

Data Center Energy Efficiency Grant Pilot Program Frequently Asked Questions

This document responds to frequently asked questions about the Maryland Energy Administration (MEA) fiscal year 2017 (FY17) Data Center Energy Efficiency Grant Pilot Program (DCEEG). MEA is providing this document to clarify and expand on the [Notice of Availability](#).

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General Questions

1. What is considered a data center?

For the purpose of this program a data center is any physical space, either stand-alone or within a mixed-use facility, used to house information technology equipment, specifically networked computer servers, networking systems, components, and supporting equipment, with a data floor facility size at least 2,000 square feet within a single facility.

Multiple smaller spaces within a single facility (e.g., multiple data rooms within a single standalone facility) that in aggregate are at least 2,000 square feet would be considered an eligible data center. However, a server closet is not considered a data center.

2. What is the program timeline?

- October 2016 - January 2017: The program is open for applications
- February 17, 2017: Applications are due
- March 2017: Award notification announcements are expected
- April 2017: Target timing for Grant Agreements to be executed (Grantees may only commence work after a Grant Agreement has been fully executed with MEA)
- May 2017 – April 2018: Implementation of energy efficiency measures
- May 30, 2018: Deadline for all energy measures to be installed
- June 15, 2018: Final invoices are due to MEA

3. How does the MEA define Power Usage Effectiveness (PUE)?

For the purpose of this program, MEA will define Power Usage Effectiveness (PUE) as the ratio of total facility power to IT equipment power.

$$PUE = \frac{\text{Total Facility Power}}{\text{IT Equipment Power}}$$

MEA considers the total facility power to be the energy that is dedicated solely to the data center (e.g., the energy measured at the utility meter of a dedicated data center facility or at the meter for a data center in a mixed-use facility). MEA considers IT equipment power to be the energy consumed by equipment that is used to manage, process, store, or route data within the computer space. A detailed explanation of PUE can be found at: http://www.thegreengrid.org/~media/WhitePapers/WP49-PUE%20A%20Comprehensive%20Examination%20of%20the%20Metric_v6.pdf

4. Who should be the applicant listed in Section A on the MEA FY17 DCEEG Pilot Program application?

The business owner or authorized representative of the business owner.

5. Will MEA provide technical guidance or recommendations?

Technical assistance to help determine savings or efficiency options is not available from MEA under this grant program. However, general application assistance is available by contacting rory.spangler@maryland.gov. MEA's goal is to respond to all such requests within one business day.

You may also wish to contact your utility to see whether a utility trade ally could offer project development and application assistance.

6. Are there project size limitations associated with this program?

The project must cost at least \$40,000 in order to qualify. There is no limit on project size, although the maximum grant available through this Program is \$200,000 per owner or parent company, subject to funding availability.

7. How is the grant structured and how much money should I plan on spending out of pocket?

MEA grants are designed to reimburse up to 50% of the net customer cost after other incentives and grants have been applied.

For example:

Total project cost: \$50,000

Utility incentives: \$10,000

Customer net cost: \$50,000 - \$10,000 = \$40,000

MEA grant (assumes a 50% grant) = \$40,000 x 50% = \$20,000

Prior to grant payment, a representative from MEA will conduct a post-installation site visit to verify project completion and operation. The grantee may then submit an invoice requesting payment for the grant with the appropriate documentation including all paid invoices or a completed contract with \$0 balance.

8. Can I apply for the MEA grant if I also will be applying for an incentive from my local utility?

Yes.

9. What is the process in awarding grants?

MEA will rank applications and make one of three determinations: approve the project, place the project on a waiting list, or reject the application due to funding limitations or other programmatic constraints.

MEA will communicate with each applicant regarding the project's selection status. If your application is selected for a grant, MEA will send a conditional approval letter with the specific grant amount that has been reserved for the project and the Terms and Conditions that may be specific to each grantee. All grant awards are expressly contingent upon execution of a Grant Agreement between MEA and the selected applicant and completion of the project in accordance with all program requirements.

Program Requirements

10. What are the energy savings requirements for eligible projects?

Projects must be cost effective and reduce existing energy usage. MEA has not defined a minimum energy savings requirement; however, to be considered cost effective a project's lifetime net energy benefits shall be at least equal to or greater than the cost of the project.

MEA may consider the amount of energy savings during application evaluation when ranking eligible applicants.

11. What types of energy efficiency/energy conservation measures are eligible?

Any established, best-practice energy efficiency measure, as determined solely by MEA, will be considered. A list of some potential energy efficiency measures is included in the Grant Program Notice of Availability.

Replacement of failed equipment or equipment deemed by MEA to be nearing the end of average useful life will not be considered an energy efficiency measure.

Specifications for individual electricity efficiency measures must meet all applicable energy code requirements. The proposed equipment must not only meet Maryland's energy code requirements but also the minimum efficiency requirements and standards set by the local utility's rebate program. Fluorescent lighting must be listed on the Consortium for Energy Efficiency (CEE) product list or must meet CEE standards. LED replacements must be listed on the Design Lights Consortium or ENERGY STAR® Qualified Products list. HVAC equipment must meet or exceed the minimum SEER/EER/IEER outlined by your local utility's rebate program and/or comply with the current International Energy Conservation Code.

MEA recognizes that improved system operations can be helpful in achieving energy saving targets. While applications that include operational components as well as traditional technology upgrades are welcome, applicants should be aware that electricity savings from operational changes may be more difficult to quantify than savings from technology upgrades. The burden of proof for the percentage of electricity savings achieved by operational changes rests with the applicant. MEA strongly encourages applicants to provide credible, third-party analysis or documentation to validate estimates of energy savings attributed to operational changes.

