



Funding Opportunity Announcement

Higher Education Clean Energy Grant Pilot Program

FY 2025 Grant Program (Rev.1)

Program Description:

The Maryland Energy Administration (MEA) proudly presents the FY2025 Higher Education Clean Energy Grant Pilot Program, aimed at Maryland's Institutions of Higher Education (i.e., accredited two and four year colleges and universities). This **competitive - statewide program** is designed to foster a holistic approach to sustainability by supporting the adoption of on-site renewable energy technologies, the integration of strategic energy planning into operations and academic curricula, and the advancement of workforce development in the renewable energy sector.

The FY25 Program's focus will support the installation of solar panel installations on campuses that complement strategic energy planning, sustainable curricula, and workforce development. The program seeks to create sustainable, energy-efficient campuses that serve as practical learning environments and hubs for renewable energy education and job creation. Projects under this Program should not only contribute to the institution's sustainability goals but also ensure that students are equipped with the skills and knowledge necessary to thrive in the sustainability and renewable energy sectors.

Type of Grant Program: **Competitive - statewide**

Application Deadline: **3:00 P.M. EST, Wednesday, October 30, 2024**

Anticipated Funding: A total of **\$9,200,000** is anticipated to be available from the Strategic Energy Investment Fund ("SEIF"). The amount awarded may be more or less, depending on the quantity and quality of applications received. On average, MEA expects to provide approximately \$1.15 Million per project.

Eligible Applicants: Funding is available to Maryland's Institutions of Higher Education that are accredited by the Middle States Commission on Higher Education (campus" or "campuses." Each Campus, including its satellite locations, may only receive one grant.

Eligible Activities:

Funding is available for Solar Panel Installation and is anticipated to be approximately \$1 Million per eligible applicant. Funding may be used for the installation of roof mounted solar, ground mounted solar, or solar canopies over existing parking lots, parking garages, or other permanent impervious areas (e.g. athletic courts) owned or controlled by a Campus. In addition to the Solar Panel Installation, a Campus shall also develop a comprehensive Campus Clean Energy Master

Plan (“CCEMP”) to identify clear targets for the Campus, per Maryland’s clean energy goals, and define strategies and options available to achieve these targets. Funding to support the CCEMP is anticipated to be approximately up to \$145,000 per eligible applicant. Additionally, a bonus of up to \$5,000 per student intern can be applied to support the cost of utilizing one or more student intern(s) to assist the campus Sustainability and Facilities Offices in completing the plan (maximum of five interns per award).

A Campus may also apply for additional funding under Category 1: Clean Energy Sector Training Programing. Funding is available for this optional category, anticipated to be approximately up to \$145,000 per eligible applicant, for the development of courses to develop a workforce to design, develop and install solar arrays and installations, to include energy storage associated with the installation. A bonus of up to \$5,000 per student intern can be applied to support student intern(s) to assist the campus Sustainability Office and appropriate Academic Department(s) to develop course curriculum based on best practices.

PERIOD OF PERFORMANCE:

Thirty-six (36) months, beginning with the effective date of the executed grant agreement. An extension for good cause may be requested by a grantee and must be justified with written documentation explaining the need for an extension. Extensions are granted by and at the sole discretion of MEA.

SCOPE OF WORK

1) Solar Panel Installation

- Solar purchased by Campus: For the installation of a solar system purchased/owned by the Campus, up to \$2,500/kW of grant funds are available with a cap of \$1,000,000 per project. On a case-by-case basis, MEA may consider increasing the grant to \$3,000/kW with the cap remaining at \$1,000,000 per project when unique circumstances or a compelling reason is specified in the application.
 - To be eligible, applicants must leverage funds from federal incentive programs (or provide a compelling reason to waive this requirement).
 - Leveraging funding from state and local programs will also make an application more competitive.

- 3rd Party-Owned Solar System: For the installation of a 3rd party-owned solar canopy system, up to \$600/kW of grant funds are available, with a cap of \$750,000.
 - To be eligible, a system must be net metered.
 - To be eligible, the 3rd party owner must leverage funds from federal incentive programs.

2) Campus Clean Energy Master Plan

- The scope of this initiative encompasses comprehensive sustainability and

workforce development, including but not limited to, the deployment of renewable energy systems, enhancement of energy efficiency, and facilitation of energy education and job training.

