



# 2017 AGRICULTURAL INCENTIVES



Energy Efficient



Environmentally Responsible



Cost Effective

## +

### ADDING VALUE TO YOUR ELECTRIC SERVICE



# 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](http://www.energystar.gov)

DesignLights Consortium®  
[www.designlights.org](http://www.designlights.org)

Iowa State Extension  
[www.extension.iastate.edu](http://www.extension.iastate.edu)

Iowa Energy Center  
[www.iowaenergycenter.org](http://www.iowaenergycenter.org)

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



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[www.cecnet.net](http://www.cecnet.net)

*This institution is an equal opportunity provider and employer.*



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



**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.

