Sensors and High Efficiency LEDs Cut Lighting Costs at California Retail Center

Annualized energy savings are equivalent to 65 metric tons of greenhouse gases reduced or 13 cars removed from the road.

Asset Facts

Date Built	1987
Square Feet	214,934
Asset Type	Retail Center Parking

Project Facts

Annual Energy Savings	91,393 kWh
Annual Energy Reduction (%)	77
Annual Savings	$16,983
Gross Investment	$76,635
Rebates	$9,794
Rebates as % of Total Project Cost	12.8
Net Investment	$66,841
Net Payback	3.9 years
ROI	**25%**

www.greengenerationsolutions.com

Challenge

The retail center, located in southern California, was constructed in 1987 and is comprised of five separate buildings with the remainder of the area allocated to parking.

The retail center lot measures 346,320 ft^2, of which 214,934 ft^2 (60% of the entire lot) are used as parking for the facility.

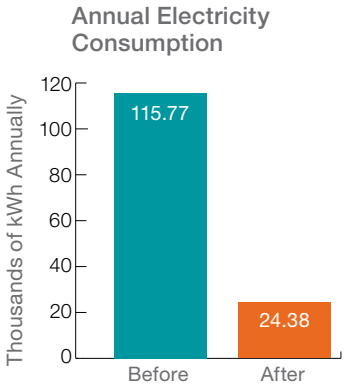
Our Solution

The existing 113 lighting fixtures in the parking garage were a combination of metal halide poles, wall packs, and flood fixtures. They were not controlled by any dimmers or sensors and ran continuously throughout the night, throughout the year.

- Green Generation Solutions installed LED fixtures to replace the existing metal halide lamps. The power required to run the fixtures decreased from 25.5 kW to 5.8 kW while ensuring optimal light levels at the parking lot surface were maintained
- Photocells were installed on the new LED fixtures to turn lights on and off in response to natural daylight levels. This maximized energy savings by limiting fixture use when sufficient ambient light exists
- Billing and consumption analyses were completed pre- and post-installation on the lighting and sensors to measure and verify the impact of the solution
- GreenGen coordinated all rebate capture activities with the local utility to secure funding for nearly 13% of total project cost.

Energy Summary – 79%

- The new LED fixtures reduced wattage and the demand of the exterior light fixtures by 77%
- The installed lighting and daylight and occupancy sensors save about 91,393 kWh annually
- Overall, the solution resulted in a 79% reduction in the annual parking lot electricity consumption.



How can we help you? Please contact Green Generation Solutions at info@greengenerationsolutions.com or 301.202.2930

operate in the green®