- CCEMPs should focus on integrating renewable energy installations with strategic planning and analysis, aimed at not only reducing the campus carbon footprint but also fostering a skilled workforce in the clean energy sector.
 - CCEMPs should identify impactful projects that synergize with existing campus sustainability plans, expand clean energy installations beyond the Solar Canopy award, and contribute to the state's broader clean energy objectives, with a focus on equitable distribution and effective utilization.
- Collaborative efforts with industry partners for practical training, alongside meticulous energy consumption and economic analyses, are encouraged to ensure the feasibility and success of these initiatives.

3) Category 1 Clean Energy Sector Training Programing

- The scope of this initiative encompasses comprehensive sustainability and workforce development through the integration of renewable energy and sustainability into the curriculum.
- Educational Program Development that is designed to expand and enhance efforts to develop a clean energy ready workforce including but not limited to:
 - Creating a course program (i.e. major, minor, or certificate) for Clean Energy Sector Education and Training
 - Course creation for renewable energy design and installation
 - Integration of energy storage systems in the curriculum.

4) Optional Student Internship Bonus

- Student engagement is encouraged. A bonus of \$5,000 per student intern, may be applied to support the cost of utilizing a student intern(s) to assist in the completion of either the CEMP or Category 1. Each applicant may apply for up to \$25,000 total, to support a maximum of 5 interns.
- The use of student interns is strongly encouraged to support the execution of the Project, as appropriate. Student internships can provide valuable learning opportunities for students. Student interns are required to provide a final report on the tasks they completed relevant to the Project, which should be submitted as part of the final report.
- Student intern(s) must be managed by a staff or faculty member employed by the Campus. The designated supervisor will be responsible for coordinating directly with and ensuring the student intern(s) is effectively supporting the completion of the Project.

● Funding Exclusions

- Activities ineligible for funding include:

- Commissioning reports
- Energy Audits
- Activities lacking a clear link to Greenhouse Gas emission reductions
- Academic Research
- Travel to conferences
- Professional Staffing
- Activities related to the Program already completed

COST AND PERFORMANCE METRICS

MEA will evaluate each complete application received based on the value of the project to the taxpayer, which is determined, in part, by using the Application Review Checklist. Due to the complexity of the selection process, MEA may request additional information after all applications have been submitted to facilitate the evaluation process. MEA reserves the right to adjust project standings to obtain reasonable geographic diversity of projects or to provide a reasonable distribution of projects.

Solar Panel Installation: The primary element for evaluation is the Greenhouse Gas saved per dollar of grant funding. As a proxy, the calculation evaluates the energy generation (kWh) per dollar of grant funding (kWh/\$).

While institutions may apply for additional MEA grant funding under MEA's Solar Canopy Program, the Public Facility Solar Grant Program, and this program, MEA will only issue one award for an individual project.

Campus Clean Energy Master Plan: The primary element for evaluation is a detailed plan that identifies specific and actionable opportunities, for renewable and cleaner energy generation, including the following:

- Identify locations on campus conducive for solar arrays and other renewable energy opportunities;
- Identify opportunities for third-party ownership, for example power purchase agreements (PPAs), that can be used to access distributed energy resources such as solar;
- Identify alternative sources of financing, including federal, state, and local incentives including bonds and leases supported by energy savings;
- Identify opportunities for Energy as a Service (EaaS) agreements;
- Develop plans and procurement options to solicit PPAs.
- Identify ways to increase energy efficiency in building envelopes during renovation and roof projects;
- Make recommendations for consideration of energy efficient equipment in heating, ventilation and air-conditioning replacement projects;
- Develop policies for evaluating energy efficiency during the planning phases of systemic renovation projects; and
- Develop design standards for incorporating energy efficiency into these projects.

Category 1 Clean Energy Sector Training Programing

The primary element for evaluation is the number and types of courses developed and offered to students. The institution must commit to offering the course to students within 2 years of course approval by the institution to receive points.

