Carson City Reduces Their Annual Electricity Consumption by 2,039,040 kWh

**Technology Type:**
- Asset Planning Solutions
- Boiler Replacements
- Building Envelope
- Energy Efficiency
- Energy Savings Performance Contract
- HVAC
- Replacements and Retrofits
- Interior and Exterior Lighting Retrofits

**Facility Size**

553,468 square feet (23 city facilities)

**Energy Project Size**

$4,246,786

**Annual CO₂ Reduction**

1,598 tons

**Annual Energy Savings**

$183,516

**Summary**

Motivated to create a more sustainable and reliable future and secure new, more efficient infrastructure for staff and citizens, Carson City selected Ameresco to implement their energy modernization project at 23 city facilities totaling 553,468 square feet. In addition, the City and Ameresco collaboratively developed a citywide energy policy to standardize energy use throughout city facilities.
Solution

Carson City’s energy modernization project enhanced the reliability and quality of facility operations. The following measures were implemented as part of the Energy Savings Performance Contract with Carson City:

- Interior and exterior lighting converted to LED technology
- HVAC systems and boilers retrofitted or replaced with new, high efficiency equipment
- Energy management controls upgraded to improve control sequences, provide internet connectivity to more sites, and repair and replace obsolete control components
- Building envelope air sealing measures

The Carson City Energy Savings Performance Contract project has been regarded by community leadership as a very successful project and has generated significant energy and maintenance cost savings. The success of the project was due in no small part to the full scope of services provided by Ameresco.

Tom Grundy
Water Operations Supervisor, Carson City

Benefits

The City reduced energy consumption, upgraded their aging infrastructure, and turned their sustainability vision into a reality. Other benefits included:

- Guaranteed energy savings
- Maintenance savings due to the longer life of newer, more efficient equipment
- Annual reduction of electricity consumption by 2,039,040 kilowatt-hours, natural gas consumption by 65,108 therms and the production of 1,598 tons of carbon dioxide, 518 pounds of sulfur dioxide and 26 pounds of nitrous oxides
- A more comfortable environment for City staff and visitors by providing higher quality lighting and improving temperature control