Maryland Energy Administration

County-Allocated Competitive Clean Energy Communities
FY2017 Low-to-Moderate Income Grant Program

Application Instructions

Overview

In Fiscal Year 2017, the Maryland Energy Administration (MEA) has approximately $5 million, subject to funding availability, in Clean Energy Communities Low-to-Moderate Income Grant Program (Program) funds (Funds) available through the Strategic Energy Investment Fund (SEIF) for entities that serve Maryland's low-to-moderate income households.

The Clean Energy Communities Low-to-Moderate Income grants will be competitively awarded for energy efficiency projects that generate significant energy savings, with the financial benefits of the energy savings being passed on to Maryland's low-to-moderate income residents. Projects that maximize energy savings and the number of low-to-moderate income residents served will receive grant funding priority.

In order to ensure an equitable distribution of grant funds, Funds are allocated to each Maryland county (or county equivalent) based on the number of low-to-moderate income households residing in the respective county (or county equivalent), with each county allocated a minimum of $50,000. Grants will be awarded competitively within the applicant pool for each county.

The chart below shows each county's allocation of Funds.

County	*Allocation*	*County*	*Allocation*
Allegany	$100,000	Harford	$160,000
Anne Arundel	$300,000	Howard	$130,000
Baltimore City	$940,000	Kent	$50,000
Baltimore County	$640,000	Montgomery	$640,000
Calvert	$50,000	Prince George's	$760,000
Caroline	$50,000	Queen Anne's	$50,000
Carroll	$90,000	St. Mary's	$90,000
Cecil	$110,000	Somerset	$50,000
Charles	$100,000	Talbot	$50,000
Dorchester	$50,000	Washington	$170,000
Frederick	$170,000	Wicomico	$130,000
Garrett	$50,000	Worcester	$50,000

(subject to funding availability)

If MEA does not receive sufficient grant applications in a particular county, MEA may elect to reallocate grant funding to maximize the achievement of the Program goals.

If additional sources of grant funding become available during the fiscal year, MEA may elect to allocate additional funding in a manner that will best achieve the goals of the Program.

General Information

As the county-allocated platform of the 2017 Program is county-based, applications will be evaluated on a county-by-county basis. If an applicant wishes to apply for grants in multiple counties, a SEPARATE grant application must be submitted for each county.

With the exception of the county allocations, MEA has not restricted the number of grants for which an applicant may apply.

Funding from Other Sources

Grants may be made in conjunction with, or in addition to, financial assistance provided through other state, federal, or private programs. In all cases, MEA Funds must supplement, and not supplant, other funding sources. While matching funds are not required, Grantees are encouraged to make a contribution in order to maximize the amount of energy savings achieved through the project. Matching funds may include:

1) Cash
2) In-kind services
3) Equipment, labor, or materials
4) Energy efficiency utility incentives

MEA allows grant applicants to pursue support through any EmPOWER Maryland energy efficiency utility program available in their project location (Utility Incentive Program). These incentives should enable Grantees to expand the size of their respective energy projects, install more energy efficiency measures and/or serve more low-to-moderate income households.

Grantees with Utility Incentive Program funding should note that:

- MEA will only reimburse the Grantee for the allowable cost of approved energy efficiency measures less the amount of the utility efficiency rebate.
- Each Grantee must share incentive information with MEA as part of the grant reporting process. This will enable MEA to ensure that energy savings estimates are not double-counted.

All grant funding leveraged from sources other than MEA, including incentives obtained through participating utility rebate programs, should be summarized in *Section 27: Total Funding Match/Leveraged Funds* of the grant application.

Grant Project Period

MEA anticipates that grant agreements will be available for signature by February 2017**.** For planning purposes, **all construction activities should be completed by April 1, 2018**, with all invoices and project reports submitted to MEA no later than May 1, 2018.

Please note, however, that equipment purchases and project work cannot begin prior to the execution of the grant agreement between the Grantee and MEA.

