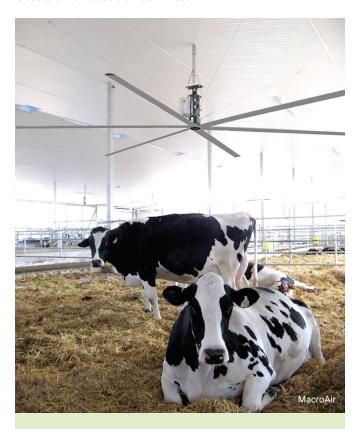
# **VENTILATION AND CIRCULATION**

#### **High Volume Low Speed Fans**

High Volume Low Speed Fans

\$35/ft.

Must be a ceiling-mounted fan with a diameter of 10' or more. Rebate is based on fan blade diameter in feet.



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®**

energystar.gov

# **DesignLights Consortium™**

designlights.org

#### **Iowa State Extension**

extension.iastate.ed

#### BESS Labs

bess.illinois.edu

For more energy saving opportunities, contact CIPCO about available residential and commercial rebates.

All programs subject to change at any time, without prior notice.



A Touchstone Energy® Cooperative 🔨

# ecirec.coop

2400 Bing Miller Lane PO Box 248 Urbana, IA 52345-0248 PH: 319-443-4343 TOLL FREE: 877-850-4343

This institution is an equal opportunity provider and employer.



# 2021 AGRICULTURAL REBATES





# **VENTILATION AND CIRCULATION**

Farm animals require ventilation and air movement for comfort and productivity year-round. Rebates are available for high efficiency systems that could help save energy costs of up to 30% 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 \$3/inch

(fan blade diameter)

Controller with Humidistat

• Ventilation Thermostat \$25 each

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

# **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 inch min. 23.0 lbs. thrust/kW

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

# **FARM OPERATIONS**



Why ENERGY STAR or DesignLights?

ENERGY STAR and the DesignLights Consortium have developed product 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 these products with confidence and know they are likely to last longer and perform better than non-listed products.

# DAIRY OPERATIONS

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

#### **Dairy Heat Reclaimers**

\$5 per milking cow Heat reclaimers can reduce water-heating energy usage by

60% to 80% by recovering the heat discharged from dairy refrigeration equipment.

### **Dairy Milk Pre-Coolers**

• Reducing the temperature of milk with "pre-coolers" helps reduce refrigeration system energy costs by 20% to 30%.

## Variable Speed Dairy Vacuum Pumps

 Variable speed drives (VSDs) used with dairy vacuum systems can reduce electricity use by as much as 60%.

#### **Dairy Scroll Compressor**

\$250 each

\$4 per milking cow

\$40/horsepower

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

(must replace reciprocating compressor)

The maximum rebate is \$2,000 for each equipment type.

# LIVESTOCK EQUIPMENT

#### **Livestock Waterers**

- Rebates 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.
- · Single Crate Heating Pads \$25/pad (≤ 85W)
- Double Crate Heating Pads \$50/pad (≤ 170W)
- · Heat Lamp or Pad Controller \$50/controller

# LIGHTING

Energy-efficient lighting technologies can reduce operating costs and provide lower fixed costs through fewer replacements. Note: All lamp and fixtures must be ENERGY STAR or DesignLights Consortium qualified.

### **All Buildings**

Occupancy Sensors

\$8 each

# **Outdoor Security LED Lighting**

20-34W	\$10/fixture
35-49W	\$20/fixture
50-74W	\$40/fixture
75-124W	\$50/fixture
≥ 125W	\$60/fixture

Outdoor lighting must be on from dusk to dawn and controlled by an automatic photocell sensor.

# **Horticulture LED Lighting**

8-14 Watts	\$10/fixture
15-49 Watts	\$15/fixture
50-99 Watts	\$25/fixture
≥ 100 Watts	\$40/fixture

Horticulture lighting must be classified as such in DesignLights Consortium to qualify.

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



