

Assessing Energy Savings for Your Business



The Power of Human Connections



cost-effective

energy-efficient

environmentally responsible

Investing in energy efficiency is smart and very rewarding. Financial incentives are available for a variety of efficient electric equipment, and local and federal tax incentives and financing are often available. The rate of return on your energy efficiency investments also delivers through lower monthly energy costs.



Assessing Your Savings Potential

You can't see energy, so it can be difficult to visualize the potential savings lying undiscovered in your facility. However, you can see and easily understand those utility bills you receive each month. Visualize your energy bill being lower by 25 to 30 percent, or even more. Visualize your potential energy savings as an appreciable pile of cash that could go to your bottom line.

Clearly managing energy use makes good business sense, but remember, "you can't manage what you can't measure." Your facility's energy use for lighting, heating, cooling, office equipment and other systems can be easily identified, measured and analyzed. The result is a new and interesting look at your facility - where simple identification and measurement techniques provide the first steps toward eliminating waste and saving money.

When you invest in energy efficiency, the benefits go far beyond saving energy and money, and protecting the environment.

- **Enhanced Employee Productivity:** Enhanced comfort and improved lighting conditions may contribute to improvements in staff productivity.
- **Reduced Operations and Maintenance Costs:** Many energy-efficient technologies significantly decrease your operations and maintenance requirements, saving not only money but also staff time.
- **Increased Customer Comfort:** Building upgrades will improve your facility's appearance, present your products or services in a comfortable, well-lit environment, and help your customers enjoy their visit. This can increase sales and encourage repeat business.
- **Increased Asset Value:** Efficient business properties have higher market values than those with higher operating costs.
- **Enhanced Public Image:** Your contribution to environmental protection very positively differentiates your business from your competitors.

Contact your cooperative for the complete list of incentive programs and qualifications. All programs subject to change at any time, without prior notice.



Heating, Cooling and Ventilation

Proper heating, ventilating, and air-conditioning (known in the trade as HVAC) are key to maintaining a comfortable, healthy and productive work environment. Collectively, these systems account for approximately 40 percent of the electricity used in commercial buildings.

Did You Know?

Just like your automobile, your facility's heating and cooling systems need maintenance to operate efficiently and help ensure reliability and long life.



Heating and Cooling Equipment

Improved heating and cooling performance along with substantial energy savings can be achieved by implementing energy efficiency measures.

Heating and cooling systems have advanced significantly in design and efficiency. For example, today's air conditioners use 30 to 50 percent less energy to produce the same amount of cooling as air conditioners made in the mid 1970s.

Selecting the right technology for your building and your budget

- Geothermal heating and cooling is recognized as the most energy-efficient technology available, and is the best choice for most new construction and major building remodels. While they may be more costly to install initially, they can produce markedly lower energy bills—30 to 40 percent lower, according to estimates from the U.S. Environmental Protection Agency.
- Air source heat pumps provide efficient cooling and can assist in heating requirements in the spring and fall.
- Chillers are the choice for many applications, depending on the building requirements and/or restrictions.
- Central air conditioner systems may handle the requirements for cooling both small or large spaces.



How Many Tons Do You Need?

The amount of tons is a measurement of the capacity of a cooling or heating system. The required capacity of your system will depend on several variables including the size of the building and type of activities that take place from within.

Heat Recovery Ventilators

Heat recovery ventilation systems improve the efficiency of your heating and cooling systems and improve indoor air quality. Heat is transferred from stale indoor exhaust air to the incoming fresh supply air, reducing the required cooling capacity and operation of the main air conditioning system. In recovering this exhaust heat, healthy indoor air can be maintained at a fraction of the costs of operating a typical ventilation, heating and cooling system.

Lighting

Lighting is a critical component of every small business. Employees must be able to see to perform their jobs, and objects and spaces must be aesthetically pleasing to encourage sales.

Depending on the type of business you operate, lighting accounts for 20 to 50 percent of electricity consumption. This means that significant cost savings can be achieved with energy efficiency improvements, and due to continually improving equipment, lighting usually provides the highest return-on-investment of major upgrades.



Did You Know?

Lighting upgrades can save money through reduced energy use, and result in increased occupant comfort and sales.

Adjustable Speed Drives

Adjustable-speed drive (ASD) describes equipment used to control the speed of machinery. In commercial buildings ASD's can be used to increase efficiency of HVAC fans and pumping equipment. Many industrial processes such as assembly lines that must operate at different speeds for different products can also benefit from the addition of ASD's to their operation. Compared with other techniques for flow control, varying the speed of the drive can save significant energy and money.



Refrigeration

(Commercial Refrigerators and Freezers)

Compared to standard models, ENERGY STAR labeled commercial refrigerators and freezers can lead to energy savings of as much as 35 percent with a 1.3 year payback.

Financial Incentives



Your cooperative supports your interest and efforts in using electricity wisely. Financial incentives are available for specific equipment through prescriptive rebates in a wide range of categories.

Customers that implement initiatives that reduce electrical usage can be rewarded for the energy savings from equipment or measures that are not included as part of a prescriptive incentive program. Examples include control systems, process line improvements, and production-specific equipment.

The incentives from your cooperative can benefit the bottom line when determining the rate of return, payback and cash flow for efficiency projects. Tax credits, loan programs, and other local incentives may also be available to leverage your investment.

Your cooperative is also a resource for assistance in locating professionals to assist in identifying current equipment and building energy use as well as potential efficiency measures and practices.

Engaging your cooperative during early planning stages and completing the necessary application forms will ensure your project will meet program requirements and help you estimate the financial return your investment will provide.