Eligible Applicants

The following organization types are eligible to receive funding through the FY2017 Program:

- Local governments (counties and/or municipalities)
- Incorporated non-profit organizations

Non-profit organizations must include a description of the organization's mission, purpose, and organizational structure in section 2 of the grant application. Additionally, proof of incorporation should be included as an attachment to the grant application. If an applicant is a non-profit organization and will be using a for-profit entity that has a relationship to the applicant, including but not limited to a past or present business affiliate relationship, the applicant is required to disclose this relationship in the application. Nondisclosure of this information may be grounds for revocation of the grant.

Grant Income Requirements

Funds must be used to fund energy efficiency projects that benefit Maryland's low-to-moderate income population. For the purposes of this application, low and moderate income households are defined as households with total household incomes that are less than 60% and 85%, respectively, of the median income for each Maryland County. Income limits for 2016 can be found on the Maryland Department of Housing and Community Development (DHCD) website; 60% income limits can be found on pages 10 and 11, and 85% income limits can be found on pages 18 and 19.

Examples:

	60% AMI	85% AMI
4 person household in Allegany County	$43,260	$ 61,300
2 person household in Anne Arundel County*	$41,640	$ 59,000

* Anne Arundel County is located in the Baltimore PMSA.

Grant applications must clearly specify how low- or moderate-income Marylanders will benefit from the grant either as participants in the program or as beneficiaries. For instance, a non-profit organization could apply for a grant to make energy efficiency improvements in a senior living facility where residents are responsible for paying utility bills.

As part of Program requirements, Grantees will be responsible for verifying that program participants and/or beneficiaries comply with the established income limits. *Section 40: Eligibility Verification* of the grant application requires applicants to describe the process that the applicant will use to verify that all participants and/or beneficiaries comply with the low-to-moderate income requirements.

Allowable Program Measures

The majority of Funds must be used directly on energy efficiency measures, including the purchase and installation of machinery and/or equipment. A limited amount of grant funding may be used for the costs of technical assessments, licenses, engineering, and/or training, only after written approval by MEA.

Program Restrictions & Limitations

- All projects funded through the Program must comply with the 2015 International Energy Efficiency Code (IECC) code.

- For home energy retrofit projects, but for the HVAC exception noted below, no more than $7,000 per home energy retrofit is reimbursable under the Program. For home energy retrofits necessitating an HVAC upgrade, no more than $10,000 per home energy retrofit is reimbursable under the Program. Note that HVAC upgrades are not allowable in homes that have not been weatherized.

    - For the purposes of this program, an unweatherized home is considered any home to which cost-saving energy efficiency measures could be applied, including air sealing, insulation, and building

envelope improvements. For MEA to consider installation of HVAC equipment as part of this Program, applicants must provide proof of weatherization or propose weatherization as part of the retrofit project.

- For appliance replacements, only ENERGY STAR™ qualified appliances qualify under the Program. MEA will not provide reimbursement for the replacement of any appliance for which the ENERGY STAR qualification is unavailable.
    - Refrigerator replacements -The maximum reimbursable cost per ENERGY STAR refrigerator is $800 under the Program.
    - Water heater replacements - ENERGY STAR qualified heat pump water heaters and natural gas water heater replacements are eligible under the Program. ENERGY STAR no longer qualifies electric tank water heaters and electric instantaneous water heaters. For this reason, electric tank water heater or electric instantaneous water heater replacements are not eligible under the Program.
- For new construction projects, only the incremental purchase cost of upgrading to a higher level of energy efficiency is reimbursable under the Program. For example, MEA will cover the cost of upgrading from a baseline efficiency heat pump (SEER 13) to a higher efficiency heat pump (SEER 14.5+). MEA will not cover the cost of installing energy efficiency measures in new construction projects unless the Grantee can explain why the cost of installing the energy efficiency measure is more expensive than the costs of installing a baseline efficiency measure. Applications for a new construction project should include cost estimates for both the energy efficient technology and the baseline efficiency technology.
- For residentially metered buildings, Grantees should develop projects whose energy conservation measures (ECMs), in aggregate, have a simple payback that is less than 10 years. For commercially metered buildings, Grantees should develop projects with ECMs that, in aggregate, have a simple payback less than 15 years. When a single measure is proposed, it should have a simple payback that is less than the anticipated equipment life.
- The Maryland Strategic Energy Investment Fund (SEIF) Act specifies that low income residents cannot be charged for participation in any program that receives SEIF funding, including any projects receiving grant funds through the Program.
- Renewable energy technologies are not eligible for the Program. See the MEA website for information on programs that provide commercial and residential renewable energy incentives.
- MEA will consider fuel switching only if it can be shown to be cost effective and will result in energy savings.
- MEA encourages all applicants to focus on residential households that are ineligible for assistance through the Weatherization Assistance Program (WAP) or the EmPOWER Maryland Low Income Energy Efficiency Program (LIEEP) run by the Department of Housing and Community Development (DHCD).

