

## 2023 Guidelines

# ON-FARM ENERGY EFFICIENCY INCENTIVES



*The **On-Farm Energy Efficiency Incentives Program** provides funding for Kentucky farm families to increase the energy efficiency of existing equipment or facilities.*

*The Kentucky Agricultural Development Fund is dedicated to helping Kentucky agriculture become more sustainable and profitable for generations to come by supporting this program. Direct questions concerning these guidelines to the Kentucky Office of Agricultural Policy at (502) 573-0282 or [KOAP@ky.gov](mailto:KOAP@ky.gov).*

## A. Application Submission

1. All applications (including energy audit) must be submitted to the Kentucky Office of Agricultural Policy no later than close of business one of the following dates:
  - April 28, 2023
  - August 25, 2023
  - December 22, 2023
2. Submit the original & one (1) copy to the Kentucky Office of Agricultural Policy.  
*Please do not submit application in any type of binding.*  
*Faxed or emailed copies will not be accepted.*
3. This is a competitive program. All complete applications received by each deadline will be scored, ranked and presented 60 days after the deadline. Incomplete applications will be held for consideration during the next funding cycle, provided the application is complete and funding is available.
4. Grants are dependent on the availability of funds. If more applications are eligible for funding than there are funds available, then awards will be made according to application scores in descending order, until all funds are expended.
5. Eligible expenses are retroactive based on the following deadlines:
  - April 28, 2023 - retroactive to August 26, 2022
  - August 25, 2023 - retroactive to December 16, 2022
  - December 22, 2023 - retroactive to April 28, 2023
6. A third-party audit by an approved professional engineer or certified energy manager is required with the application. *For assistance, contact KOAP at [KOAP@ky.gov](mailto:KOAP@ky.gov) or 502-573-0282.*
7. Applicants are eligible for reimbursement up to \$150 for a third-party audit.  
*This is in addition to the funds awarded for the energy project.*  
  
*Example: Eligible funds for \$10,000 on \$20,000 project plus \$150 audit fee\* with proof of payment = \$10,150 \*Eligible audit fees require proof of payment*

## B. Producer Eligibility

1. Only one individual per household may apply for the On-Farm Energy funds within a program year.
2. Applicants must receive either at least \$25,000 in Gross Farm Income (GFI) or 20% of gross income from farming for the previous two years, calculated by dividing the GFI amount found on the Schedule F by the Adjusted Gross Income amount found on the Form 1040.

### C. Funding Limitations

1. Annual Maximum: Applicants will be limited to 50% reimbursement for the eligible expenditures not to exceed \$10,000 within program year, plus an additional \$150 for energy audit.
2. No more than 50% of the funds for this project may come from KADF grants, including county cost-share funds.
3. Applicants previously approved for the KADF On-Farm Energy Incentives Program shall complete the previous project before submitting a new application for consideration.
4. Projects totaling more than \$50,000 are required to provide documentation of funding sources.

### D. Eligible Investments & Exclusions

1. Eligible items will be restricted to components and investments used solely to replace existing equipment and technology for the benefit of farming operations located in Kentucky. (See Appendix A for a listing of eligible items)
2. A project must show a reduction or offset (i.e. solar projects) in energy consumption (BTUs) to receive funding.
3. Project size is reported as purchase price before trade-ins, down payments, grants, and the KADF energy audit.
4. Projects shall have a payback of less than 25 years and applications must score at or above 25 points to be eligible for funding. If a portion of the project is not completed, then the remaining portion submitted for reimbursement still must meet these requirements. If not, funds will not be disbursed.
5. Payback calculation for the purposes of this program is the purchase price divided by energy savings before all other incentives.
6. Improvements to personal residences, non-farm commercial property, and any other non-farm structures are not eligible.
7. Solar projects require at least 50 percent of energy usage to be for the farming operation. The actual percentage of energy determined to benefit the farming operation will be the basis to determine eligible project costs. A separate meter is encouraged, but not required.
8. Tractors, motorized vehicles, and other equipment with internal combustion engines are excluded from this program with the exception of stationary power units.
9. Reimbursements for purchases, including labor, from the producer's immediate family (e.g. father/mother, son/daughter, brother/sister, aunt/uncle, niece/nephew), including in-laws and step family, are not eligible.

### E. Post Approval Requirements & Deadlines

1. Approved applicants will be required to provide a detailed listing and verification of all expenditures related to the approved project. The following documents shall be submitted: invoices, receipts and evidence of payment (i.e. cancelled check, credit statement, lending documents), as well as Project Itemization Form.

**Completion Deadlines:** Projects approved for funding must be completed and all required documentation for reimbursement must be returned to the Kentucky Office of Agricultural Policy no later than one year from the execution date of the legal agreement.

