

2017 Kathleen A. P. Mathias Agriculture Energy Efficiency Program

Program Information and Q&A

[Is this Program for me?
Preparing an Application](#)

[Application Review & Next Steps
Project Compliance](#)

[Is this Program for me?](#)

1) Who is eligible for this Program?

Farms and businesses in the agriculture sector may apply. Examples include, but are not limited to, dairy, orchard, poultry/egg, greenhouse, vegetable, animal, vineyard, grain dryer, processor, sawmill, and aquaculture. If you are uncertain about your eligibility, contact the MEA Program manager, [Dean Fisher](#), or call [EnSave](#), an MEA subcontractor supporting the Program, at (800) 732-1399 for guidance on the eligibility requirements.¹

To be eligible, you will need to implement a project costing at least \$20,000 that either:

- Saves energy through the installation of energy efficiency measures; or,
- Implements renewable energy measures in conjunction with energy efficiency measures.
 - At least 25% of the total award amount for all proposed projects that combine renewable energy and energy efficiency must be for cost-effective energy efficiency measures.
 - When applying for renewable energy projects, it is important to consider your utility's requirements and limitations as well as local laws.

In either case, you must detail your proposed efforts to maximize energy efficiency on the farm or in the agricultural-related business.

2) What types of energy measures are eligible?

The Program provides funding for two types of projects: energy efficiency and energy efficiency with renewable energy.

3) What is meant by energy efficiency or renewable energy?

Energy Efficiency:

Energy efficiency is simply using less energy to perform the same task. Agricultural buildings can become more energy efficient in a variety of ways. One possible energy efficiency measure involves replacing old and inefficient lighting, such as incandescent light bulbs and T12 linear

¹ [EnSave](#), an MEA subcontractor, will provide limited, basic technical support necessary to help identify a proposed project and its potential for savings/generation. The use of the contractor does not guarantee an award, nor does it necessarily advantage an applicant. Each applicant is ultimately and solely responsible for their own application.

fluorescent lamps, with LED, CFL bulbs, or more efficient linear fluorescent lamps (such as T5, or T8 lamps) and fixtures. Installing better insulation, more efficient heating and cooling systems, energy efficient fans, and motor and control upgrades are also potential energy efficiency measures to consider.

Renewable Energy:

Renewable energy includes generating energy on-site through solar, wind, biomass and geothermal resources to power an aspect of your operation. To qualify for a renewable energy incentive, you will also need to implement energy efficiency upgrades. At least 25% of the total award amount for all proposed projects, including renewable energy and energy efficiency must be for cost-effective energy efficiency measures.

4) What is the Program budget?

The total budget for the Program is \$900,000. Of this amount, \$650,000 is available for eligible energy efficiency measures and \$250,000 is available for eligible renewable energy measures.

Please note that MEA is unable to fund energy efficiency measures from the renewable energy budget. Similarly, MEA is unable to fund renewable energy measures from the energy efficiency budget.

5) How are participants selected?

The Program is a competitive grant program. Complete, eligible applications will be evaluated using the criteria outlined in question #12 below.

6) What is the application deadline?

Applications are due on Thursday, December 15, 2016 at 11:59 PM EST. Please see the application for further application instructions.

7) Are energy efficiency new construction projects eligible?

New construction for energy efficiency projects may be eligible for the Program. Incentives are capped at 50% of the incremental costs after available utility rebates (if available) are subtracted. Eligible new construction projects include equipment installed in the following situations:

- A facility where previously no comparable equipment was installed
- An expansion of an existing building
- An entirely new structure

Examples of eligible new construction projects include, but are not limited to:

- Evaporative fan controls for cold storage
- High efficiency scroll compressors
- LED lighting
- High efficiency boiler

8) What is incremental cost?

Incremental cost is the cost difference between the standard efficiency technology and a higher efficiency technology. For example, as part of a larger project, an applicant would like to install a new ENERGY STAR™ rated chest freezer which costs \$1,000. A new standard efficiency chest freezer costs \$800. Therefore, the incremental cost is \$200 and the grant amount available for that measure would be 50% of the incremental cost, or \$100.

9) What size grant awards are available?

Grants are provided at up to 50% of the project cost for energy efficiency measures and up to 25% for renewable energy measures, up to a maximum total grant of \$150,000, inclusive of both energy efficiency and renewable energy measures.