Administrative Costs

Administrative costs are capped at a maximum of 10% of the grant award. MEA defines administrative costs to be non-energy related costs required to execute a proposed energy project (e.g., financial staff). If an applicant plans to request administrative costs, the amount of the administrative funds requested must be clearly indicated, with supporting documentation, in *Section 33: Cost Breakdown* of the Program application. In *Section 34: Administrative Costs* of the application, grant applicants should explain how administrative costs will be used in association with their proposed grant project.

Health and Safety Repairs

For projects involving whole home energy retrofits (such as Home Performance with ENERGY STAR projects), non-energy related health and safety repairs that enable energy efficiency upgrades are capped at $1,000 per home. For the purposes of this Program, MEA defines a home as a residential unit that operates with independent systems, including its own HVAC system and kitchen and bath facilities. The cost of the health and safety repairs must be included in the $7,000 per home maximum budget (or $10,000 per home maximum budget for any home receiving an HVAC upgrade). For commercial buildings in which kitchen and bath facilities are shared among multiple residents, non-energy related health and safety repairs are also capped at $1,000 per building.

Grant Evaluation Criteria

For each county, MEA will evaluate applications using four primary criteria:

- **Annual energy savings per dollar of MEA investment**. MEA is looking for projects that maximize potential electricity savings. (While other kinds of energy savings can increase an application's competitiveness, they are not as critical to the application's standing as estimated electricity savings.) If an applicant can access matching funds, the ratio of energy savings to dollar of MEA investment will improve.

- **Impact on Maryland's low-to-moderate income residents**. MEA is looking for projects that maximize the number of low-to-moderate income residents that can be served with Program grant funding. MEA will evaluate this metric based on the number of low-to-moderate income individuals/households that will benefit from Funds over a 15 year period, the standard life of many energy measures.

  Formula: (# of households) * [(# of individuals/household)/(duration in home)] * 15 years

  For example:

  - An upgrade to a homeless shelter that is able to house 5 individuals with most people staying approximately one year will serve an estimated 75 individuals over the life of the project.

    1 household * [(5 individuals/household)/(1 year)] * 15 years =

    75 individuals who benefit over the 15 year period

  - An upgrade to a residential, privately owned home that contains a family of four will benefit four individuals (or 1 household) over the life of the project. It is assumed that the family will not relocate during this timeframe.

    1 household * [(4 individuals/household)/15 years)] * (15 years) =

    4 individuals who benefit over the 15 year period

- **Applicant's willingness and ability to deliver energy upgrades to households that are not eligible for assistance through other channels.** In particular, MEA is looking for applications that propose methods to target households unable to access the Department of Housing and Community Development's Weatherization Assistance Program (WAP) and Maryland Low Income Energy Efficiency Program (LIEPP) programs.

- **Applicant's proposed method of delivery of energy products and services and whether the proposed method will provide the best value to the State of Maryland (State).** The Program is based on the

successful continuation of cost effective energy conservation measures. Thus, MEA will be reviewing applications to assure that methods of delivery will be cost effective and provide the best value to the State.

