



Efficiency Works

Platte River
Power Authority

Estes Park
Light and Power

Fort Collins
Utilities

Longmont
Power &
Communications

Loveland
Water and Power



“Our assessment helped us understand how our building was using energy and what we can do to reduce waste and save us money. In addition, we are keeping our animals healthy while freshening the building for our staff and visitors.”

Liz Smokowski,
Executive Director

Longmont Humane Society: lowering utility costs with energy savings

It’s all about the animals at the Longmont Humane Society where more than 4,000 animals come through the doors of the 58,000 square foot facility on an annual basis. In early 2013, staff began to seek ideas for improving comfort within the facility and lowering utility costs in order to have more funds available for pet adoption, training, and welfare programs. The Longmont Humane Society partnered with Longmont Power & Communications, Platte River Power Authority, and EnergySmart to identify areas where energy was being wasted and implement measures to lower electric use.

Energy Assessment Identifies Cost Saving Options

- Heating, ventilation and air conditioning (HVAC) systems were adjusted to optimize operation, provide energy savings, and improve air quality.
- Existing lighting was retrofitted with newer T- 8 fluorescent lighting. De-lamping opportunities were paired with more efficient lighting to attain the same or higher light output while using fewer bulbs.
- Staff was educated about ongoing opportunities within the facility to save energy and lower utility bills.

Efficiency Programs Help Offset Project Costs

Longmont Humane Society took advantage of the free energy assessment provided by EnergySmart to identify areas where energy efficiency could be improved. In addition, lighting retrofits within the facility qualified for a number of rebates as well the Business Efficiency Grant, enabling the Humane Society to maximize the number of upgrades at minimal expense.

Building Tune-up

The following is a list of improvements that were made as a result of the building tune-up:

- Heating and air conditioning schedules adjusted to match current building use.
- Roof Top Unit (RTU) economizer temperature sensors relocated to the proper location for sensing outside air temperature.
- Reduced percentage of outside air to all split furnaces to decrease the run time for the electric reheat for outside air.
- HVAC improvements such as locking out mechanical cooling for the main air handling unit to prevent running when outside air temperatures are cooler and limiting set-point ranges of space temperature controllers.
- Domestic hot water temperatures were lowered and the pump timer was programmed to not run at night.
- A control board for one of the heat exchange systems was replaced. These systems transfer heat energy between the exhausted building air and fresh make-up air so the building air requires less conditioning.

Interior Lighting Retrofit Project

Old fixtures:

- 15 4-lamp F32T8 fluorescent 114 watt fixtures
- 218 3-lamp F32T8 fluorescent 85 watt fixtures;
- 27 4-lamp F17T8 fluorescent 58 watt fixtures
- 2 incandescent 65 watt bulbs
- 10 incandescent 75 watt bulbs
- 10 incandescent 150 watt bulbs
- 27 high intensity 84 watt discharge fixtures

New fixtures:

- 233 2-lamp F28T8 fluorescent 42-54 watt fixtures;
- 27 2-lamp F17T8 fluorescent 24 watt fixtures
- 2 2-lamp F32T8 fluorescent 48 watt fixtures
- 10 LED 12 watt bulbs

Total project cost: \$15,043

Total incentives: \$10,230

Net project cost: \$4,813

Estimated annual energy savings: 52,639 kWh

Estimated annual electric cost savings: \$3,771

Building Tune-up

Project Cost: \$8,587

Total Incentives: \$8,587

Net project cost: \$0

Estimated annual energy savings: 63,584 kWh

Estimated annual gas energy savings: 9,223 therms

Estimated annual electric & gas cost savings: \$10,077