- Developing a major, minor, or certificate program to enhance Clean Energy Sector Training and/or Education;
- Courses designed to prepare students for NABCEP Associate and various NABCEP certifications
- Courses designed to support students in a renewable energy related apprenticeship programs
- Courses designed to support bachelor and graduate level engineering students (e.g. electrical engineering, systems engineering, or similar) develop skills to design solar panels, inverters, charge controllers, microgrid controllers, etc.)
- Courses designed to prepare students to become solar installers, wind technicians and/or geothermal technicians
- Courses designed to prepare students to become solar system designers (residential, commercial, utility scale)

MINIMUM APPLICATION REQUIREMENTS

A checklist of required documents, as described below, can be found appended to this FOA in "Attachment A: Documents Checklist".

- A signature applied to the application by a Campus officer with the authority to commit the Campus to execute the grant's requirements (e.g. President, Chief Financial Officer, Chief Sustainability Officer, etc.). This individual should have sufficient authority to identify, authorize, and provide the necessary resources to perform the following activities:
 - A system diagram detailing locations, dimensions, and orientations of the proposed system on the property;
 - A site map exhibiting the location of the system on the property;
 - Construction schedule;
 - Output(s) from a Solar Energy Calculator (i.e. [National Renewable Energy Laboratory's \(NREL\) PVWatts Calculator](#), or [PVsyst's Photovoltaic Software](#), or equivalent) document showing expected energy production;
 - 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;
 - *For a purchased system*, calculate and provide the simple payback period. For a 3rd party-owned system, show the cost savings to the site owner over a 15-year period;
 - Develop institutional master plans;
 - Create and implement new programs of study, courses, and certifications;
 - A brief page narrative describing the anticipated scope of work and how this will complement existing campus facilities, utilities, sustainability and/or climate action plan;

- A signed IRS Form W-9;
- A prospective schedule and plan for Campus design and construction of the solar panel system;
- A prospective schedule and plan for Campus Clean Energy Master Plan;
 - including a brief narrative describing how the CCEMP will identify specific and actionable opportunities for renewable energy generation and energy efficiency to reduce the campus' carbon footprint
- A project budget showing full costs and requested funding from MEA. All non-capital costs that may be incurred must be submitted individually with a description of proposed use of the funding request.
 - Applicants must leverage funds from federal incentive programs, including the Inflation Reduction Act's [Direct Pay](#) incentives for clean energy technologies. Leveraging funding from state and local programs will also make an application more competitive. Projects that do not leverage additional federal, state, or local funding sources, must provide a compelling reason to waive this requirement or they will not be eligible to receive an award from this program.
- Consistent with the intent to develop capacity for ongoing efforts, applicants shall identify a Campus staff person who will be responsible for overseeing the continuation of the activities outlined in this grant announcement after the end of the award's period of performance;
- Competitive Procurement Required, if the applicant must conduct a competitive procurement for the project, the Campus must provide documentation showing that it understands the current pricing for a solar canopy, or if a Power Purchase Agreement is contemplated, provide documentation that the Campus believes that a satisfactory PPA rate may be negotiated/achieved. If a PPA is contemplated, a copy of a signed contract or Letter of Intent (LOI) between the Site Owner and System Owner; or
- Non-Competitive Procurement Required If a competitive procurement is not required, provide a LOI between the Campus and the installer (for a purchased system) or a LOI between the institute and the system owner (for a PPA system).
 - The LOI must, at a minimum, include:
 - The all of the documentation required in this FOA to satisfy the minimum application requirements,
 - For systems not requiring a competitive procurement, evidence of project finance in the form of a financier's Letter of Commitment, or a signed letter by the proposed system owner confirming its ability to self-finance the project;

- For a purchased system, calculate and provide the simple payback period. For a 3rd party-owned system, show the cost savings to the site owner over a 15-year period.

COMPETITIVE APPLICATION CRITERIA

Award selection will prioritize campuses that demonstrate the greatest cost-benefit and greenhouse gas (GHG) savings per dollar spent. As a proxy, the calculation evaluates the energy generation (kWh) per dollar of MEA grant funding (kWh/\$). All evaluation criteria will be considered concurrently, with kWh per MEA grant dollars having the highest weight.