In addition to the primary criteria shown above, MEA will also consider the following secondary criteria:

- Project feasibility: Can the proposed project be completed in the available construction window?
    a. Can project construction be completed by April 1, 2018 with all invoices submitted to MEA by no later than May 1, 2018?
- Accuracy of energy savings and cost information for the project:
    a. How accurate are the applicant's estimates?
    b. Are assumptions behind the numbers clearly stated in a manner allowing the review team to evaluate the project?
- Applicant's past performance complying with program requirements and participating in other state programs, if applicable.
- Location, as related to the State's Priority Funding Areas[1]. The State gives priority to projects occurring in Priority Funding Areas. According to the Maryland Department of Planning (MDP), Priority Funding Areas are existing communities and places where local governments want State investment to support future growth. The following areas qualify as Priority Funding Areas:
    a. Every municipality, as they existed in 1997
    b. Areas inside the Washington Beltway and the Baltimore Beltway
    c. Areas already designated as enterprise zones, neighborhood revitalization areas, heritage areas and existing industrial land.

Energy Savings Estimates

To be competitive, the application must include detailed energy savings estimates. To simplify energy savings calculations, MEA has developed some simple energy assumptions for residential energy projects using formulas outlined in the Mid-Atlantic Technical Reference Manual (TRM).[2] The residential energy assumptions are outlined on the following pages.

For commercial energy projects and for residential energy measures not quantified in this document, grant applicants can cite alternative sources of energy estimates including, but not limited to, energy audits completed by a qualified auditor, online calculators maintained by the U.S. Department of Energy (DOE), ENERGY STAR calculators, etc.

For all alternative energy savings estimates, please be sure to cite the source of your estimate and provide all necessary back-up documentation (e.g., website URLs, formulas, etc.).

[1] A map of Priority Funding Areas, including a search by address feature, can be found on the MDP website.

[2] MEA's approximations of energy savings below are based on the Mid-Atlantic TRM version 2, version 4 and version 5, which were developed by the Northeast Energy Efficiency Partnership (NEEP) to standardize energy savings assumptions across the Mid-Atlantic region. MEA uses TRM formulas to develop a preliminary estimate of potential energy savings, which allows MEA to make an "apples to apples" comparison of proposed energy measures. If you have alternative energy savings calculations, please include these estimates as well, clearly describing their source.

Residential Energy Assumptions (based on the Mid-Atlantic Technical Reference Manual, versions 2, 4 & 5)

Lighting & Appliance Measures

Replacement of an incandescent bulb with a CFL: ΔkWh/year = 30

Replacement of an incandescent bulb with a Screw Based LED: ΔkWh/year = 93.5

Replacement of an existing refrigerator with an ENERGY STAR refrigerator: ΔkWh/year = 117

Replacement of an existing clothes washer with an ENERGY STAR clothes washer:

a) Using hot water produced by electricity: ΔkWh/year = 153

b) Using hot water produced by natural gas: ΔMMBTU/year = 0.42

c) Using hot water produced by oil: ΔMMBTU/year = 0.05

d) Using hot water produced by propane: ΔMMBTU/year = 0.01

HVAC Measures

Replacement of an existing air conditioning unit with an ENERGY STAR AC unit: ΔkWh/year = 101

Replacement of an air source heat pump with an ENERGY STAR heat pump: ΔkWh/year = 297

Replacement of existing air conditioning with a Ductless Mini-Split heat pump: ΔkWh/year = 1,450

Replacement of an existing natural gas boiler with an ENERGY STAR gas boiler: ΔMMBTU/year = 4.56

Replacement of a gas furnace with an ENERGY STAR condensing gas furnace: ΔMMBTU/year = 8.6

Replacement of an existing room AC unit with an ENERGY STAR room AC unit: ΔkWh/year = 121

Installation of a programmable thermostat (fossil fuel heating savings only)[3]: ΔMMBTU/year = 3.41

Duct sealing – cooling (central AC or heat pump): ΔkWh/year = 212

Duct sealing – heating (electric heat pump): ΔkWh/year = 467

Duct sealing – heating (electric resistance heat): ΔkWh/year = 934

Duct sealing – fossil fuel heating: ΔMMBTU/year = 8.2

Air Sealing Measures

Air sealing – air conditioning savings: ΔkWh/year = 309

Air sealing – heat pump (heat only) savings: ΔkWh/year = 943

Air sealing – electric resistance heat savings: ΔkWh/year = 1888

[3] The TRM does not estimate energy savings associated with the use of programmable thermostats with electrical heating and/or cooling.

