

United States Department of Agriculture Natural Resources Conservation Service



Delaware

**ENERGY MANAGEMENT (CSP Enhancements)
Delaware Enhancement Activity Job Sheet E-8**

January 2005

Name:

Energy Use Reduction

Payment = \$100.00 for 5% reduction; \$200.00 for 10% reduction; \$500.00 for 20% reduction.

Energy Use Reduction (5%, 10%, & 20%)

Energy consumption in agriculture grew steadily during the 1960s and 1970s, peaking in 1978, due to increased mechanization, use of confinement housing and expanding farm size. High energy prices during the 1970s and 1990s caused farmers and ranchers to find ways to reduce their energy costs—agricultural consumption was reduced by 41 percent from 1978 to 1998. This was primarily accomplished by reducing energy use or taking actions to use energy more efficiently while still achieving the same outcome. The following are examples of ways energy use was reduced (not including modifying tillage operations and fertilizer use):

- Switching from gasoline powered to more fuel efficient diesel powered engines

- Shifting to larger multiprocessor machines

- Using energy saving methods for drying and irrigating crops

- Replacing old machinery with more energy-efficient equipment

- Using new seed varieties to reduce energy-intensive chemical requirements

- Insulating farm buildings

- Using energy efficient irrigation systems

Opportunities for energy conservation are available in almost every application or operation on the farm or ranch. Energy conservation can be achieved from simple management changes, such as shifting energy consuming irrigation to hours of low evapotranspiration or conscientiously completing scheduled maintenance so that systems work at optimal levels¹.

The advantages of energy conservation include reducing air pollutants, reducing global greenhouse gas emissions, reducing dependence on petroleum based products, and slowing escalation of energy costs due to lower demand. The USDA is promoting energy efficiency and conservation through the CSP so that farmers and ranchers can effectively respond to energy price and availability

fluctuations and achieve environmental benefits.

The CSP provides an annual payment for energy reduction to applicants who enroll in the program. The payment is based on reduction rates of 5 percent, 10 percent, and 20 percent of total British Thermal Units (Btu's)² consumed on the farm or ranch. A companion Job Sheet, "Btu Conversion Charts," also is available from NRCS field offices to assist with converting a variety of energy measurement units into Btu's.

Energy Use Reduction

Date	Rolling 5 year average energy use	Verified By:

Documentation Required: Receipts documenting the rolling 5-year average for energy use reduction expressed as Btu's.

Certification

I certify that I have installed/performed the enhancements listed in the Table above.

Name: _____ Date: _____

NRCS
New Castle Agricultural Center
2430 Old County Road
Newark, Delaware 19702
Phone: 302-832-3100

NRCS
Kent County Agricultural Center
800 Bay Road
Suite #2
Dover, Delaware 19901-4667
Phone: 302-741-2600

NRCS
Sussex County Agricultural Center
408 North Dupont Highway
Suite C
Georgetown, Delaware 19947
Phone: 302-856-3990

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's [TARGET Center](#) at 202-720-2600 (voice and TDD).

To file a complaint of discrimination write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.