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**2015 Kathleen A. P. Mathias Agriculture Energy Efficiency Program**

**Application Information Q&A**

[**Is this program for me?**](#programforme)

[**Preparing an Application**](#preparingapplication)

[**Application Review & Next Steps**](#applicationreview)

[**Project Compliance**](#projectcompliance)

**Is this program for me?**

1. **Who is eligible for this program?**

Farms and businesses in the agriculture sector may apply. Examples include 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](mailto:dean.fisher@maryland.gov), or call [EnSave](http://www.ensave.com/contact/), an MEA subcontractor supporting the Mathias Agriculture program, at (800) 732-1399 for guidance on the eligibility requirements.[[1]](#footnote-1)

To be eligible, you will need to implement a project costing at least $30,000 that either:

1. Saves energy through the installation of energy efficiency measures or
2. Implements renewable energy measures in conjunction with energy efficiency measures.

In either case, you must detail your proposed efforts to maximize energy efficiency on the farm.

1. **What is meant by energy efficiency or renewable energy?**

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

Energy Efficiency:

* Energy efficiency is simply using less energy to perform the same duty. Agriculture buildings can become more energy efficient in a variety of ways. Some examples include replacing old and inefficient lighting, such as incandescent light bulbs and T12 linear fluorescent lamps, with LED, CFL bulbs, or more efficient linear fluorescent lamps (such as T5, or T8 lamps) and fixtures. Installing better insulation in farm buildings, more efficient heating and cooling systems, energy efficient fans, and motor and control upgrades are also good measures to consider. Your equipment vendor can also assist you with choosing appropriate measures for your operation, and EnSave can briefly assess whether a project is appropriate for your site.

Renewable Energy:

* Renewable energy includes generating energy on-site—such as wind, solar PV, solar thermal, geothermal and biomass to power an aspect of your operation. To qualify for a renewable energy incentive, you will also need to implement energy efficiency upgrades.

1. **What are some examples of strong and weak project proposals?**

**Strong:**

Enhanced energy efficiency proposal

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

Renewable energy proposal 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.

1. **What is the grant amount?**

Grants are provided at up to 50% of the project cost, up to a maximum grant of $60,000.

The minimum project cost is $30,000, meaning the minimum grant, without any additional leveraged funds, would be $15,000. There is no maximum project size, although the maximum grant amount is $60,000.

1. **If I receive a grant award, how much money should I plan on spending out of pocket?**

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

For example:

* + $60,000 project - $10,000 utility incentive = $50,000 project cost
    - $50,000 – $25,000 (assume 50% Mathias Ag Program rebate) = $25,000 out-of-pocket cost

1. **What does “MEA will highlight these projects as case studies within the agriculture sector” mean?**

The intent of the project showcasing is to help other farms and businesses like yours 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:

* + - How much it 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 success story for a newsletter, video, or other marketing vehicle.

MEA also will need to perform monitoring visit(s) 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).

1. **How will projects be selected?**

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

* Project feasibility – Can the project be completed in the available construction window (by November 1, 2015)?
* 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?
* Deep retrofit approach – Does the project include multiple energy efficiency measures? If it is a renewable project, are energy efficiency projects included in the application?
* 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?
* Simple payback – How many years will it take to recover the cost of the investment without incentives from MEA or other sources? (Project cost divided by annual energy savings in dollars. For example, a project saving 400,000 kWh per year at $0.10 per kWh and a $50,000 project cost has a simple payback of 1.25 years: $50,000/$40,000=1.25)
* 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 Mathias Ag Program team to evaluate the project (i.e., detailed bids, equipment make and model numbers, efficiency ratings, operational schedules)?
* 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 what can be done. MEA is interested in projects that showcase the following types of energy measures:
  + Whole building weatherization
  + Efficient lighting
  + Motor efficiency upgrades
  + Wind (consider capacity factor)
  + Biomass (location and access to wood/fuel)
  + Solar PV (factoring in orientation, location, and siting—i .e., not on usable farmland)
  + Methane digester (is the fuel on site? How much can it burn?)

MEA also 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.

**Preparing an Application**

1. **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](http://www.ensave.com/contact/) at 800-732-1399 for application or technical assistance. [EnSave](http://www.ensave.com/contact/) 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.

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.

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.

1. **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, we offer here 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***

*Less Accurate: Applicants must submit an itemized bid from one or more contractors for all project-related work, including both equipment and labor. 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. Also, provide an estimation of the labor time involved to install the measure(s).*

*More Accurate: Request assistance with estimating 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. For the cost estimate, provide a bid that includes both labor and materials.*

1. **I only have one meter for my entire operation. How do I figure out the energy used in the building containing my project?**

You can divide your use by the number or buildings it serves, provide an audit, or use the MEA contractor, EnSave, to help you determine this. However you choose to make this estimate, it is important to clearly document how you did so for the application.

1. **How are renewable energy projects incorporated into this program?**

Funding is available for renewable energy projects such as such as wind, solar PV, solar thermal, geothermal and biomass. To receive funding for a renewable energy project, you will need to include energy efficiency measures in your application. If you are unsure if a particular technology is potentially eligible for funding through the Mathias Ag Program, please contact Program Manager [Dean Fisher](mailto:dean.fisher@maryland.gov) or MEA’s subcontractor for this program, [EnSave](http://www.ensave.com/contact/).

1. **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 would 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.

1. **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 code](http://energy.maryland.gov/codes/).

**Application Review & Next Steps**

1. **What happens after I submit my application?**

The Mathias Ag Program team will review your application. For each application, we will make one of three determinations:

1. Provisionally accept your project, and require additional information to calculate the energy savings.
2. Place your project on a waiting list in the event another provisionally selected project does not proceed as anticipated.
3. Reject your project if it falls outside the program design criteria.
4. **What is the process after applications have been selected?**

MEA will send out letters informing all applicants if their project was selected, rejected, or placed on the waiting list. For selected projects, 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);
  + Provides instructions about meeting various preliminary project requirements within a prescribed time window.

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.***

1. **Will I be informed if my project is rejected?**

Yes, MEA will contact all applicants letting them know their project’s selection status.

1. **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 efficiency 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 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.

**Project Compliance**

1. **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](http://www.dat.state.md.us/) 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 work 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 and Charge Controllers for Use in Photovoltaic Systems and UL 1703, 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.

1. [*EnSave*](http://www.ensave.com/contact/)*, 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.* [↑](#footnote-ref-1)