2025 CAIP Incentive Area Guidelines: ON-FARM ENERGY



These guidelines represent one of 11 incentive areas within the **County Agricultural Incentives Program (CAIP)** to provide Kentucky agricultural producers cost-share assistance on practices that increase net farm income and opportunities to try new/innovative technologies or systems that improve farm efficiency and productivity.

Funded participants shall adhere to all local, state, and federal rules and regulations.

Incentive Area Prerequisites

- Applicants are required to provide a detailed listing and verification of all expenditures related to this
 incentive area. In addition to the normal documentation, the applicant may be required to provide model
 and serial numbers for all relevant components, as well as further explanation of the energy related
 benefits of the incentive.
- The local Administrative Entity in consultation with KOAP Staff has the discretion to disqualify the reimbursement of expenditures not explicitly listed above or for items determined to provide no energy savings.
- Dairy applicants shall be permitted by the Kentucky Milk Safety Branch.

Incentive Area Limitations

- Eligible items will be restricted to components of buildings used solely for farming purposes.
- Improvements to personal residences, non-farm commercial property, and any other non-farm structures are not eligible.
- Tractors, motorized vehicles, and other equipment with internal combustion engines are excluded from this incentive area.
- **Beginning in 2010**, all transport equipment was removed as eligible cost-share items from all incentive areas. This exclusion includes trailers, wagons, and carts with the primary function of transportation.

A. Upgrades to all Applicable Farms

- 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 75%
 - b. New dryers with increased column width 75%
 - c. Implementation of dryeration 75%
 - d. Addition of in-bin cooling 75%
- 2. Milk cooler tank and milk pre-cooler 75%
- 3. Automatic milker takeoffs 75%
- 4. Variable speed drives for vacuum pumps 75%
- 5. Heat recovery from refrigeration equipment 50%
- 6. Scroll compressor 75%
- 7. Timers for tractor engine block heaters 50%
- 8. Energy free or low energy waterers 75%
- 9. NEMA labeled Premium Efficiency motors 50%
- 10. Generator **50%**

Effective: January 1, 2025

- 11. Low pressure irrigation systems, conversion from Sprinkler to Drip irrigation, or Variable Frequency Drives for well pumps 75%
- 12. Renovation expenditures recommended by a previously completed energy audit or energy assessment may be considered 75%
- 13. Installation expenses of above items when performed by a hired contractor and documented by invoices and cancelled checks (this percentage will match the chosen project's percentage)

B. Energy Efficient Building Components & Renewable Energy Projects

- 1. *Energy Star*, CFL, Cold Cathode, T-8, T-5, LED, or High Intensity Discharge (HID) lights and lighting fixtures 50%
- 2. Insulation 50%
- 3. Programmable thermostats and controllers 50%
- 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) 50%
- 5. Energy Star windows, doors, skylights, roofing, or other Energy Star building components 50%
- 6. Cool Roof system 50%
- 7. Tankless, solar, or water heaters with a thermal efficiency of at least 90% 75%
- 8. EPA approved waste oil or biomass fired boilers, hydronic furnaces, heaters, and stoves 50%
- 9. Renovation expenditures recommended by a previously completed energy audit or energy assessment may be considered 75%
- 10. Installation expenses of above items when performed by a hired contractor and documented by invoices and cancelled checks (this percentage will match the chosen project's percentage)
- 11. Solar powered watering system for agricultural use. Documentation from a third-party service provider, verifying water use, is required with application. **75%**
- 12. Equipment, structure, or other supplies necessary to harness available solar 75%

C. Professional Fees and Training

- 1. Documented expenses not covered by other programs for the completion of an on-farm energy audit or assessment 75%
- Third party professional fees associated with the completion of a grant application within a United States Department of Agriculture, United States Department of Energy, or other non Kentucky Agricultural Development Fund program related to on-farm energy efficiency or renewable energy production. 75%
 - Executive Summary of completed application and verification of its submission to the appropriate program must be submitted with documented expenses. **75%**
- 3. Third party professional fees for environmental, technical, geological, biological, engineering, and chemical consultation associated with the development of projects in the area of On-Farm Energy Efficiency and Production. 75%
- 4. Registration fees for the attendance of workshops and conferences focusing on the area of On-Farm Energy Efficiency and Production. **75**%

<u>IMPORTANT:</u> Applicants with projects requiring over \$50,000 in expenditures or projects likely to be submitted for consideration for federal programs, should consider requesting funds for a professional energy audit. Eligibility criteria for other federal programs will likely have more stringent requirements. Resumes confirming the qualifications of all third party professionals listed above and performing services for a fee must be attached with submission of the documented expenditures.

D. Biomass Energy Crop Production

- 1. Seed, rootstock, or other plant material used to establish a dedicated biomass energy crop 75%
- 2. Specialized equipment, structures, and other supplies not currently owned by the applicant that are essential for the production, harvesting, and or transportation of biomass energy crops (excluding trailers and wagons) 75%
- 3. Hired services needed for the production, harvesting, and/or transportation of biomass energy crops 75%

<u>IMPORTANT:</u> Only farm level costs for projects under the supervision of Universities or other entities conducting valid research, demonstrating production techniques, or utilizing the biomass crops for energy production will be considered.

E. Equipment and Infrastructure for On-Farm Energy Production

- 1. Equipment, structures, or other supplies necessary to convert animal waste into useable energy 75%
- 2. Equipment, structures, or other supplies necessary to connect an on-farm electric power generator fueled by renewable fuels to the electric power utility's distribution system 75%
- 3. Equipment, structures, or other supplies necessary to retrofit existing oil or gas wells to which the farmer/applicant owns the mineral rights and can utilize the fuel within their farming operation 75%
- 4. Equipment, structures, or other supplies necessary to convert biomass crops into useable energy 75%
- Equipment, structures, or other supplies necessary to convert grains and oilseeds into ethanol or biodiesel 75%
- 6. Fuel testing services and kits needed to monitor fuel quality 50%
- 7. Equipment, structures, or other supplies necessary to harness available solar, wind, geothermal, or other renewable sources of energy **75%**

<u>IMPORTANT:</u> Due to the array of local, state, and federal taxes, any fuels produced on the farm with assistance through this program cannot be utilized as transportation fuels for highway use. Applicants are encouraged to review all manufacturers' warranties and specifications before using the fuels in any equipment.