



2017 AGRICULTURAL INCENTIVES



Energy Efficient



Environmentally Responsible



Cost Effective



ADDING VALUE TO YOUR ELECTRIC SERVICE



Maquoketa Valley Electric Cooperative

Your Touchstone Energy® Cooperative

FANS

VENTILATION & CIRCULATION

Farm animals require ventilation and air movement for comfort and productivity year round. Incentives are available for high efficiency systems that could help save energy costs of up to 30 percent a year.

Ventilation and Circulation Fans

The operating costs of a ventilation system will depend on the efficiency of the equipment, configuration of the fans, proper installation and control over the amount of airflow.

Ventilation Fans (fan blade diameter) \$3/inch

Ventilation Thermostat Controller with Humidistat \$25 each

Circulation Fans (fan blade diameter) \$1/inch

Ventilation Fan Efficiency Requirements

(must be BESS Labs rated at 0.10 in. static pressure)

14-23 inch - min. 10.5 CFM/Watt

24-35 inch - min. 13.0 CFM/Watt

36-47 inch - min. 16.5 CFM/Watt

48-49 inch - min. 18.5 CFM/Watt

≥ 50 inch - min. 19.5 CFM/Watt

Circulation Fan Efficiency Requirements

(must be BESS Labs rated at thrust/kW requirements)

12-23 inch - min. 11.0 lbs. thrust/kW

24-35 inch - min. 15.0 lbs. thrust/kW

36-47 inch - min. 18.5 lbs. thrust/kW

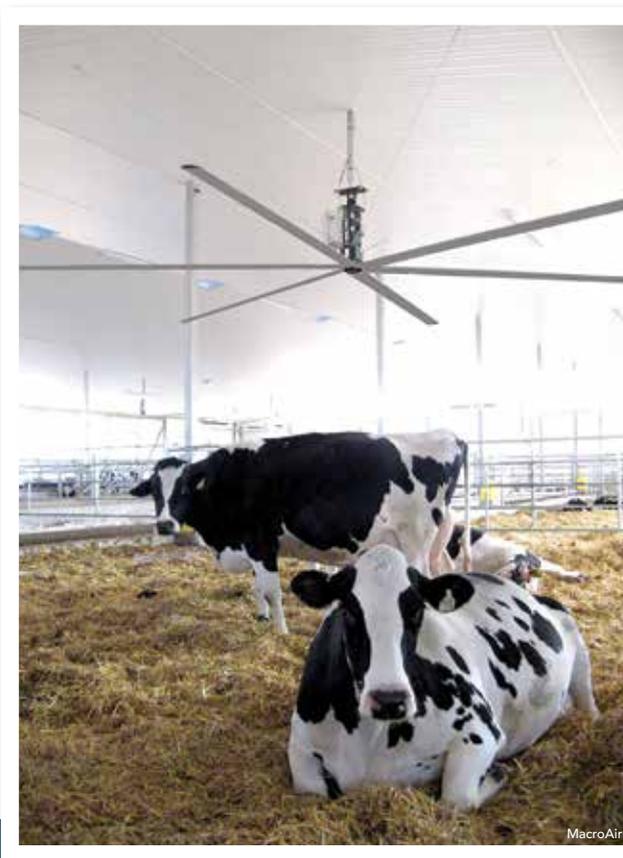
48-52 inch - min. 23.0 lbs. thrust/kW

Incentives are limited to \$5,000 per account for all ventilation and circulation equipment.

HIGH VOLUME LOW SPEED FANS

One 24-foot HVLS fan can move the same amount of air as six 48-inch high-speed box fans and uses significantly less energy.

High Volume Low Speed Fans (minimum 10' diameter) \$35/ft. (fan blade diameter)



“ A 24-foot HVLS fan will move as much air as six standard industrial high-speed fans and consume only one-sixth the energy. In a typical dairy free stall barn, HVLS fans are placed over the feed alley every 35-60 feet, depending on the fan size. – ProgressiveDairy.com



FOR MORE INFORMATION VISIT

ENERGY STAR®
www.energystar.gov

DesignLights Consortium®
www.designlights.org

Iowa State Extension
www.extension.iastate.edu

Iowa Energy Center
www.iowaenergycenter.org

For more energy saving opportunities, contact your cooperative about the residential and commercial incentives available.



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Anamosa, IA 52205

(800) 927-6068

www.mvec.coop

This institution is an equal opportunity provider and employer.

DAIRY



Contact your cooperative for the complete list of incentive programs and qualifications.

DAIRY OPERATIONS

Energy-efficient equipment and technologies can go a long way in helping to reduce energy expenses and improve productivity.