Applications will be considered based on all of the following weighted criteria (please see Attachment B: Competitive Documents Checklist):

- Energy generation (kWh) per dollar of MEA grant funding (kWh / \$)
- Justification of how funds will be used to advance or expand activities consistent with the Scope of Work;
- Maximum benefit to Campus and their students (energy reductions, cost savings and leveraging factors). Leveraging factor is the total cost of the project divided by the total grant and loan funds from all sources (including other federal, state, and local incentive programs); and,
- Service and programming for students and communities from designated census tracts, as defined by Maryland's House Bill 550 in the 2023 Acts of Maryland, and identified by the Maryland Department of the Environment as "overburdened," with measurable outcomes.; and,
- Engagement plan demonstrating how students, staff, faculty and the surrounding communities are involved with the solar project, Campus Clean Energy Master Plan and, if applicable, the Clean Energy Sector Training including: communications and opportunities to include the project in educational (curricular or otherwise) activities; and,
- Pursuit of the optional student internship bonus; and,
- Applicant actively teaches (i.e. has offered at least one course in the last four semesters) solar energy courses and would utilize the solar array for educational value ; and,
- Applicant is recognized by the U.S. Department of Education as Minority Serving Institution (MSI).

EVALUATION & RANKING METHODOLOGY

Each application will be evaluated and ranked based on the following methodology. Energy generation (kWh) per dollar of MEA grant funding (kWh / \$) will have the highest weight among

all criteria but will be considered concurrently with other criteria to ensure a comprehensive assessment. Table 1 and Table 2 (pages 7-8) provide the criteria, maximum points available for each criteria, and the weight of each criteria toward the overall score. Attachment C provides an example of how these calculations will be made.

1) Solar Panel Installation & Campus Clean Energy Master Plan

Table 1: Evaluation Criteria for Solar and CCEMP

Scope Component	Description	Evaluation Type: Required or Competitive Criteria	Points	Weight (%)
Solar Panel Installation	All required solar documentation submitted	Required	N/A	
Solar Panel Installation	Project and Construction schedule with estimated timeline to completion	Required	N/A	
Solar Panel Installation	Identification of campus staff person who will be responsible for overseeing the continuation of the activities outlined	Required	N/A	
CCEMP	1 page narrative describing the anticipated scope of work and how this will complement existing campus facilities, utilities, sustainability and/or climate action plan	Required	N/A	
CCEMP	1 page narrative describing how the CCEMP will identify specific and actionable opportunities for renewable energy generation and energy efficiency. and reduce the campus carb footprint	Required	N/A	
CCEMP	Identification of campus staff person who will be responsible for overseeing the continuation of the activities outlined	Required	N/A	
Financing	Project budget showing full costs and requested funding from MEA.	Required	N/A	
Financing	Procurement Strategy documentation	Required	N/A	
Leveraged Funds	Brief narrative description demonstrating how federal incentives will be leveraged and explaining any additional leveraged funding.	Required	N/A	
Cost-Effective Climate Impact	Energy generated per MEA dollar awarded	Competitive	Calculated	65
Engagement Plan	1-2 page engagement plan demonstrating involvement of students, staff, faculty, and surrounding communities in the project and educational activities.	Competitive	0-2	5

Courses	Point awarded for institutions providing documentation to show they are actively teaching solar energy courses	Competitive	0-1	5
MSI	Point awarded if the applicant is recognized by the U.S. Department of Education as a Minority Serving Institution (MSI).	Competitive	0-1	5
Environmental Justice	Consideration of projects benefiting overburdened communities as defined by Maryland's House Bill 550.	Competitive	0-1	5
Justification	Brief narrative description with a justification of how funds will be used to advance or expand activities consistent with the Scope of Work	Competitive	0-1	5
Student Internship Utilization	Bonus points for utilizing student interns in the completion of the CCEMP	Competitive	0-1	5
Category 1 Pursuit	Pursuit of Clean Energy Sector Training Programing Funding	Competitive	0-1	5

2) Evaluation for Clean Energy Sector Training Programing (Optional)

