

Solar Canopies for Community Services Microgrids: MEA encourages solar canopies that are installed as part of microgrids supporting critical infrastructure facilities, or businesses and organizations that are essential for community continuity in power outage and emergency situations. Incentives for these solar canopy systems will be offered under the following categories:

- **Community Care Microgrid Canopies:** MEA will provide up to **$1,100 per kW_{DC}** ($550,000 per project) for a solar canopy installed at a community critical infrastructure facility as part of a microgrid to safeguard its operations against power outages and other emergency situations. For the purposes of this grant program, a "critical infrastructure facility" includes one or more of the following: a hospital or other medical facility; potable water delivery and wastewater treatment system; communications infrastructure (including internet, cellular phone, landline phone, satellite, etc.); or other facility that is necessary for the life, health, and safety of the community.

- **Community Continuity Microgrid Canopies:** MEA will provide up to **$1,100 per kW_{DC}** ($550,000 per project) for a solar canopy installed as part of a microgrid that supports businesses or other organizations that are necessary for societal continuity and wellbeing. These include grocery stores, hardware stores, pharmacies, vehicle fuel stations and fuel distributors, and others approved by MEA on a case-by-case basis.

Partial Funding:

Partial funding may be available if additional funds remain once all fully funded grants have been awarded (in order of highest to lowest ranking). If so, MEA will offer the applicant with the next highest ranking an opportunity to receive the remaining budgeted funding for the applicant's project. If the applicant does not accept partial funding, then the offer is made to the next ranked project.

While MEA anticipates using the full amount of allocated

funds for this Program, MEA may obligate less than the full amount based on the quality and eligibility of applications submitted.

Minimum Eligibility Criteria:

The following criteria must be met, at minimum, to be considered for funding under the Program ("Minimum Eligibility Criteria"):

1. **Authority to Operate in Maryland:** The applicant must be legally authorized to transact business or otherwise operate in the State of Maryland, and must have an established Employer Identification Number (EIN, sometimes referred to as a "taxpayer identification number" or "TIN") at the time they apply to the Program.

2. **Location:** The project site(s) where the solar PV canopy system is installed, as well as the location of the loads that the system will serve, must be located within the State of Maryland.

3. **Minimum Number of EV Chargers:** Unless waived by the MEA Program Manager, a Solar Canopy Project must include at least four (4) new qualified Level 2 or Level 3 EV charging stations located in the same parking lot or on the same parking structure as the solar PV canopy system. The colocation requirement for the EV charging stations may be waived by the MEA Program Manager.

4. **Site Control:** The applicant must exhibit control over the project site (parking lot or parking structure, as applicable), either by providing evidence of ownership, or a long-term lease (with a minimum of 20 years remaining on the lease after Project completion).

5. **Completion Deadline:** Projects must be completed within four (4) years, unless they are Community Services Microgrids, in which case they must be completed within five (5) years. When necessary, a grantee may submit a request for an extension at

least two months prior to the expiration of the existing grant agreement. Please note that extensions will only be granted for good cause shown or circumstances outside of a grantee's control, determined solely by MEA.

6. **NABCEP Certification Requirement:** At least one (1) North American Board of Certified Energy Practitioners (NABCEP) PV Installation Professional or PV Design Specialist must be employed and involved in the electrical and mechanical design of the project. Each applicant is expected to provide the name and certification number of the NABCEP PV Installation Professional or NABCEP PV Design Specialist, as applicable.

7. **IEEE Requirement:** The solar system must meet minimum system requirements as specified in IEEE 1547 and the National Electric Code.

8. **National Testing Laboratory:** Each component of the system(s) must be listed or labeled by a recognized national testing laboratory.

9. **Maryland Historic Trust:** A Maryland Historical Trust review must be completed without an adverse finding before grant funding may be awarded.

10. **Contract Requirement:** Unless the applicant is a state or local government entity, the applicant must provide a signed contract with an installing contractor/developer. This contract may be contingent on receipt of this grant. For a State or local government applicant that must use a Request for Proposal, please provide a letter of commitment, signed by a senior official of the applicant, documenting the agency's commitment to the project (in place of the signed contract).

11. **Public Sector Applicants and Procurement:** When the site owner is a municipality, county, or State agency, the site owner is responsible for determining the applicability of §§14-416 and

17-303 of the State Finance and Procurement Article, Annotated Code of Maryland.

12. **Limit One (1) Grant:** Only one (1) Solar Canopy and Dual Use Technology Grant can be awarded to a single project.

13. **Reporting Requirement:** If awarded a grant, each grantee under the Program is responsible for submitting all reporting documents, including invoices for grant reimbursements, to MEA.