10) If I receive a grant award, how much money should I plan on spending out of pocket?

The Program grant applies to the applicant's net costs, after utility or other incentives. Any additional funding that comes in after selection for the Program must be deducted from the Program project cost or used to enlarge the scope of the energy project.

For example:

- \$60,000 energy efficiency project - \$10,000 utility energy efficiency incentive = \$50,000 project cost
 - For Energy Efficiency Measure: $\$50,000 * 50\% = \$25,000$ out-of-pocket cost
- \$60,000 project consisting of a \$30,000 energy efficiency project and a \$30,000 renewable project with a \$10,000 utility energy efficiency incentive
 - For Energy Efficiency Measure: $\$30,000$ energy efficiency project - $\$10,000$ utility energy efficiency incentive = $(\$20,000 \text{ project cost} * 50\%) = \$10,000$ out-of-pocket (energy efficiency)
 - For Renewable Energy Measure: $\$30,000 * 75\%$ (assumes 25% Program incentive) = $\$22,500$ out-of-pocket cost
 - Total out-of-pocket costs = $\$10,000 + \$22,500 = \$32,500$

11) What is the meaning of; “MEA will highlight these projects as case studies within the agriculture sector”?

The intent of project showcasing is to help other farms and businesses in the agricultural sector see a “real life” example of the energy and money saving potential of energy improvements. Information gathered and shared with others who might benefit from your example would include project details such as:

- Total project cost
- How long it took to install
- The energy savings
- Energy generated
- The simple payback
- The leveraged funds

We may provide this information on MEA's web site and/or use your project as the subject of a case study for a newsletter, video, or other marketing vehicle.

MEA also will need to perform monitoring visits to provide technical assistance and ensure the project requirements are fully satisfied (see “Who will be visiting my farm or business?” below). Beyond the requirements outlined above, you will NOT need to open your farm/business to allow individuals to view and inspect your project(s).

12) How will projects be selected?

These evaluation criteria will be considered in the selection of projects for grant funding:

- Project feasibility – Can the project be completed in the available construction window (by April 1, 2018)?
- Cost effectiveness – Will the energy improvements, in aggregate, pay for themselves within the expected lifetime of the equipment? Does the project provide significant energy savings (and generation if applicable) compared to the cost of the project? What is the energy savings (and generation if applicable) per MEA dollars spent on the project? The maximum payback for measures in aggregate is **15 years**.
- Deep retrofit approach – Does the project include multiple energy efficiency measures that achieve more than 20% savings for the individual building or facility as a whole?
- Energy benefits – What are the likely energy benefits (kWh reduced, kWh generated, etc.) from the proposed measures? Do the anticipated energy benefits represent a significant percentage of the energy used within the building?
- Percent of total energy saved per measure -- Projects saving a higher percentage of the facility energy use will be evaluated more favorably.
- Percent of total energy saved and/or generated within each building – Priority will be given to projects that reduce electricity use via efficiency gains or through a combination of efficiency and renewable energy. Projects saving a higher percentage of their energy use will also be evaluated more favorably. Because the Program’s focus is electricity reduction, proposals that add load to the grid will be given the least consideration.
- Amount of matching (leveraged) funds – Is the applicant tapping additional non-MEA funding sources to maximize the value of this grant?
- Accuracy of energy savings and cost information for the project – Are the assumptions behind the numbers clearly stated to enable the Program team to evaluate the project (i.e., detailed bids, equipment make and model numbers, efficiency ratings, operational schedules)? MEA’s technical assistance contractor is available to assist you with your application at no cost to you.
- Best practices/showcase project – MEA is looking for projects that demonstrate energy efficiency and renewable energy best practices in order to expand both energy efficiency and renewable energy in the agriculture sector—and show other farm-related businesses how much energy and money can be saved through various measures.
 - For any renewable energy projects, it is important to note the following important information on your application:
 - Solar PV (factor in orientation, location, and siting—i.e., avoiding usable farmland)
 - Methane digester (is the fuel on site? How much can it burn?)
 - Wood boilers (is the fuel on site? How much can it burn?)

MEA reserves the right to select applications that allow for a broad diversity in the project portfolio. Factors such as measure type, geographic region and agricultural market will be considered.

13) What are some examples of strong and weak project proposals?