Air sealing – fossil fuel heat savings: ΔMMBTU/year = 9.76

Attic/Roof/Ceiling Insulation Measures

Attic/roof/ceiling insulation – air conditioning load savings: ΔkWh/year = 28

Attic/roof/ceiling insulation – electric heat pump load savings: ΔkWh/year = 470

Attic/roof/ceiling insulation – electric resistance heat load savings: ΔkWh/year = 940

Attic/roof/ceiling insulation – fossil fuel heat load savings: ΔMMBTU/year = 4.86

Water Related Measures

Low flow showerhead:

a) In a home with an electric domestic water heater: ΔkWh/year = 168

b) In a home with a fossil fuel domestic water heater: ΔMMBTU/year = 0.75

Faucet aerators:

a) In a home with an electric domestic water heater: ΔkWh/year = 29

b) In a home with a fossil fuel domestic water heater: ΔMMBTU/yr = 0.128

Domestic hot water tank wrap[4]: ΔkWh/year = 79

Domestic hot water pipe insulation:

a) In a home with an electric domestic water heater: ΔkWh/year = 95

b) In a home with a fossil fuel domestic water heater: ΔMMBTU/yr = 0.425

Installation of an ENERGY STAR high efficiency gas storage water heater: ΔMMBTU/year = 3.0

Installation of an ENERGY STAR gas condensing water heater: ΔMMBTU/year = 5.9

Installation of an ENERGY STAR whole home tankless water heater: ΔMMBTU/year = 6.3

Sample Energy Savings Calculation

A sample energy savings calculation using the provided residential energy savings assumptions is shown below. Each grant application should include a similar breakdown of estimated energy savings, by technology, in *Section 29: Annual Energy Savings*. Lengthy calculations can be included as a separate attachment referenced in the application.

Example: A grant applicant proposes to complete three whole home retrofits. All three homes have electric heat pumps. Likely energy measures include air sealing and the installation of 1 low flow showerhead, 2 faucet aerators, and 5 CFLs per home.

For each electric home:

Air sealing – air conditioning savings: ΔkWh/year = 309

Air sealing – heat pump (heat only) savings: ΔkWh/year = 943

[4] In a home containing an electric water heater that is not already well insulated.

Low flow showerhead in a home with an electric water heater:	ΔkWh/year = 168
Faucet aerators in a home with an electric domestic water heater:	ΔkWh/year = 29 * 2 per home
Replacement of an incandescent bulb with a CFL:	ΔkWh/year = 30 * 5 CFLs/home

Total anticipated energy savings per home: (309+943+168+29*2+30*5) = 1,628 kWh/year
Total anticipated energy savings (entire project) = 5 *1628 kWh = 8,140 kWh/year

Application Submission

Please use the grant application entitled "County-Allocated Competitive Clean Energy Communities FY2017 Low-to-Moderate Income Grant Program Application." This document can be found on the Maryland Energy Administration Clean Energy Communities Low-to-Moderate Income Grant Program webpage here. Additional supporting documents should be attached as necessary.

Applications must be submitted to the Maryland Energy Administration as outlined below by **Friday, January 6, 2017.**

For applicants applying for grants in multiple counties, a separate application must be submitted for each county-specific grant. Combined applications for multiple counties will not be evaluated.

Instructions for Submitting Applications:
Applications should be submitted via email to the Maryland Energy Administration at **MEALMI@csra.com.**

All applications should meet the following criteria:

- All files should be saved in PDF format.
- All files should be less than 10 MB in size. Files in excess of 10 MB may not be reliably delivered.
- If you submit your application in parts, please number your email submissions (Part 1 of 3, Part 2 of 3, etc.) so that we can verify that the entire application is received.
- Please be sure to include the name of the County in the email's subject line, followed by your organization's name (for example: "Garrett_Bright Start Foundation"). If you are sending documents in a series of emails, number the emails at the end of each subject line (i.e., "Garrett_Bright Start Foundation 1 of 2," etc.).
- Please be sure to not include any personally identifiable information (PII) in your application.

No applications will be accepted after the deadline.