DAIRY HEAT RECLAIMERS

Heat reclaimers can reduce water-heating energy usage by 60 to 80 percent by recovering the heat discharged from dairy refrigeration equipment.

DAIRY HEAT RECLAIMERS

\$5 per milking cow

DAIRY MILK PRE-COOLERS

Reducing the temperature of milk before it enters the bulk tank with "pre-coolers" helps to reduce the refrigeration system energy costs by 20 to 30 percent.

DAIRY MILK PRE-COOLERS

\$4 per milking cow

ROBOTIC MILKING

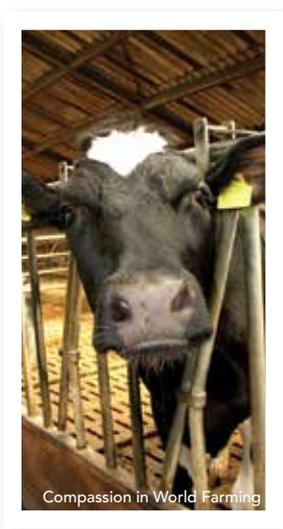
Benefits of robotic milking typically include: improved cow health, shorter calving intervals and reduced feed and labor costs.

Robotic Milking \$2,000 each

VARIABLE SPEED DAIRY VACUUM PUMPS

Standard motors and pumps often only have two speeds, full power or completely off. Variable speed drives (VSDs) used with dairy vacuum systems can save considerable energy on farms. Utilizing VSDs can reduce electricity use by as much as 60 percent.

VSD Vacuum Pumps \$40/horsepower



DAIRY SCROLL COMPRESSOR

Refrigeration systems with scroll compressors are 15 to 20 percent more efficient than traditional reciprocating compressor systems.

Scroll Compressors \$250 each
(must replace reciprocating compressor)

LIVESTOCK EQUIPMENT

Livestock Waterers

Most of the energy used by a heated livestock waterer is used to keep the water from freezing. Incentives are available for efficient waterers with tanks constructed of plastic, a minimum of 2 inches of insulation and lid covers.

Electric Heated Livestock Waterers \$50 each
(≤ 175W per trough opening)

Farrowing Equipment

Efficient heating lamps, pads and controllers help reduce energy use and improve animal health.

Heat Lamps \$3/lamp
(≤ 175W, replacement of 250W lamp)
Single Crate Heating Pads (≤ 85W) \$25/single pad
Double Crate Heating Pads (≤ 170W) \$50/double pad
Heat Lamp or Pad Controller \$50/controller

LIGHTING

Energy-efficient lighting technologies can reduce operating costs and provide lower fixed costs through fewer replacements.

ALL BUILDINGS

Indoor Lighting

ENERGY STAR® or DesignLights Qualified LED Lamps
Screw-based, ≥ 8W \$4/lamp

Occupancy Sensors \$15 each

ENERGY STAR or DesignLights Qualified LED Fixtures (non-troffer type)
8-49W \$15/fixture
50-99W \$25/fixture
≥ 100W \$40/fixture

LED High Bay and LED Troffer Fixtures Contact Your Co-op

Outdoor Security Lighting

ENERGY STAR or DesignLights Qualified LED Fixtures
20-34W \$15/fixture
35-49W \$20/fixture
50-74W \$40/fixture
75-124W \$50/fixture
≥ 125W \$60/fixture

Incentive Details

Maximum incentive is 50 percent of installed costs. Custom incentives may be available; contact your cooperative for further details.

EXISTING BUILDINGS

Indoor Lighting

Linear Lamp Replacements (4' Troffer Fixtures)

Reduced Wattage T8* \$2/lamp

*Must be on the Consortium for Energy Efficiency's Qualifying Product List

LED Tubes - Replacing T12 or T8** \$3/lamp

**DesignLights Qualified

High Bay Fluorescent Fixtures (4' T8/T5, 15' mount height)

Replacement of HID fixtures \$12/lamp

Replacement of Non-HID fixtures \$6/lamp

NEW BUILDINGS OR ADDITIONS

Indoor Lighting

High Bay Fluorescent Fixtures \$6/lamp

(4' T8/T5, 15' mount height)

WHY ENERGY STAR OR DESIGNLIGHTS?

ENERGY STAR and the DesignLights Consortium have developed products lists to identify quality LED lighting products that meet certain performance criteria. ENERGY STAR and DesignLights qualified products have been tested to verify that they perform as advertised and that required safety certifications have been obtained. This means that consumers can purchase with confidence that these products are likely to last longer and perform better than non-listed products.