Table 2: Evaluation for Clean Energy Sector Training Programing

Scope Component	Description	Evaluation Type: Required or Competitive Criteria	Points	Weight (%)
Workforce Development Plan	Brief narrative description outlining the development of courses and programs to train students in the clean energy sector, including creating major, minor, or certificate programs. Maximum of 4 points available, 1 point for each novel course or program developed.	Required & Competitive	0-4	25
Educational Program Implementation	Brief narrative description of plan to implement the developed educational programs and ensure their sustainability.	Required & Competitive	0-1	25
Financing	Project budget showing full costs and requested funding from MEA.	Required & Competitive	0-1	25
Student Internship Utilization	Bonus points for utilizing student interns Clean Energy Sector Training Program.	Competitive	0-1	12.5
Justification	Brief narrative description with a justification of how funds will be used to advance or expand activities consistent with the Scope of Work	Competitive	0-1	12.5

DELIVERABLES

The following deliverables are anticipated to document activities conducted during the grant period:

- A grant implementation plan to include the following:
 - Identification of any key Campus position(s) relevant to overseeing activities required by the grant, as well as the role(s) of individuals, consultants, etc. who will be responsible for completing the grant-funded work;
 - Outline of the process, including a timeline, by August 1st, 2025; and
 - Explanation of how funding from this grant will be used to meet the scope and deliverables of this grant award
- Final close-out report outlining progress, identification of next steps occurring after the grant performance period, and a summary of lessons learned and recommended best practices.
- Quarterly progress reports and invoices submitted to MEA.

FUNDING

A total of \$9,200,000 is anticipated to be available for this program. The amount awarded may vary depending on the quantity and quality of applications received.

Project funding is required to be combined with other incentives, including the Inflation Reduction Act's [Direct Pay](#) incentives for clean energy technologies. Projects must leverage federal and utility incentives wherever possible. If applicants cannot leverage federal incentives, applicants must provide a narrative justifying that. Applicants that leverage additional funding will also score more competitively on the highest weighted factor - energy generated per MEA dollar awarded. MEA will not provide grant funds for costs that exceed the project cost minus all incentives.

Participation in MEA grant programs is voluntary. If awarded a grant and to ensure the secure transmission of grant funds, grantee recipients of MEA funding are generally required to receive electronic payments from the State of Maryland. Electronic payments are set up through the State of Maryland's Comptroller's Office. Grantee must fill out and submit the "[ACH/Direct Deposit Authorization for Vendor Payments Form X-10](#)" to the Comptroller's Office via the submission methods outlined on the X-10 form. ACH/Direct Deposit Authorization for Vendor Payment Form X-10 should not be sent to MEA.

Failure to submit ACH/Direct Deposit Authorization Form X-10 may result in award reimbursement being delayed.

If an applicant is unable to receive ACH/Direct Deposit payments, MEA may provide an exception to this requirement on a case-by-case basis, at the sole discretion of MEA.

REVIEW PROCESS:

Applications will be reviewed by a team that may include individuals from MEA and other entities with experience in energy, construction, and capital development. Applications will be reviewed using the evaluation criteria and priority factors outlined in this FOA.

PARTIAL AWARDS:

In general, partial awards are anticipated under this program. Awards will be distributed until funds are exhausted. In the case where the remaining funds are insufficient to fully fund an additional qualified project, a partial award will be offered to the Campus based on budget availability. If the partial award is not accepted, MEA will offer the remaining funding to the remaining approved but unfunded applications.

EQUITABLE FUNDING ACKNOWLEDGMENT AND APPROACH:

MEA recognizes that Higher Education Institutions across Maryland are diverse in their needs, priorities, and financial constraints. Understanding this variability, it is a fundamental objective of the FY25 Program to provide equitable funding opportunities to all Colleges and Universities across the state, regardless of their circumstances.

To this end, MEA is committed to ensuring that the allocation of funds under this Program helps to foster a holistic approach to sustainability by supporting the adoption of on-site renewable energy technologies, the integration of strategic energy planning into operations and academic curricula, and the advancement of workforce development in the renewable energy sector.

To effectively support communities in Maryland that are disproportionately affected by environmental harms, MEA prioritizes equity. This is particularly relevant in the context of delivering benefits from numerous environmental programs. In Maryland, an “Overburdened Community” is defined as any census tract where at least three environmental health indicators are above the 75th percentile statewide, in accordance with the criteria established by Maryland’s Climate Solutions Now Act of 2022 (Ch. 38 of the 2022 Laws of Maryland). MEA aims to use such designations to help guide policy and allocation decisions to promote health and sustainability.