Strong:

Deep retrofit energy efficiency proposals, which require saving at least 20% of existing energy use

- Dairy farm variable speed drive, energy efficient lighting, and scroll compressor (demonstrating a comprehensive approach to energy efficiency by installing several projects)

Renewable energy proposals in conjunction with energy efficiency

- Installation of insulation, LED lighting, radiant-tube heating, and energy efficient ventilation in a poultry house and a PV array to offset the electricity requirements of the building

Weak:

- Dairy farm energy efficient lighting (when opportunity exists for a more comprehensive project)
- Request for funding for renewable energy technology without substantial project plan to increase energy efficiency

14) Is installation labor eligible as a grant expense?

Yes. Installation labor must be completed by individuals holding all necessary certifications and licenses. All work must comply with applicable codes, laws and regulations.

Preparing an Application

15) I want to take advantage of this opportunity, but I am not an energy expert and am not sure how to figure out my savings or efficiency options. Where can I get help?

You have the option of contacting MEA’s technical assistance sub-contractor [EnSave](#) at 800-732-1399 for application or technical assistance. [EnSave](#) is available on a limited basis to assist you with determining whether your proposed project will potentially meet the Program’s requirements. Applicants are encouraged to request assistance early in the application cycle. Each applicant is ultimately and solely responsible for their own application, and any reliance on advice from the MEA contractor is at the applicant’s sole discretion. If you utilize EnSave as a resource for technical assistance, you must provide them with all of the necessary information at least two weeks prior to the application deadline.

Before calling EnSave, potential applicants will be expected to:

- Identify at least one potential project (preferably more than one)
- Have an estimate of project costs
- Review this Q&A document thoroughly
- Have energy usage information for the previous year

Accuracy is very important to the review team, as we will only have your application and supporting documentation to use in evaluating the merits of your project during the competitive review. Whether you use the available MEA contractor or any other source of assistance with figuring your proposed project savings, it is important that you are able to clearly show how you derived your savings/generation estimates.

16) What does “accuracy” mean when it comes to preparing my application?

The review team will use the following energy-related metrics to evaluate your application:

- Amount of energy savings (provide total current and proposed energy use for the building in which the project will take place)
- Amount of anticipated generation from proposed installation(s)
- Type of measure (including the make and model numbers in your application is strongly advised)
- Simple payback (specify energy savings of project, total project cost, and cost per unit of energy as reflected in your utility bills)

To help you provide the best possible information, below, we offer some examples of less and more accurate data for some key application questions.

Section B, Question 2 of Application: Existing Equipment Description

Less Accurate: Description of location and number and type of existing lighting fixtures

More Accurate: Description of location and number and type of existing lighting fixtures PLUS operating schedule of lighting and wattage

Section B, Question 3: Describe the Proposed Project

Less Accurate: Description of lighting replacement (100 12-watt LEDs) and motor replacement (horsepower)

More Accurate: Description of lighting replacement PLUS make and model number and a specification sheet from the manufacturer; motor replacement with decreased running time, model number, and a specification sheet from the manufacturer.

Section D: Estimated Project Costs and Savings

Applicants must submit an itemized bid from one or more contractors for all project-related work, including both equipment and labor.

Less Accurate: Stating project cost and savings without documentation or without taking advantage of available technical assistance to arrive at the energy savings will result in an incomplete application. (If you found equipment costs in a catalog or online, include that information in your application so we can validate the information.)

More Accurate: Providing a detailed bid that includes labor and materials as well as an accompanying estimate of energy savings on a measure by measure basis. Also, request assistance with estimating energy savings if you are unable to provide an accurate estimate of the energy savings. Assistance can be through EnSave, the available MEA contractor, or through any other source that can help you clearly and accurately state the estimated savings associated with your proposed project.

17) Do I need an audit to apply?

Submission of an energy audit report with your application confers an advantage. However, if you are able to adequately document how your proposed measures achieve the estimated savings, the project may still be eligible for funding. At a minimum, you will need to know how much energy the building uses annually (this could be based on one year's bills), how much energy the equipment uses that you would like to replace, and how much energy the planned replacement would use. The MEA has structured the application to capture this information.

18) 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 provide that information to you.

If the building is being repurposed for alternative use or has been unoccupied, an applicant can create a baseline of energy assuming that installed systems meet current [Maryland building codes](#). One year's

worth of utility bills or the above stated equivalent must be provided with the application.

19) Can I change my projects after I submit the application?

