



King City



Community members and ENGIE's team celebrate sustainability at the groundbreaking event at the site of the solar installation at the King City pool on July 19th, 2016.

THE OPPORTUNITY

King City is a strong agricultural community of more than 13,000 residents, located in Monterey County, California, on the Salinas River. From strong roots to the land and commitment to building stronger services for residents, City leaders began assessing new ways to save money and reduce facilities' environmental impact. In 2013, City staff and leadership began consulting with ENGIE Services U.S. (ENGIE) to map out energy program possibilities, goals, and next steps. ENGIE worked with the City Council to co-develop a customized project scope based on King City's resource needs, and coupled the plan with a strong financing plan to ensure the project could be enacted quickly with no financial burden to taxpayers.

THE PARTNERSHIP

In summer of 2016, ENGIE installed a total of 546 kilowatts of solar PV power at the King City Pool and the Wastewater Treatment Plant. At the Pool, a solar array was mounted on part of the main building roof structure, with an additional solar shade structure constructed over an open grass area to provide needed shade and respite from the hot summer sun for community pool-goers. Additionally, high efficiency LED lighting was attached to the underside of the PV canopy at the Pool. Four ground-mounted solar arrays at the Wastewater Treatment Plant were installed on open areas, which will provide electricity to power the plant on site, creating a vital opportunity for self-generation that immediately reduces the City's costs to power the plant full-time. ENGIE is also providing ongoing, preventative maintenance and repair services, including regular inspection, testing, monitoring, and cleaning of the PV modules, which ensures maximum energy production and efficiency of the systems.

Program Highlights

- Expected to achieve more than \$5.5MM in net savings over the life of the program
- Offsets 627 metric tons of CO₂ annually, the equivalent to removing 132 cars from the road
- Created 13 local jobs as a result of program implementation

Technical Scope

- Installed a total of 546 kW of solar PV power on six arrays across two City sites:
 - 476 kW on four ground-mounted arrays at the Wastewater Treatment Plant
 - 70 kW on a roof-mounted and solar shade structure at the King City Pool
- Retrofitted 132 existing high pressure sodium (HPS) and City-owned induction streetlights to high efficiency LED across the City:
 - 47 decorative lights
 - 85 cobrahead lights

Another key component of the program scope is retrofitting the existing, City-owned streetlights to LED fixtures to improve efficiency and reduce maintenance costs. ENGIE retrofitted 132 existing City-owned streetlights with both decorative and cobrahead fixtures. Energy-efficient LED technology helps to provide whiter and brighter light throughout the City.

As a result of comparing multiple funding streams, the project required no capital outlay and the City took advantage of a tax-exempt lease purchase and captured more than \$7,000 in lighting incentives in addition to a substantial reduction in energy costs.

3 DIMENSIONS OF IMPACT

ENGIE is committed to building three dimensions of impact in every customer's future:



Supporting People



Saving Money



Protecting the Environment

By entering into this partnership with ENGIE, King City is exemplifying economic and environmental leadership. For a city of its size, King City is truly setting new standards for how a small community can still make big waves in the sustainability landscape. By prioritizing fiscal responsibility, the City will capture more than \$5.5 million in net savings over the 30-year life of the energy program. As a result of the City opting in to receive a monitoring and verification services guarantee, ENGIE promises to manage the systems to produce a specified amount each year or the City will receive a check for the difference. Over the program lifetime, the City will avoid using over 18 million kilowatt-hours of electricity.

By converting City-owned streetlight fixtures to LED, citizens benefit from brighter, more evenly distributed light than the conventional HPS and induction fixtures, while using less energy. By producing clean, renewable energy from solar power, the City will effectively reduce greenhouse gas emissions. On July 19th, 2016, the City and ENGIE held a groundbreaking event, to celebrate a more sustainable, brighter future with a reduced carbon footprint for King City.