GRANT PROGRAM SPECIFIC PROVISIONS:

Projects that include fossil-fuel or other combustion technologies that produce greenhouse gas emissions are typically not eligible for funding.

- Specific examples of projects that would not be eligible for funding under the Program include:
 - Efforts that expand the use of fossil fuel or natural gas technologies, except where meeting one of the exemptions or those efforts are technically infeasible;
 - Expansion of infrastructure that results in an expansion of fossil fuel delivery volume;
 - New installations of fossil fuel or natural gas fired technologies;

- Projects that result in significant life extension of fossil fuel fired systems, beyond basic health and safety repairs or efforts that enhance efficiency but do not extend the gas system/or fossil fueled fired equipment life. Note: Limited exceptions may be considered where there is no other technically feasible technology or where a source can be demonstrated to be zero emission. Any applications for projects involving fossil fuel should provide evidence that a technical analysis of why electrified or other zero emission alternatives cannot be implemented, this analysis should not be on the basis of operating or capital costs alone.

Exemptions: All exemption requests will be in writing and provide a thorough technical analysis of why electrification and other zero emission technologies cannot be applied from a technical perspective and consider the following:

- Currently available commercialized technologies,
- Ability of locationally specific existing utility infrastructure to support non-fossil fuel applications,
- Thorough evaluation of alternatives,
- Mitigation efforts to offset the greenhouse gas emissions of fossil fuel use,
- A description of any efforts to make infrastructure ready for future technologies, such as green hydrogen, or phase out fossil fueled technology in the future, and
- Statutorily directed activities.

Operating and capital costs alone will not be considered justification for any exemption and exemptions will not be approved purely on cost saving opportunities alone.

GRANT PROGRAM GENERAL PROVISIONS:

MEA grant programs, including pilot programs, are covered by general requirements (“General Provisions”) that will be made part of the grant agreement between MEA and a grantee. The General Provisions are available for review on [MEA’s website](#). These General Provisions, Version 3.0, are incorporated into all MEA FY25 Grant Agreements. In addition to the General Provisions, the following funding qualifications apply to the program:

- Funds may be used for physical construction activities, the purchase of materials, or equipment.
- Funds must be used for additional capacity and may not be used to supplant existing activities, including staffing, systems, and other efforts already implemented or contracted for previously. In the review of grant activities for a grantee, MEA may request documentation to demonstrate that activities are unique and distinct from a Campus’s baseline activities.
- Funding may not be used for activities already completed but may be used to supplement or expand on those activities.
- Under most circumstances, costs a grantee has incurred prior to the effective date of the Grant Agreement are not reimbursable. For good cause shown as determined by MEA, MEA may authorize reimbursement of pre-Grant Agreement costs incurred after notice of the award has been issued. Any such authorization will be valid only if specified in the

Funding Opportunity Announcement or Grant Agreement, or provided separately in writing by MEA.

SUBMISSION INSTRUCTIONS:

Once complete, Application packages should be submitted to [MEA electronically](#) or via email to Schools.MEA@Maryland.gov. Applications submitted to the direct email inbox(es) of MEA employees will not be considered. **All documents must be received by MEA no later than 3:00 P.M. EST, Wednesday, October 30, 2024.** MEA will not accept any application packages after this deadline under any circumstances, and all documents received by the deadline will constitute the entire submission. If electronic submission is not possible, an Applicant should contact MEA via email at Schools.MEA@Maryland.gov or by calling Program Manager Ryan Kmetz at 443-537-8006 no fewer than fourteen (14) days prior to the application deadline to arrange an alternative method of submission.

Electronic Application URL: <https://form.jotform.com/240455223724047>

CONTACT INFORMATION:

For more information or assistance, please visit the [FY25 Higher Education Clean Energy Grant Pilot Program website](#) or contact:

Ryan Kmetz

Program Manager, Schools Decarbonization Program

ryan.kmetz@maryland.gov

ATTACHMENT A: DOCUMENTS CHECKLIST

The following documents are required, as minimum criteria, for all applications to be considered.

