Savings for Municipal Buildings

ENERGY EFFICIENCY PROGRAMS FOR BUSINESSES



By investing in energy efficiency, building managers of municipal buildings, including administrative buildings, K-12 schools, wastewater treatment plants, maintenance facilities, libraries and indoor/outdoor recreation centers, can achieve substantial energy cost savings in their facilities. They can also demonstrate energy and environmental leadership and raise public awareness of the benefits of becoming more energy efficient to their entire community.

Due to their size, operating time and inefficient systems, energy use constitutes about 19% of total expenditures for the typical office building. Some of the biggest energy users include lighting, electronics, office equipment, heating and cooling. Municipalities are also responsible for maintaining structures such as parking garages and streetlights, which rely heavily on lighting Updating to LED lighting can help cut costs while improving nighttime safety and ambiance for your community members.



How Municipal Customers Use Energy¹

Electricity End Uses Natural Gas End Uses 26% Other 18% Cooling 17% Ventilation 77% Space Heating 16% Lighting 9% Cooking 7% Computing 8% Water Heating 6% Refrigeration 6% Other 5% Space Heating 2% Cooking 2% Water Heating 1% Office Equipment

U.S. Energy Information Administration (2018 CBECS Survey Data). Some data is withheld due to a lack of sample size and where relative standard error is greater than 50%.





A Local College Scores High on Energy Efficiency

• Incentives Earned: \$11,451

• Total kWh Saved: 104,704 kWh

• Total Therms Saved: 1,301 therms

• Project Cost (with incentive): **\$75,803**

• 1st Year ROI (with incentive): 16%

Payback (with incentive): 6.07 Years

Upgrades included: Electric HVAC and Furnace Upgrades, LED Lighting

Quick Fix: Computers & Monitors

Computers and other electronic equipment use a sizeable amount of a municipal building's overall energy. Adjust energy-saving settings on computers and monitors to cut a computer's electricity use roughly in half.

Get Started Saving!

Now that you know more about what to upgrade, visit trcsavesenergy.com/TradeAlly/TradeAllySearch to find an experienced contractor or contact a TRC Field Engineer in your area by visiting trcsavesenergy.com/Home/ContactUs or calling TRC at 1-800-299-2501.

An Indiana Municipality Saves Big with Wastewater Treatment Plant & Facility Projects

Financial Impact

• Total Incentives Earned: \$96,141

• Total kWh Saved: **961,414**

• Total Project Cost: \$443,049

• Project Cost After Incentive: \$346,908

• ROI: **52.4%**

• Payback: **3.6 Years**

Upgrades included:

This project replaced a high-energy mixing system in the oxidation ditch portion of the wastewater treatment process with a significantly lower energy air mixing system. Both the existing and new systems operate 24/7.

Energy Efficiency Savings:

- Reduced operating time
- The oxidation of electricity saves 797,000 kWh annually
- The peak demand, driven by the oxidation ditches improvement, decreased from 140 kW to 12-18 kW
- Supplemental use of non-potable pump to support the oxidation ditches saves 164,000 kWh annually
- Frequency of sludge pressing decreased to once every three weeks, saving 414 kWh annually.

Other Projects:

This municipality also completed a variety of other projects saving it energy and money. Projects included replacing gas space heaters, seasonal lighting, and boiler/HVAC unit replacements. Learn more about their other savings below:

• Total Incentives Earned: \$14,148

Total kWh Saved: 187,514
Total Therms Saved: 1,029
Total Project Costs: \$72,781

