

May 2005

**Producer:**

**Date:**

**Watershed:**

**Farm Identification:**

This guidance sheet is to be used with the Conservation Security Program (CSP) where a baseline energy self-assessment is being performed to document qualification for Energy Use Reduction enhancement payments. It contains the deliverables required to establish a baseline level of energy consumption for computing energy use reduction payment under CSP as well as other important program requirements and definitions. A baseline energy self-assessment may be used in lieu of the Comprehensive Energy Audit to calculate on-farm energy use reduction; however, the baseline self-assessment will not qualify for an Energy Audit enhancement payment.

**Deliverable:** A baseline energy assessment can be accomplished through a producer self-assessment. This baseline can be used to calculate on-farm energy use reduction. The baseline self-assessment will not qualify for an Energy Audit enhancement payment.

**Baseline energy assessment:** The minimum requirement to qualify for the Energy Use Reduction enhancement payment is the baseline energy assessment. Documentation shall include seasonal and annual records of metered electricity, natural gas, propane or other fuel used for stationary equipment. A list of proposed energy saving activities and anticipated energy savings due to conservation actions or equipment modifications are also required. The producer (farmer or rancher) should consider activities to reduce energy usage for items such as:

- Lights
- Fans
- Stationary Engines
- Pumps – vacuum pumps
- Hot water
- Fans
- Heating/Cooling Systems
- Drying systems
- Refrigeration
- Miscellaneous (e.g., electric Fences, livestock water heaters)

**Record Keeping:** If the producer chooses to implement recommendations from the baseline energy self-assessment to earn an enhancement payment for Energy Use Reduction, it is the responsibility of the producer, or his agents to maintain records which document energy use. Records include:

- Utility and/or fuel purchase bills

- Quantities and sources of energy applied;
- Dates (month and year) documenting energy use.
- Methods of energy use
- Actions taken to improve energy efficiency
- Removal or addition of energy use components to the farm or ranch.

**Key Definitions:**

- Energy: Fuels (purchased propane, diesel and natural gas) and electricity used to perform stationary farm and ranch activities. This definition includes on-site renewable energy sources.
- Energy Management: Optimization of energy use on farms and ranches to minimize energy consumption.
- Certified Energy Auditor: A person who has the technical qualifications to perform an agricultural energy audit. In most cases a Certified Energy Auditor will be a professional engineer.
- Energy Source: The type of fuel (liquid or gas), electricity or on-site renewable power used to perform farm and ranch activities.
- Current Energy Usage: The annual and seasonal usage, as appropriate, of grid electricity and/or natural gas and purchased fuels (liquid or gas) for stationary farm or ranch operations.

**Additional Guidance**

On-farm energy use must be converted to a common unit of energy (Btu) for the purpose of recording the baseline energy use and calculating energy use reduction. The Btu Conversion Calculator can be used to perform these energy use conversions.

**Producer Acknowledgement:**

I agree to maintain energy records, and to perform a baseline self-assessment as described above as indicated in the Conservation Security Program contract.

**Client:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Listed below are some example components to consider for typical individual on-farm or ranch activities. You may have others for your specific location and operation:

a. Irrigation

- Pumps
- Stationary Motors (all types)
- Miscellaneous

b. Grain Drying

- Stationary Motors
- Fans
- Heating Systems
- Type of Drying System
  - Batch Drying
  - Continuous Flow Drying
- Miscellaneous

c. Animal Housing and Processing

- Lighting
- Heating/Cooling – including insulation type and amount
- Ventilation
- Stationary Motors
- Pumps
- Refrigeration
- Hot water heaters
- Miscellaneous – cleaning systems

d. Other Farm Buildings excluding homestead:

- Lighting
- Heating/cooling systems
- Miscellaneous

e. Greenhouses

- Lighting
- Heating
- Ventilation
- Pumps
- Stationary Motors
- Miscellaneous

f. Animal Waste collection

- Pumps
- Stationary Motors
- Lighting
- Miscellaneous – Methane Digesters