1. Signed IRS FORM W9
2. Signed Application
3. Identification of a Campus staff person who will be responsible for overseeing the continuation of the activities outlined in this grant announcement after the end of the grant's period of performance
4. Project budget showing full costs and requested funding from MEA

Solar Panel Installation Supporting Documentation

5. A system diagram detailing locations, dimensions, and orientations of the proposed system on the property
6. A site map exhibiting the location of the system on the property
7. A prospective schedule and plan for Campus design and construction of the solar panel system
8. Output(s) from a Solar Energy Calculator (i.e. [National Renewable Energy Laboratory's \(NREL\) PVWatts Calculator](#), or [PVsyst's Photovoltaic Software](#), or equivalent) document showing expected energy production
9. 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
10. A brief narrative (no more than two pages) describing the anticipated scope of work and how this will complement existing campus facilities, utilities, sustainability and/or climate action plan

Solar Panel System Financial Information

11. For a purchased system, calculate and provide the simple payback period

-OR-

12. For a 3rd party-owned system, show the cost savings to the site owner over a 15-year period

Campus Clean Energy Master Plan Supporting Documentation

13. A prospective schedule and plan for Campus Clean Energy Master Plan
14. A brief narrative (no more than two pages) describing how the CCEMP will identify specific and actionable opportunities for renewable energy generation and energy efficiency to reduce the campus' carbon footprint

Procurement Documentation

15. Competitive Procurement Required

- a. documentation showing that the Campus understands the current pricing for a solar canopy, or if a Power Purchase Agreement is contemplated, provide documentation that the Campus believes that a satisfactory PPA rate may be negotiated/achieved.
- b. If a PPA is contemplated, a copy of a signed contract or Letter of Intent (LOI) between the Site Owner and System Owner

16. Non-Competitive Procurement Required If a competitive procurement is not required, provide a LOI between the Campus and the installer (for a purchased system) or a LOI between the institute and the system owner (for a PPA system).

- a. The LOI must, at a minimum, include:
 - a. All of the documentation required in this FOA to satisfy the minimum application requirements,
 - b. For systems not requiring a competitive procurement, evidence of project finance in the form of a financier's Letter of Commitment, or a signed letter by the proposed system owner confirming its ability to self-finance the project;
 - c. For a purchased system, calculate and provide the simple payback period. For a 3rd party-owned system, show the cost savings to the site owner over a 15-year period.

Clean Energy Workforce Training

(only required if this category is pursued by the applicant)

17. Workforce Development Plan, a brief narrative description, (no more than 2 pages) outlining the development of courses and programs to train students in the clean energy sector, including creating major, minor, or certificate programs.
18. Educational Program Implementation, a brief narrative description (not more than 2 pages) of the plan to implement the developed educational programs and ensure their sustainability.

ATTACHMENT B: COMPETITIVE APPLICATION DOCUMENT CHECKLIST

1. Engagement Plan: Demonstrate how students, staff, faculty, and the surrounding communities are involved with the solar project, Campus Clean Energy Master Plan, and, if applicable, the Clean Energy Sector Training. Include communications and opportunities to integrate the project into educational (curricular or otherwise) activities. Provide a narrative no more than 2 pages.
2. Courses: Documentation to support that the applicant actively teaches (i.e., has offered at least one course in the last four semesters) solar energy courses and would utilize the solar array for educational purposes.
3. Justification of Fund Usage: Briefly explain (no more than one page) how the funds will be used to advance or expand activities consistent with the Scope of Work.
 - a. Benefit to Campus and Students: Briefly explain (no more than one page) how the grant will provide the maximum benefit to the campus and their students, including energy reductions, cost savings, and leveraging factors.
4. Service and Programming for Designated Communities: Explain in a narrative (no more than four pages) and provide details on service and programming for students and overburdened or underserved communities as referenced by Ch. 98 of the 2023 Laws of Maryland, and defined in section 1-701 of the Environment Article of the Maryland Code, with measurable outcomes.
5. Student Internship: Provide a narrative (no more than one page) detailing how the applicant would plan to utilize the student intern(s). Briefly identify their role, their internship supervisor(s), and the department the interns would support.

Attachment C: Example Calculations

Below are two hypothetical applications (A and B) with raw values for the given criteria.

