



# Starwood Capital and Hersha Select Service Hotel Sees Lower Costs with GreenGen Solution

Annualized energy savings are equivalent to 134 metric tons of greenhouse gases reduced or 28 cars removed from the road.



## Asset Facts

Date Built	1982
Square Feet	76,875
Number of Rooms	109 rooms
Asset Type	Select Service Hotel

## Project Facts

Annual Energy Savings	190,437 kWh
Total Annual Building Energy Savings (%)	18.1
Annual Savings	\$21,672
Gross Investment	\$71,917
Rebates Received	\$13,929
Rebates as % of Total Project Cost	19.4
Net Investment	\$57,988
Net Payback	2.7 years

**ROI 37%**

## Challenge

Located in the mid-Atlantic region of the United States, this 109 room select service hotel was constructed in the early 1980s and maintains many of the original building systems and operational parameters.

In the months leading up to solution implementation, a Property Improvement Plan (PIP) was completed by the owner. The PIP primarily focused on aesthetic upgrades to the property but did not address HVAC, controls, and building envelope inefficiencies.

## Our Solution

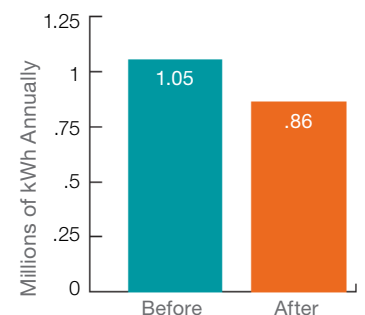
Green Generation Solutions collaborated with hotel management to design a solution that provided occupancy-based control capabilities for the PTAC units and bathroom lights located in each guestroom.

- In the absence of a wall mounted thermostat, GreenGen designed a control system that wirelessly linked room occupancy with the on-board controls of the PTAC unit
- To mitigate the heat gain and loss through the un-tinted double pane windows, GreenGen installed high-performance low-e solar film on the southeast and southwest orientations of the building glass façade
- GreenGen processed and coordinated all rebate capture activities with the local utility to secure funding for nearly 20% of the total project cost
- Installation was completed in only 10 days during normal business hours, without any impact on guest experience
- GreenGen installed submetering equipment at the subpanel to measure the energy consumption of individual rooms with and without the solution installed. The rooms without the solar film and in-room controls provided a live baseline from which to measure and verify the energy savings.

## Energy Savings – 18%

- Solar film and in-room controls generated a 38% average reduction in energy consumption
- The combined solution of solar film and in-room controls in the guestrooms applied throughout the hotel resulted in an 18.1% reduction in total building energy consumption.

Annual Electricity Consumption



**How can we help you?** Please contact Green Generation Solutions at [info@greengenerationsolutions.com](mailto:info@greengenerationsolutions.com) or 301.202.2930