

Energy Efficient Measures Cut Operating Costs at Sunrise Senior Living Facility

Annualized energy savings are equivalent to 30 metric tons of greenhouse gases reduced or six cars removed from the road.



Asset Facts

Date Built	2003
Square Feet	75,000
Number of Rooms	89 units
Asset Type	Senior Living

Project Facts

Annual Energy Savings	41,275 kWh
Annual Energy Reduction (%)	4
Annual Savings	\$5,769
Gross Investment	\$24,520
Net Investment	\$24,520
Net Payback	4.2 years

ROI 26%

Challenge

This 89-room senior living facility is located in the mid-Atlantic region of the United States. Due to the specific needs of the residents, maintaining their comfort was a priority in the project.

- The HVAC system consists of 10 constant volume rooftop units (RTU) varying in make, size, age, run-time, and operating schedule. The facility operates continuously to meet the needs of the residents
- The lighting fixtures in the back of house are inefficient, and there is no existing controls equipment.

Our Solution

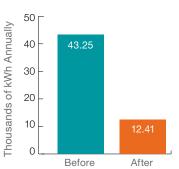
All building systems were assessed, prepared, and commissioned before and after installation.

- High output and high efficiency lighting fixtures and controls were installed
- Destratification fans were installed in the annex so that they operated in response to outside air temperatures
- Low-e solar film was applied to the lobby and atrium to reduce solar heat gain and UV ray damage
- HVAC operations were optimized by adding a BMS overlay that controlled the building HVAC systems components through the consideration of time of day usage charges, peak demand, historical building consumption and operations, and future weather conditions
- Low-flow fixtures and aerators were installed to reduce water consumption
- Data loggers were used to measure and verify savings.

Energy Savings – 4%

- The treated RTUs saw a 71% reduction of energy use compared to the older, untreated units
- The installed lighting and sensors save 7,667 kWh annually
- The occupancy controls reduced runtimes by an average of 41.5%
- Overall, the solution resulted in 4% reduction in consumption.

Annual Electical Consumption of Treated RTUs



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