12. Is an energy audit or Data Center Profile (DC PRO) Report required?

MEA requires either a Data Center Energy Audit or a DC Profiler report. A DC Profiler Report can be completed at no cost through the US Department of Energy's Center of Expertise for Energy Efficiency in Data Centers (CoE) Additional information can be found here: <https://datacenters.lbl.gov/dcpro>.

13. Must the DC PRO report be completed by an energy auditor?

No. The report can be completed in house by data center staff. The report typically takes 30-90 minutes to

complete. The report can be saved or printed and must be included with your application materials.

14. Is PUE required?

Yes. A PUE estimate may be submitted by completing the PUE Estimator on the CoE website found here: <https://datacenters.lbl.gov/dcpro>. The DC PRO report will include an estimated PUE. If you complete and submit a DC PRO report there is no need to submit an additional PUE report.

15. Where can I apply for utility incentives?

Applicants that are located within a utility service territory with an EmPOWER Incentive program may also apply for funding from [EmPOWER energy savings programs offered through Maryland utilities](#). If the building you wish to upgrade is not eligible for utility incentives because it is located outside the service territory of any of the six EmPOWER Maryland utilities, or the owner/developer does not participate in a utility program, the project is still eligible for a grant under the MEA Data Center Energy Efficiency Grant Pilot Program.

16. If a project doesn't qualify for a utility program, can it still qualify for a grant?

Yes, assuming it meets the MEA program Terms and Conditions.

17. What is required to "showcase" a project?

MEA develops project case studies to share with other businesses and the public at large to demonstrate how energy efficiency can save money and reduce electricity usage. To develop these case studies, MEA may share information that includes such project details as:

- Business name and location
- Business and building type
- Project development process
- Energy conservation measures
- Project costs
- Leveraged funds
- Energy and financial savings
- Simple payback

Subject to the requirements of the Maryland Public Information Act and any other applicable law, MEA and its representatives will not divulge confidential information or trade secrets. Grantees may review and approve photos and video taken of their facility.

18. Who qualifies as authorized signatory for the application?

The authorized signatory is the business owner or representative authorized by the business owner. The application must include owner information that matches its IRS W9 form.

19. How will I know if program Terms and Conditions are changed?

MEA will post any changes on its website.

20. Are applications related to new construction eligible?

No, new construction is not eligible for this program.

21. Are renewable energy projects eligible?

No, renewable energy projects that generate electricity are not eligible. Only measures that reduce electricity use through energy efficiency are eligible.

22. Can a contractor complete an application on behalf of a Maryland customer?

The application must be signed and submitted by the owner or legal representative of the owner. However, a contractor may assist with completing the paperwork and preparing the submission.

23. What is the complete list of all required attachments to the application?

- A copy of the initial utility program application (if applying to local utility program)
- Contractor bid(s)
- Data Center Energy Audit or DC PRO Report
- Power Usage Effectiveness Report or PUE Estimate
- Specification sheets for all proposed equipment
- Most recent (12) consecutive months of electric bills
- Current Certificate of Status provided by the [Maryland State Department of Assessments and Taxation](#)

24. Can I mail a hard copy application?

Yes. However, applicants are encouraged to submit a complete application electronically to DATACENTERS.MEA@Maryland.gov

Eligibility

25. What type of project is eligible for this program?

Please see the answer to question #1. Please note that MEA will only disburse grant funds to the grantee.

Evaluation Criteria

26. Must I leverage utility or other incentive programs?

No, this is not required.

27. How does MEA evaluate project feasibility?

The applicant must submit one or more bids from a qualified contractor with the application, as well as a timeline showing the project can be completed by May 2018.

28. What if I don't have one year's worth of utility bills?

If you do not have these records, your utility history can be obtained from your utility provider. Your utility provider may require you to complete a form in order to obtain that information.

29. How do I quantify cost effectiveness and energy savings?

Cost effectiveness means that the project's lifetime net energy benefits are at least equal to the cost of the project.

MEA will show preference to projects that include a full energy audit report. However, an applicant may still be successful if the application includes the minimum information outlined below.

- **A description of the existing system or equipment that will be modified.** This should include a basic description of the facility and its function, square feet of the facility, type and model of equipment to be replaced, location of affected equipment, and typical facility operating hours.
- **A description of the proposed project.** Attach bid(s) from a contractor for installed cost of measures, and, if available, manufacturer data sheets. Depending on the measure, this includes:
 - The efficiency rating of the measures you wish to install
 - The efficiency rating of the measures you are proposing
 - Operational hours – both before and after the proposed upgrade
 - Number and type of units that are being replaced, and the number and type of upgraded units
- **Detailed project cost and energy savings estimates.** Clearly itemize all costs and assure that project costs include both material and labor. Appropriate documentation will include all math and assumptions, provide sources of projected savings, and enable MEA to properly evaluate the estimates. MEA reserves the right to request additional bids if the installation costs appear disproportionately high or low.

30. How do you calculate simple payback?

“Simple payback” is a calculation of the time it will take to recover the cost of the investment without incentives. It is determined by dividing total project cost by the annual energy savings in dollars. For example: a \$50,000 project saving 400,000 kWh per year at \$0.10 per kWh has a simple payback of 1.25 years ($\$50,000/\$40,000 = 1.25$ years).

31. What if I do not know the PUE of the proposed data center?

Complete the DC PRO Report or the PUE Estimator from the CoE found here:
<https://datacenters.lbl.gov/dcpro>