AMERESCO Green • Clean • Sustainable

Contract Details

Contract Type:

Budget Neutral; Energy Efficiency; Energy Savings Performance Contract; Photovoltaic System; Power Purchase Agreement; Renewable Energy

Facility Size:

11 main buildings with numerous sub buildings; 382,869 square feet

Energy Project Size: Solar PV PPA: \$1.5 million ESPC: \$1.46 million

ESPC Savings: \$117,000 annually

Summary

The City of Englewood, Colorado, selected a partnership with Ameresco to make much needed facility improvements where no capital funds existed and to reduce energy costs and generate renewable energy for the municipality. The successful two-tiered program included the installation of a solar system and a comprehensive energy efficiency system.



Ameresco's comprehensive city-wide energy audit resulted in a two-tier project for the City.



Under the energy efficiency project, Ameresco installed 12 energy conservation measures. The City benefits from improved overall energy efficiency and more reliable equipment at its facilities.

Customer Benefits

The City of Englewood (City) partnered with Ameresco for an energy savings performance contract (ESPC) and solar photovoltaic (PV) power purchase agreement (PPA) to leverage utility savings to fund the necessary energy and water conservation upgrades. This helps the City stretch their capital dollars to focus on the costly infrastructure improvements, such as boiler replacements, and measures that would typically carry a long payback from energy savings. These improvements will not only save wasted energy and enhance the City's facilities, they will also greatly improve aging infrastructure and enhance the comfort quality of the City workers and residents who use these buildings.

Accolades

"The program we've developed with Ameresco is both environmentally and fiscally sound. It will reduce our energy usage and dangerous emissions, produce clean energy, and provide the City with ongoing lower utility expenses. This new initiative is a win for Englewood on every level."

- Mayor Jim Woodward City of Englewood

Environmental Benefits

Through its partnership with Ameresco, Englewood is expected to save the equivalent of 1,729 tons of ${\rm CO_2}$ per year. The green benefit from this carbon reduction is roughly equal to:

▶ the reduction of 3.8 tons of SO₂

- ▶ the reduction of 4.8 tons of NOX
- ▶ 326 cars taken off the road for one year
- ▶ 113 households powered for one year

The project helps reduce the need for energy from traditional power plants fueled by fossil fuels.

Services Provided

The City Council of the City of Englewood set a directive for its administration to investigate energy efficient opportunities and specifically the concept of an ESPC. With limited capital and the need for capital intensive upgrades city-wide, the City approached the State of Colorado Governor's Energy Office (GEO) for education and guidance through the general ESPC process. The City issued a request for proposal to GEO-qualified energy service companies (ESCOs), and an interview process followed. The City selected Ameresco as its ESCO.

Ameresco's comprehensive city-wide energy audit resulted in a two-tier project for the City.

The first tier includes a \$1.5 million design-build own-operate-maintain PV project under a 20-year PPA and will benefit from Xcel Energy (the City's utility provider) rebates and Renewable Energy Credits. Ameresco will own and maintain the systems for 20 years. During that time, the City will buy solar power from Ameresco that provides a stable and predictable energy cost for the City. At the end of the 20-year contract, the solar PV systems may become property of the City.

About the City of Englewood

Englewood is a full-service city that is centrally located within the Denver metropolitan area. Its vibrant small town atmosphere boasts an array of shopping and dining destinations for residents and visitors alike. In addition, Englewood offers a variety of recreational and cultural opportunities and easy access to open space. Englewood mixes small town convenience with big city amenities and is home to 32.883 residents and 1,700 businesses.

Learn more at www.englewoodgov.org.

About Ameresco

Ameresco, Inc. (NYSE:AMRC) is one of the leading energy efficiency and renewable energy services providers. Our energy experts deliver long-term customer value, environmental stewardship, and sustainability through energy efficiency services, alternative energy, supply management, and innovative facility renewal all with practical financial solutions. Ameresco and its predecessors have constructed billions in projects throughout North America.

For more information about Ameresco and our full-range of energy efficiency and renewable energy solutions, please visit http://www.ameresco.com and http://colorado.ameresco.com.



Ameresco and the City of Englewood hosted a press conference and ribboncutting ceremony for the newly installed photovoltaic system.

Services Provided (cont.)

The second tier is a \$1.46 million ESPC that is guaranteed to reduce utility costs by \$117,000 annually (23.3 percent electricity and 9.3 percent natural gas use).

Under the ESPC project, the key measures are designed to replace aged and failed equipment and also improve overall energy efficiency of the City's facilities. Measures that are designed not only save energy but improve the City building conditions include energy efficient lights and controls, wall insulation, attic insulation, new windows, and sealing and caulking remaining single pane windows.

The ESPC project also includes a city-wide water conservation effort where Ameresco will install new low-flow faucet aerators, low-flow showerheads, low-flow toilets and urinals, and rinse wands. Other measures for the ESPC project include the following:

- Converting constant volume air handling units to variable air volume at the recreation center pool and gym
- Converting variable air volume inlet vanes to variable frequency drives and replacing the fan powered variable air volume air handling unit
- Converting constant flow hot water pumps to



variable flow with variable frequency drives

- Adding variable air volume dampers on branch supply and converting roof-top units to variable air volume operations
- Replacing gas unit heaters with infrared
- Installing HVAC controls

Solar PV systems were installed on four City-owned sites (Englewood Civic Center, Malley Senior Recreation Center, Safety Service Complex for Police and Fire, and Englewood ServiCenter). The solar PV systems are expected to generate over 300,000 kilowatt-hours of energy annually. The state-of-the-art poly-crystalline PV-based panels used in this project are recognized for reliable perfomance, cost efficiencies, and longevity.

A case study video can be found at http://www.ameresco.com/page/video-library



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