14. **Good Standing:** The applicant, and any contractor or third party that the applicant works with on the project, must be in Good Standing with the Maryland Department of Assessments and Taxation (DAT)[2]. The applicant and any contractor or third party must provide proof of Good Standing with the application. Acceptable proof includes (1) a screenshot or PDF of the applicant's status in DAT's Business Entity Search[3] that indicates a Good Standing status; OR (2) a copy of a Certificate of Good Standing from DAT. Instructions on how to obtain a Certificate of Good Standing are available on DAT's website[4].

15. **Solar Renewable Energy Credits (SRECs):** Projects must register for and receive Solar Renewable Energy Certificates (SRECs) in Maryland. Grantees will be required to verify the successful registration of projects with the Maryland Public Service Commission and with PJM Interconnection. For information concerning SREC registration, consult the PJM EIS website at https://www.pjm-eis.com/.

16. **Floating Solar:** If considering floating solar arrays, a developer should consult with the Maryland Department of Natural Resources and Maryland Department of the Environment before applying for

[2] https://dat.maryland.gov/pages/default.aspx
[3] https://egov.maryland.gov/businessexpress/entitysearch
[4] https://dat.maryland.gov/businesses/Pages/Internet-Certificate-of-Status.aspx

an MEA grant to identify the required permits and reviews. For potential projects to be located in the Chesapeake Bay or connecting waters, a developer must consult with the Critical Area Commission for the Chesapeake & Atlantic Coastal Bays before applying for an MEA grant.

17. **Dual Use Technologies:** Developers considering technologies other than solar canopies and floating solar should discuss the technology with MEA in advance of application. MEA, at its sole discretion, may accept or reject a technology as being an acceptable dual use technology for this Program.

18. **Agrivoltaics:** MEA is not presently incentivizing agrivoltaics under this FY25 program. Developers considering agrivoltaics should instead apply to MEA's OPEN Energy Grant Program[5].

Evaluation Criteria:

MEA will evaluate each complete application based on the project's value to the State's energy goals, which is determined, in part, by using the Application Review Checklist. A sample of the Application Review Checklist can be found on the program website.

Primary evaluation element: The overall Greenhouse Gas (GHG) emissions avoided per dollar of grant funding (GHG in metric tons during the first year) times a scaling factor of 100,000, divided by the grant amount (in dollars).

Example Calculation: for a 400 kW solar canopy with a production factor of 1,250 kWh_{AC}/kW_{DC}. This canopy IS NOT used in a critical infrastructure or a community continuity microgrid:

$$Points = \frac{400kW \times 1{,}250\frac{kWh}{kW} \times 0.000306628mTonnes\frac{CO2e}{kWh} \times 100{,}000}{400kW \times \$800/kW}$$

$$Points = 47.911$$

[5] https://energy.maryland.gov/Pages/OpenEnergyGrantProgram.aspx

<u>Example Calculation</u>: for the same 400 kW solar canopy with a production factor of 1,250 kWh_{AC}/kW_{DC} that IS used in either a critical infrastructure or a community continuity microgrid.

$$Points = \frac{400kW \times 1{,}250\frac{kWh}{kW} \times 0.000306628mTonnes\frac{CO2e}{kWh} \times 100{,}000}{400kW \times \$1{,}100/kW}$$

$$Points = 34.844$$

<u>NOTE</u>: A canopy tilt of more than 10 degrees will require justification.

<u>Additional evaluation criteria</u> (with additional points) include:

- Provides direct, identifiable benefits to Marylanders that reside in an LMI, underserved, overburdened, or disadvantaged community. The Maryland Department of the Environment's Environmental Justice screening tool includes layers to identify some of these areas. See (https://mde.maryland.gov/Environmental_Justice/Pages/EJ-Screening-Tool.aspx) **Up to ten (10) additional points.**

- Additional roof or ground-mounted capacity installed in conjunction with the canopy system and located on the same real estate parcel. (MEA will not include capacity greater than 500kW when determining the grant amount.) **Points = (total capacity in kW_{DC} minus 500 kW_{DC})/1000.**

- Additional solar capacity installed in conjunction with a floating solar system and located on the same body of water. (Please note that MEA will not include capacity greater than 500kW when determining the grant amount.) **Points = total capacity in kW_{DC} minus 500kW_{DC})/1000.**

- Innovative project design and/or use. **Points: 1**

point.

- Located in a wastewater treatment pond, stormwater retention pond or private waterway. (Any project that proposes installation in an area used for public recreation, water supply, or are generally considered navigable waterways, must have the signed approval of each applicable regulatory authority BEFORE applying.) **Points: 2.**
- Provides Community Care or Community Continuity services microgrid services. **Points: 15 points.**
- Estimated accessibility of the proposed carport and the EV chargers to the public. **Points: 1 point if EV charges are available to the public.**
- The frequency of parking lot use. **Points: 1 point if used at least five days per week.**
- Applicant Organization's first Solar Canopy grant request. **Points: 5 points.**

Due to the complexity of the evaluation process, MEA may request additional information after all applications have been submitted to facilitate the evaluation process.