Table A: Example Applications

School	Energy Generated (kWh/\$)	Leveraged Funding (\$)	Engagement Plan	Courses	MSI	Environmental Justice	Scope Justification	Student Interns	Category 1 Pursuit
A	600	300,000	1	1	1	1	1	1	1
B	800	350,000	2	0	0	1	0	1	1

Step 1: Normalize the Calculated Values

- Energy Generated: Min = 600, Max = 800
- Leveraged Funding: Min = 300,000, Max = 350,000
 - **Normalized Value = (Value - Min) / (Max - Min)**

Table B: Normalization

School	Normalized Energy Generated	Normalized Leveraged Funding
A	$(600-600)/(800-600) = 0$	$(300,000-300,000)/(350,000-300,000) = 0$
B	$(800-600)/(800-600) = 1$	$(350,000-300,000)/(350,000-300,000) = 1$

Step 2: Apply Weights

Table C: Weighting Factors

School	Normalized Energy Generated (65%)	Normalized Leveraged Funding (5%)	Engagement Plan (5%)	Courses (5%)	MSI (5%)	Environmental Justice (5%)	Scope Justification (5%)	Student Interns (5%)	Category 1 Pursuit (5%)
A	$0 * 65\% = 0$	$0 * 5\% = 0$	$1/2 * 5\% = 2.5$	$1/1 * 5\% = 5$	$1/1 * 5\% = 5$	$1/1 * 5\% = 5$	$1/1 * 5\% = 5$	$1/1 * 5\% = 5$	$1/1 * 5\% = 5$
B	$1 * 65\% = 65$	$1 * 5\% = 5$	$2/2 * 5\% = 5$	$0/1 * 5\% = 0$	$0/1 * 5\% = 0$	$1/1 * 5\% = 5$	$0/1 * 5\% = 0$	$1/1 * 5\% = 5$	$1/1 * 5\% = 5$

Step 3: Sum the Weighted Scores

Application	Total Weighted Score
A	$0 + 0 + 2.5 + 5 + 5 + 5 + 5 + 5 + 5 = 32.5$
B	$65 + 5 + 5 + 0 + 0 + 5 + 0 + 5 + 5 = 85$

Results

In the above example, School B’s application would be more competitive than School A for the Solar Panel Installation and Campus Clean Energy Master Plan.

Evaluation for Category 1: Clean Energy Sector Training Programing (Optional)

Table D: Application Submissions Scores for Category 1

School	Workforce Development Plan	Educational Program Implementation	Budget	Student Internship	Scope Justification
A	3	1	1	1	1
B	4	1	1	0	1

Step 1: Apply Weights

Table E: Category 1 weighting Factors

School	Workforce Development Plan (25%)	Educational Program Implementation (25%)	Budget (25%)	Student Internship (12.5%)	Scope Justification (12.5%)
A	$3/4 * 25\% = 18.75$	$1/1 * 25\% = 25$	$1/1 * 25\% = 25$	$1/1 * 12.5\% = 12.5$	$1/1 * 12.5\% = 12.5$
B	$4/4 * 25\% = 25$	$1/1 * 25\% = 25$	$1/1 * 25\% = 25$	$0/1 * 12.5\% = 0$	$1/1 * 12.5\% = 12.5$

Step 2: Sum the Weighted Scores

School	Total Weighted Score
A	$18.75 + 25 + 25 + 12.5 + 12.5 = 93.75$
B	$25 + 25 + 25 + 0 + 12.5 = 87.5$

Summary of Scores

Application A (Solar and CCEMP): Total Score = 32.5

Application B (Solar and CCEMP): Total Score = 85

Application A (Clean Energy Sector Training Programing): Total Score = 93.75

Application B (Clean Energy Sector Training Programing): Total Score = 87.5

Application A Final Score = $(32.5 + 93.75) / 2 = 63.125$

Application B Final Score = $(85 + 87.5) / 2 = 86.25$

In this example, Application B would receive funding first based on its higher final score.

Erratum

All errata are indicated by red text, signifying an update. Any deletions are shown with red text and a strikethrough.

Revision 1 (08/27/24)

[Attachment A](#), Pages 16-18: The term "Normalized Leveraged Funding" has been removed from the example, as it is a required aspect, not competitive, and does not carry an associated weight. This correction has led to adjustments in the sample formulas. Additionally, units for "Energy Generated" have been updated for clarity.