You should receive an email from MEA's Technical Assistance Team confirming receipt of your application. If you do not receive a confirmation email within an hour of submission, please contact Madeline.Koewler@csra.com to ensure that your application was received.

Grantee Responsibilities

Grant Agreement

Before making project-related purchases or starting work, each Grantee must first have an executed grant agreement with MEA. Depending on available funding levels and the type of measures proposed, grant applications may not be funded exactly as written in the applicant's original proposal. MEA staff will work with the Grantee to develop a mutually agreeable scope of work that will be incorporated into the grant agreement.

Grant Reporting

Grantees are responsible for submitting the following reporting documents to the Maryland Energy Administration as a condition of the grant award:

1) Grant timeline(s)
2) Monthly Grant Progress Reports
3) Monthly Energy Metrics Worksheet (when applicable)
4) Monthly Grant Expenditure Summary Report (when applicable)

Monthly Grant Progress Report
Once the grant agreement has been executed, a Grantee is required to submit a grant progress report each month until all Funds have been expended. Grant progress reports are due to MEA by the 10th of the month following the month covered (for example, the grant report for April 2017 should be submitted to MEA by May 10, 2017).

Monthly Energy Metrics Worksheet
For any month that a Grantee completes the installation of energy measures, the Grantee is required to complete the monthly energy metrics worksheet. The information submitted on this worksheet will enable MEA to estimate the energy savings associated with each project. MEA recommends that each potential Grantee review the attached Monthly Energy Metrics Worksheet to fully understand the energy reporting requirements of this grant program.

Monthly Grant Expenditure Summary Report
For any month in which a Grantee submits a reimbursement request to MEA, the invoice should be accompanied by the Monthly Grant Expenditure Summary Report. This report will detail how the Grantee calculated the reimbursement request.

Grant Invoicing
All Program grants will be distributed through a reimbursement process. The Grantee must provide an invoice, as well as invoice supporting documentation (e.g., copies of receipts and invoices), to MEA in order to receive Funds. Invoices must be submitted to MEA on Grantee letterhead or using the MEA-generated Grantee Invoice Template. The invoice should also list the Grantee's federal tax identification number and MEA grant number. Invoices should accompany the monthly progress report and be submitted by the 10th of the month, with all final invoices submitted no later than May 1, 2018. Once all required invoice and reporting documentation has been received and approved by MEA, Grantees can expect to receive reimbursement in approximately 30 days.

Historic Preservation
In order to comply with the State historic preservation requirements, all buildings (including individual homes) to be updated with a Program grant must first be reviewed to ensure that the proposed grant project will not have any "adverse effects" on a historic property. MEA must have documentation from the Maryland Historical Trust, or other qualified historian or historic organization, showing that the proposed project will not adversely affect historic properties in order to fund a project.

Additional information on the historic preservation review process can be found on the Maryland Historical Trust website.

Liability Insurance
Comprehensive third-party liability insurance, or its equivalent, will be required to be maintained for all work funded by Program Funds. MEA must be named as an additional insured. The insurance provided should protect MEA from bodily injury and property damage, including, but not limited to all workers' compensation insurance, and errors and omissions. All insurance certificates must be maintained in Grantee's files and made available upon MEA request.

Licensing
Grantees must ensure that contractors working on projects funded under this program comply with all necessary state and local licensing requirements, including Maryland Home Improvement Commission (MHIC) licensing, as appropriate.

Procurement
To ensure that Funds are properly used, MEA requests that each potential Grantee provide a brief summary of the organization's procurement policy and/or practices in *Section 38*: *Procurement Policy and/or Practices* of the grant application.

Additional Funds

If your organization has the capacity to deploy additional grant funding that may become available, please so indicate in Section 39 of the grant application. Please note that any additional funding must be used on projects that are consistent with your original grant application.

Grant Conditions

As a condition of the grant award, all grant recipients must agree to not discriminate in any manner against an employee or grant beneficiary because of race, color, religion, creed, age, gender, sexual orientation, marital status, national origin, ancestry, or disability.

Questions

Grant program questions should be directed to MEA Program Managers Rory Spangler, Dean Fisher, Valerie Holmes, or Brandon Bowser at (410) 537-4000.