You may not change your project after submitting your application unless otherwise authorized by MEA.

Application Review & Next Steps

20) What happens after I submit my application?

The Program team will review your application and make recommendations for grant award based on the competitive evaluation criteria outlined above. If necessary, MEA may contact you with questions regarding your application.

21) What is the process after applications have been selected?

MEA will send out letters informing all applicants of their project's status.

For projects selected for grant award, the letter:

- Explains the next steps in calculating energy savings;
- May ask you to re-solicit bids for your project (to ensure the bid amount is still the same); and
- Provides instructions about meeting various preliminary project requirements within a prescribed time window.

Note: Due to budgeting constraints or program design, grant selections may not be funded exactly as written in the Grantee'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.

Applicants selected for an award will need to enter into a grant agreement with MEA before commencement of construction or receipt of award payment. When energy savings are verified, a viable bid is secured, and the preliminary requirements are met, MEA will issue the award, provide a grant agreement for signature, and formally approve the project. ***You must not sign a contract with a bidder, purchase equipment or start work until you have received final approval to proceed. Doing so will jeopardize your grant award.***

22) Who will be visiting my farm or business?

MEA or its contractors may visit your site to perform a post-installation site inspection of your project, or to install data loggers needed for measurement and verification activities. During a typical visit, program managers will check for compliance, and photos may be taken for use in promotional materials to showcase your energy project.

Prior to visiting your farm or business, MEA and/or MEA's contractors will first call to make an appointment. Both MEA and its contractors will heed safety and/or biosecurity requirements. Participation in the Program requires you to grant MEA and/or its representative(s) permission to use photos or video of your farm or facility, as well as data presented in your final energy evaluation for marketing, publicity, and advertising purposes. Subject to the requirements of the Maryland Public Information Act, § 10-611 et seq. of the State Government Article, MEA and its representatives will not divulge any confidential information or trade secrets. You have the right to review and approve any photos or video taken of your facility.

23) Can I install my projects incrementally?

While it is permissible to install your projects incrementally, grantees receive payment only after installation and MEA inspection of all approved measures. Renewable energy projects can only be invoiced after energy efficiency projects have been installed and invoiced.

Project Compliance

24) If my project is selected, what are the compliance requirements?

- Businesses must be in good standing in the State of Maryland. For Certificate of Status information please see the [Maryland State Department of Assessments and Taxation](#) webpage.
- Historic review exemption must be secured through the Maryland Historic Trust. MEA will facilitate this review on behalf of successful applicants.
- You must have a current Nutrient Management Plan (NMP) and have submitted the Annual Implementation Report (AIR) to Maryland Department of Agriculture (MDA).
- All people performing work on your grant project must have third party insurance naming MEA as an additional insured.
- An authorized signatory for the applicant business must sign the application.
- Work performed or materials purchased before you have received a copy of your executed grant (signed by both parties) are not eligible for reimbursement.
- **All reimbursements will be paid in arrears.** Payment will be approved only after MEA has determined the project has been installed satisfactorily to the grant's terms and conditions.
- All grantees will be expected to submit progress reports on a monthly basis.
- You must be able to clearly state your process for procuring equipment and services to execute your project.
- For renewable energy projects:
 - All projects must be installed and operated in compliance with the requirements of local and county codes, as well as with applicable requirements of the National Electrical Code (NEC).
 - Any solar photovoltaic (PV) system hardware must be in compliance with all applicable performance and safety standards including: Underwriters Laboratories (UL) 1741, Standard for Static Inverters or equivalent and Charge Controllers for Use in Photovoltaic Systems or equivalent and UL 1703 or equivalent, and Standard for Safety: Flat-Plate Photovoltaic Modules and Panel. In addition, each system must be installed in a manner that is compliant with the with the *Institute of Electrical and Electronics Engineers (IEEE) Standard 929-2000, Recommended Practice for Utility Interface of Photovoltaic Systems*.
 - All renewable energy projects must be installed in a manner that is compliant with the net metering regulations outlined in the Code of Maryland Regulations (COMAR) 20.50.10 et seq., as well as the requirements of the local electric utility and Authority Having Jurisdiction.
 - Only net metered solar PV projects will be considered for this opportunity.
 - Projects on contiguous parcels of property will be considered one project.
- If selected for a grant award, please note that a decision to not install one or more of the proposed energy measures may impact MEA's ability to fund the entire project.