

# Industry Segment: *Data Centers*



## Observations for this Industry

Data centers and high energy use go hand in hand. In fact, data centers consume 10 to 50 times the energy per floor space of a typical commercial office building\*. As the demand for information technology increases, energy used by data centers is expected to rise. To make matters worse, data centers are often designed for high reliability and high capacity, with energy efficiency being a last consideration. As a result, data centers are prime targets for conserving energy and reducing operating costs.

Fortunately, many low-cost and no-cost solutions are available to reduce data center energy consumption, lower operating costs, and contribute to a greener environment.

\*energy.gov

## Related Rebate and Incentive Categories for this Industry

- Data Centers
- HVAC
- Retro Commissioning
- Custom Buildings
- Custom Equipment
- Facility Audits
- Lighting

## Energy Efficiency Solutions for this Industry

- Conduct an energy audit of your data center with industry professionals to determine the most cost-effective strategies to decrease energy consumption.
- Replace conventional servers with ENERGY STAR® servers to reduce energy consumption by up to 30%.
- Replace conventional Uninterruptible Power Supplies (UPS) with energy-efficient UPS systems to reduce energy use while providing backup power and protection against electrical anomalies.
- Optimize data systems through server virtualization, consolidation of lightly utilized servers, and decommissioning of unused servers.
- Install variable speed fan drives and properly deployed airflow management devices to efficiently manage changing loads of data center cooling systems.
- Install air-side or water-side economizers to efficiently manage temperature and humidity through the use of ambient air or cooling towers.
- Use a hot aisle/cold aisle layout in combination with containments and enclosures to improve efficiency of cooling systems.
- Upgrade to LED lighting in the data center to save electricity and reduce cooling load.

Costs of this program may be recovered through customer rates in accordance with Ohio law. For a complete list of commercial, industrial, residential and low-income energy efficiency programs, please visit [energysaveOhio.com](http://energysaveOhio.com).