MEA may allocate funds on a limited geographic basis, depending on the total number of applications received, as the SACP funds is statutorily restricted to projects occurring in specific census tracts that meet the statutory definitions of either a low-to moderate-income, underserved, or overburdened community as defined under §9-20B-05(i)(2) of the State Government Article.

Evaluation Process:

A review team of at least three members with relevant expertise, will be selected by the MEA Program Manager to review applications using the Application Review Checklist. Projects are ranked from highest to lowest.

Despite the ranking, the review team members may still recommend against awarding a grant if a majority of the review team determines that there is sufficient cause to

disqualify an application. Each recommendation to deny funding for a project that meets minimum criteria will automatically be reviewed by the Section Chief, Clean Energy and Resilience." The cause for disqualification will be documented in the award recommendation memo.

The review team will recommend applications for funding based on the amount of funding available. The Review Team may, at its sole discretion, recommend one or more additional projects (in order) for funding, if funding becomes available before the end of the fiscal year. The Program Manager will make recommendations to the Director, incorporating input from the Review Team. In the event of a disagreement, the dissenting concerns will be included in the recommendation memo to the Director. The Director makes the final decision.

Grant Funding and Payment:

- Upon receipt of a grant agreement signed by both the grantee and MEA, MEA will encumber funds.
- No costs incurred by a Grantee prior to execution of a Grant Agreement will be reimbursed by MEA for a Project.
- Grants will be paid after the project is online and producing creditable power. The Grantee will inform MEA when the project is completed (all zoning requirements met, all permit inspections passed and permits closed, all commissioning tests satisfactorily completed, and permission to operate received from the utility). MEA, at its sole discretion, will then conduct a site visit. Upon completion of the site visit, the Grantee will submit a Final Invoice and Completion Report. Upon receipt of a complete and accurate invoice and completion report, MEA will process the remaining grant funds for payment to the Grantee.
- To justify funding amounts, MEA may request documentation of hours worked, receipts for materials ordered, etc.
- For any project that is inspected by MEA, each

major deficiency must be corrected before MEA will distribute grant funds. Minor deficiencies should be addressed/corrected, but distribution of grant funds will not be delayed.

Grant Program General Provisions:

MEA grant programs are covered by general requirements (General Provisions) that will be made part of the grant agreement. A copy of the General Provisions document is available on MEA's website here[6]; these provisions will be incorporated into each FY24 grant agreement issued by MEA.

Regulations:

MEA grant programs are regulated by the Strategic Energy Investment Program regulations* (COMAR 14.26.02). All applicants and associated projects funded by MEA must meet all applicable regulations as defined by COMAR 14.26.02.

**To access these regulations, click here[7] and use the sidebar "Regulations by Title" to navigate to: 14 - Independent Agencies → 26 - MARYLAND ENERGY ADMINISTRATION → 02 - Maryland Strategic Energy Investment Program.*

Required Application Documents:

The following documents are required as part of the application package:

1. A Completed Application Workbook (Microsoft Excel).

2. A copy of the Maryland State Department of Assessments and Taxation (SDAT) Certificate of Good Standing for the site owner, the solar system installer (if known at time of application), and the system owner.

3. For businesses or nonprofits using a 3rd party owned system, a signed contract or letter of intent between the Site Owner and System Owner. The letter of intent must include the location and

[6] https://energy.maryland.gov/SiteAssets/Pages/all-incentives/General%20Provisions%20v3%202.11.22.pdf

[7] https://dsd.maryland.gov/Pages/COMARSearch.aspx

estimated capacity of the solar system as a minimum.

4. For a state agency or local government applicant, evidence of the applicant's commitment, in the form of a signed contract with a system owner, OR a letter of commitment from a senior level agency or local government official who is authorized to act on behalf of the applicant. If a signed contract is not included, provide an overview of the applicant's procurement process, including steps, required approvals, and an approximate timeline for each step of the process. At a minimum, the Letter of Intent must include the location and estimated capacity of the solar system. If a Power Purchase Agreement is being considered, and an applicant will still be required to go through the procurement process, include a statement that the applicant's electricity price expectations should be available on the open market (and provide the basis for this expectation).

5. For businesses or nonprofit applicant, a copy of an itemized and signed contract or letter of intent between the System Owner and Installing Contractor. At a minimum, the Letter of Intent must include the location and estimated capacity of the solar system. If a state or local government applicant already has a signed contract or letter of intent, it should be submitted also.

6. A system diagram detailing locations, dimensions, and orientations of the system on the property. For solar canopy systems, the system diagram must include dimensions of the parking lot and the Solar Canopy. For floating solar systems, the system diagram must include the dimensions of the body of water, the dimensions of the proposed array, and the proposed anchor points.