## APPENDIX A: Eligible Cost-Share Items

### A. Equipment Upgrades

1. New installation of, or conversion to, energy efficient grain drying systems with suggested improvements such as:
  - a. Addition of recirculation of cooling section exhaust air
  - b. New dryers with increased column width
  - c. Implementation of dryeration
  - d. Addition of in-bin cooling

*Moisture content evaluation based on past operating expenses and production records*
2. New installation of, or conversion to, energy efficient poultry systems, including:
  - a. Insulate ceiling or sidewalls
  - b. Electronic heating/ventilation controls
  - c. Attic inlets; tunnel inlet doors
  - d. Mixing fans
  - e. Radiant heaters
  - f. Energy efficient lights
3. New installation of, or conversion to, energy efficient dairy systems, including:
  - a. Milk cooler tank and milk precooler
  - b. Automatic milker takeoffs
  - c. Variable speed drives for vacuum pumps
  - d. Heat recovery from refrigeration equipment
  - e. Scroll compressor / energy efficient refrigeration unit
4. Timers for tractor engine block heaters
5. Energy free or low energy waterers
6. NEMA labeled premium efficiency motors
7. Low pressure irrigation systems, conversion from sprinkler to drip irrigation, or variable frequency drives for well pumps
8. Renovation expenditures recommended by an energy audit may be considered
9. Installation expenses of above items when performed by a hired contractor and documented by invoices and cancelled checks

### B. Energy Efficient Building Components & Renewable Energy Projects

1. Energy Star, CFL, Cold Cathode, T-5, T-8, LED, or High Intensity Discharge (HID) lights and lighting fixtures
2. Insulation
3. Programmable thermostats and controllers
4. High Volume Low Speed (HVLS) fans, energy efficient Low Volume High Speed Exhaust or Circulation fans (The BESS lab at the University of Illinois rates exhaust fans)
5. Energy Star windows, doors, skylights, roofing, or other Energy Star building components
6. Cool Roof system

## B. Energy Efficient Building Components & Renewable Energy Project (cont.)

7. Tankless, solar, or water heaters with a thermal efficiency of at least 90%
8. EPA approved biomass fired boilers, hydronic furnaces, heaters and stoves  
Must replace an existing system
9. Renovation expenditures recommended by an energy audit may be considered
10. Installation expenses of above items when performed by a hired contractor and documented by invoices and cancelled checks
11. Solar powered watering system for agricultural use. Documentation from a third-party service provider, verifying water use, is required with the application
12. Equipment, structures or other supplies necessary to harness available solar to offset agriculture related energy expenses, including solar meter for agriculture purposes. Documentation of interconnection agreement for rural electric company is required

## APPENDIX B: Approved Resource List

### External Link Disclaimer Statement

No endorsement is intended or made of any hypertext link, product, service, or information either by its inclusion or exclusion from this page or site. While all attempts are made to insure the correctness and suitability of information under our control and to correct any errors brought to our attention, no representation or guarantee can be made as to the correctness or suitability of that information or any linked information presented, referenced, or implied.

All critical information should be independently verified. Any questions should be directed to the administrator(s) of the specific sites.

### A. Approved Energy Auditors

#### University of Kentucky, Biosystems & Agricultural Engineering Dept.

[www.uky.edu/bae](http://www.uky.edu/bae)

Doug Overhults, (270) 365-7541 ext. 21329

[doug.overhults@uky.edu](mailto:doug.overhults@uky.edu)

Sam McNeill, (270) 365-7541 ext. 21326

[Sam.mcneill@uky.edu](mailto:Sam.mcneill@uky.edu)

#### Apogee Climate & Energy Transitions

[www.apogeeclimate.org](http://www.apogeeclimate.org)

Andy McDonald, MSc, CEM; (502) 699-2553

[andyboeke@yahoo.com](mailto:andyboeke@yahoo.com)

*Other professional engineers or certified public energy managers may be considered upon request.*



### B. Funding Agencies

#### USDA Rural Development

[www.rd.usda.gov/ky](http://www.rd.usda.gov/ky)

Scott Maas, (859) 224-7319

[scott.maas@ky.usda.gov](mailto:scott.maas@ky.usda.gov)

#### USDA Natural Resources Conservation Service (NRCS)

[www.ky.nrcs.usda.gov](http://www.ky.nrcs.usda.gov)

Deena Wheby, (859) 224-7403

[deena.wheby@ky.usda.gov](mailto:deena.wheby@ky.usda.gov)

#### Kentucky Highlands Investment Corporation

[www.khic.org](http://www.khic.org)

(606) 864-5175, (606) 864-5194

#### Mountain Association

<http://mtassociation.org/energy>

Carrie Ray, (859) 671-0217, (859)-544-0023

[carrie@mtassociation.org](mailto:carrie@mtassociation.org)