#### BUSINESS



# DEMAND CONTROL VENTILATION

# With Demand Control Ventilation, you'll earn a \$50/ton incentive and savings range from 5 percent to 20 percent of your ventilation costs.

Your Demand Control Ventilation (DCV) system can determine how much ventilation a room requires by measuring  $CO_2$  levels in the air. You'll save energy and it can be installed on existing HVAC systems.

When you keep an empty room cool, no one benefits. With DCV, your entire facility can be cooled based on the number of people using a particular room. The HVAC system adjusts ventilation based on the presence of  $CO_2$  produced by occupants in a space – when there is low occupancy there is less  $CO_2$  present, which allows the ventilation to be reduced.

The following building types are likely to show the quickest payback if a DCV system is installed:

Auditoriums

Malls

- Convention centers
- Hotels

Schools

- Movie theaters
- Retail stores
- Office buildings
- Here's what to expect when you install DCV:
  - Improved comfort, fewer complaints
  - · Reduced need to heat or cool excessive amounts of outside air
  - Lower operating costs and energy usage
  - Easy installation and maintenance
  - Low investment
  - Can be used on existing, fully operational electric HVAC

Beyond the fact that DCV makes a lot of sense, it's actually a low-cost energy saver and – while lowering operating costs – also improves the air quality in your building.

## **Energy Efficiency** for Business



### Incentive requirements:

- 1. HVAC equipment must have electric heat.
- 2. Duke Energy advisors must recommend your business for DCV during a Duke Energy free Business Energy Check or a consultation for new construction.
- Customer must provide an engineering report documenting DCV system and projected HVAC tonnage reduction.
- 4. DCV installation must include CO<sub>2</sub> measuring sensors that adjust ventilation rate based on varying occupancy by integrating CO<sub>2</sub> sensor readings to control outside air dampers.
- DCV installation must be in accordance with manufacturers' recommendations, building codes, and ASHRAE air exchange standards.

Rebate may not exceed 50 percent of total project cost. Other requirements do apply.

Incentive and savings example: A 10,000 sq. ft. facility could earn a \$1,900 rebate and save over \$500 per year. HVAC is SEER 9 at 76° F with 38 tons of HVAC.



## **PROGRAMS AT A GLANCE**

## **Duke Energy energy-efficiency programs**

Duke Energy has a dedicated team of energy-efficiency advisors ready to help businesses integrate energy-saving systems into both existing and new construction. A comprehensive list of our energy-saving programs is below. Please contact your Duke Energy advisor to see if you qualify for these money- and energy-saving programs. Some rebates may not exceed 50 percent of total project cost.

#### **Building envelope improvements**

- Cool roof
- Ceiling insulation upgrade
- Green roof
- Roof insulation upgrade
- Window film or screen

#### **HVAC** equipment improvement

- Air-cooled and water-cooled electric chillers
- Heat pumps
- Packaged terminal heat pumps
- Unitary AC and heat pumps
- Thermal energy storage

#### **HVAC-system-related improvements**

- Demand control ventilation (DCV)
- Duct test
- Duct repair
- Energy recovery ventilation (ERV)
- PTAC steam cleaning
- Rooftop unit recommissioning

#### Indoor lighting improvements

- Efficient indoor lighting
- Occupancy sensors

#### Industrial energy improvements

- Efficient compressed air system
- Efficient motors

1.877.372.8477 duke-energy.com/flbusiness

## **Energy Efficiency** for Business

