

**Energy Efficiency and Energy Generation through  
Conservation Security Program**  
**Sign-up available March 28-May 27, 2005**

In order to receive payments for on-farm energy activities a farmer must first have at least 50% of their total agricultural operation in the Sauk, Root, Red Eye, Red Lake, Redwood or the Blue Earth Watersheds to begin the enrollment process for CSP and meet the CSP program entry requirements for soil and water quality. A CSP Self-Assessment Work can help an interested producer determine eligibility. Workbooks are available at local NRCS offices or for download at, [www.csp.sc.egov.usda.gov](http://www.csp.sc.egov.usda.gov)

Once enrolled applicants are eligible to receive payments for on-farm energy activities, documentation is required for each activity relating to energy.

Eligible Energy Practices

- Energy Audit of Agriculture Operations
- Recycle 100% of On-Farm Lubricants
- Purchase of Renewable Fuel
- Renewable Energy Generation
- Energy Use Reduction
- Reduced Tillage
- Use of Manure and Legumes to Meet Crop Nutrient Needs

Energy Audit

An energy audit is the first step in determining which steps need to be taken on the farm to reduce energy use. A professional contractor or utility must perform an energy audit. Farmers will need to provide a payment of the receipt in order to receive the CSP enhancement payment.

**Eligible payment for energy audit: \$500 per audit**

Recycle 100 of On-Farm Lubricants

Farm lubricants that qualify under this practice are: oils, fluids or gases including mineral-based oils, synthetic oils, or semi-synthetic oils. Examples of uses for farm lubricants are most oil for tractors and lubricating oil for other farm equipment such as irrigation pumps or grain drying equipment. Lubricants must be recycled through a recycling company or

depot. Burning is only allowed when performed in a furnace that has been certified by EPA to meet or exceed all emission standards. A receipt is required from the recycling company prior to payment in CSP.

**Eligible payment for farm lubricant recycling: \$200 per year**

Renewable Fuel Purchase

Farmers are encouraged to reduce petroleum use on the farm by increasing the use of renewable fuels (ethanol and biodiesel). Payments are made on a per 100 gallon renewable fuel use scale. Local NRCS offices have an accompanying Job Sheet, "Renewable Fuel Records," to assist producers in tracking fuel use and blended fuel. Conversions are available for blended fuel to correspond with CSP payment rates. Receipts documenting the annual purchase of renewable fuel are required for payment.

**Eligible payment for renewable fuel use: \$25 per 100 gallons of fuel used**

Renewable Energy Generation

On-farm energy generation provides farmers with an opportunity to cut costs further after energy efficiency has been put in place. Qualifying technologies for payments under CSP include: wind, biomass, biogas, solar, hydropower and geothermal. Payments are made based on per 100-kilowatt hours of electricity produced. Local electric utility or State Public Utilities Commission must document amount of electricity produced.

**Eligible payment for renewable energy generation: \$2.50 for every 100-kilowatt hour produced**

Energy Use Reduction

After an energy audit is conducted, the farm can begin by putting energy saving measures in place. For every increment of energy reduced on a 5, 10 or 20 percent basis the NRCS will make an enhancement payment under CSP. Examples of energy saving measures can include, but are not limited to: Maintain, replace and clean barn fans

- Insulate farm buildings
- Monitor and clean thermostats
- Regular maintenance of farm heating system
- Switch irrigation systems for optimal energy efficiency
- Seal leaks and clean screens for maximum use in grain drying

Payments are based on reduced BTU (British Thermal Unit) measurements. Local NRCS offices have worksheets available to convert energy measurements to BTU's. Farms will need to document average annual energy reduction compared to baseline energy use to qualify for a payment.

**Eligible payment for reduced energy use: 5% energy reduction in total BTU's = \$100**  
**10% energy reduction in total BTU's = \$200**  
**20% energy reduction in total BTU's = \$500**

### Reduced Tillage

Tillage reduction is based on the location of the cropland and the Crop Management System for the farm acres and is calculated on a STIR (Soil Tillage Intensity Rating). A low STIR rating will indicate less soil disturbance whereas a high STIR rating indicates greater soil disturbance. STIR ratings are determined by the number of ground disturbing tillage passes made per acre, operating speed of tillage, equipment, tillage type, tillage depth and the percent of surface area disturbed. In order to receive an enhancement payment for reduced tillage a farm must calculate its STIR rating use RUSLE2 software available at the local farm service agency.

**Eligible payment for reduced tillage: STIR rating less than 60 = .50 cents/acre**  
**STIR rating less than 30 = .70 cents/acre**  
**STIR rating less than 15 = .90 cents/acre**

### Use of Manure and Legumes to Meet Crop Nutrient Needs

Farms can greatly reduce energy use by reducing the amount of commercial nitrogen fertilizers applied to fields. Farmers can use livestock manure, legumes, green leaf manures, cover crops, nutrient conserving crops or smother crops to meet nutrient needs of field crops. When applying manure in place of commercial nitrogen fertilizer it is required that application rates of manure be applied at appropriate agronomic rates to prevent over application. A farmer or a crop consultant is required to certify nutrient rates for enrolled acres.

**Eligible payment for use of manure and legumes: Perennial legumes = .70 cents/acre**  
**Annual legumes = .10 cents/acre**  
**Manure to supply**  
**90% of crop**  
**nutrient needs = \$1.10/acre**

### More information

NRCS detailed CSP energy enhancement information:

<http://www.nrcs.usda.gov/programs/csp/cspenergy05.html>

For specific program eligibility requirements or to enroll, contact local NRCS office

Information related to energy enhancement payments through CSP, contact Amanda Bilek, the Minnesota Project, 651-645-6159 x.5, [abilek@mnproject.org](mailto:abilek@mnproject.org),  
[www.mnproject.org/csp](http://www.mnproject.org/csp)