7. A site map exhibiting the location of the system on the property (image from Google Earth/Maps © preferred, digital/print photograph is acceptable).

8. Evidence of the Site Owner's control of the project site, preferably in the form of a recorded deed, State Department of Assessment and Taxation (SDAT) printout, or a lease extending at least 20 years after the expected completion date of the solar canopy or floating solar array.

9. Evidence of project finance in the form of a financier's Letter of Commitment or a signed letter confirming the prospective system owner's ability to finance the project on its own.

10. Construction schedule (assuming the Grant is signed on April 1, 2025).

11. IRS Form W-9 for the applicant (organization receiving the grant funding).

12. Solar Production estimate (PVWatts, PVsyst, or other accepted solar estimation program).

13. A basic electrical schematic of the facility's electrical system (a one-line diagram is acceptable) and where/how the solar array connects to it. If the array is part of a community services microgrid plan, provide a separate diagram showing connection to other components of the community services microgrid system.

14. For a purchased system, calculate and provide the simple payback period (show your work). For a 3rd party-owned system, show the cost savings to the site owner over a 25- year period (show your work).

15. For a Community Care or Community Continuity Microgrid, submit calculation of net benefit to Low-and-Moderate Income subscribers (Attachment E)

Submission Instructions:

MEA encourages the use of electronic applications to streamline processing and reduce environmental impacts. If you cannot apply electronically, please contact MEA no

later than seven (7) days prior to the application deadline to identify an alternative method to submit the application.

The application spreadsheet and required documents should be emailed to: solar.mea@maryland.gov.

If specifically authorized by MEA, the applicant should mail the supporting documents to:

Maryland Energy Administration
Attn: Solar Canopy Grant Program
1800 Washington Blvd, Suite 755
Baltimore, MD 21230

Program Changes: Any updated information or correction to an error in the Program information will be available on the Solar Canopy and Dual Use Technology Grant Program webpage. After the application deadline, MEA will also communicate (via email or mail) directly with applicants or grantees, as applicable, regarding updated Program information.

Questions: Questions about the Program can be directed to:

David Comis, Senior Clean Energy Program Manager
Email: David.Comis@Maryland.gov
Phone: 410.537.4064

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FY25 Solar Canopy and Dual Use Technology Grant Program
Appendix 1: Glossary of Terms

Community Care Microgrid Canopies: A solar canopy installed at a community critical infrastructure facility as part of a microgrid to safeguard its operations against power outages and other emergency situations. For the purposes of this grant program, a "critical infrastructure facility" includes one or more of the following: a hospital or other medical facility, potable water delivery and wastewater treatment systems, communications infrastructure (including internet, cellular phone, landline phone, satellite, etc.), or other facility that is necessary for the life, health, and safety of the community.

Community Continuity Microgrid Canopies: A solar canopy installed as part of a microgrid that supports a facility that is necessary for societal continuity and wellbeing (Eligible Facility). Eligible Facilities include grocery stores, hardware stores, pharmacies, vehicle fuel stations and fuel distributors, and others approved by MEA on a case-by-case basis. Preferably a community continuity microgrid system should support more than one Eligible Facility.

Floating solar: A solar array supported by floats, fully resting on a body of water but connected to a land-based electrical grid.

Solar Alternative Compliance Payment (SACP) funding restrictions: State Government Article Section 9-20B-05(i)(2) requires that "compliance fees paid under Section 7-705(b)(2)(i)2 of the Public Utilities Article…may be used only to make loans and grants to support the creation of new solar energy sources in the State that are owned by or directly benefit:

- Low-to moderate-income communities located in a census tract with an average median income at or below 80% of the average median income for the State
- Overburdened or underserved communities, as defined in Section 1-701 of the Environment Article; or
- Households with low to moderate income as defined in Section 2016 of this Title."

Continued on the next page.

Solar canopy: A structure over a parking lot or a parking garage allowing vehicles to park directly under the solar panels. A solar canopy is not the mere placement of solar panels over the existing structural roof of a parking garage[8].

Tier 1 funding restrictions: State Government Article Section 9-20B-05(i)(1) requires that "compliance fees paid under Section 7-705(b) of the Public Utilities Article [except Solar ACP funding discussed below] …may be used only to make loans and grants to support the creation of new Tier 1 renewable energy sources in the State that are owned by or directly benefit:

- Low-to moderate-income communities located in a census tract with an average median income at or below 80% of the average median income for the State; or
- Overburdened or underserved communities, as defined in Section 1-701 of the Environment Article."

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[8] Under rare circumstances, when vehicles may not be allowed to get wet, MEA may allow a light, non-structural structure to be installed between the vehicles and the solar canopy to protect against rain.