



# Plan to Free Liberty Center from High Energy Costs

Combined 26-story Westin Hotel and 27-story office complex assessed for phased energy efficiency upgrades



## Asset Facts

Date Built	1986
Square Feet	878,905
Asset Type	Hotel and office

## Project Facts

Annual Energy Savings	706,529 kWh
Annual Savings	\$56,508
Gross Investment	\$265,445
Rebates	\$32,800
Rebates as % of Total Project Cost	12.4%
Net Investment	\$232,645
Net Payback	4.12 years

**ROI 24.3%**

## Challenge

During the purchase of the Pittsburgh Liberty Center, Starwood Capital Group commissioned a top-to-bottom assessment of the energy efficiency improvement opportunities and potential cost savings for this signature property. The complex, which occupies over 530,000 ft<sup>2</sup> of Class A offices and 616 hotel rooms, was fully occupied, requiring a phased approach to retrofits and improvements.

## Our Solution

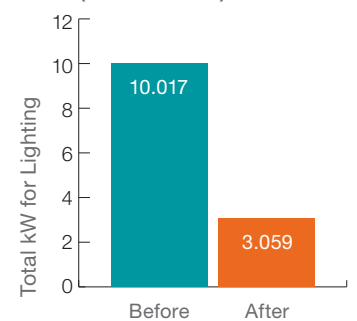
A detailed analysis and three-phased plan was presented, detailing cost as well as energy savings.

- Phase One: (completed) Added lighting controls and retrofit of over 400 T12 lamps with high-efficiency T8 lamps, fixtures, and occupancy controls
- Phase Two: (in process) Ballroom lighting retrofit using high efficiency LED lamps in the ballrooms, meeting spaces, and corridors with advanced dimming controls, which allow occupants to adjust light levels to their needs

## Energy Savings – 66%

- Runtime decrease 40%
- Wattage decrease 70%
- 246 occupancy sensors Installed
- In Phase I, replacing 1,672 lighting fixtures resulted in a savings of 398,690 kWh, or roughly \$22,000 annually
- In Phase II, replacing 756 lighting fixtures and installing 246 occupancy sensors resulted in an additional savings of 307,839 kWh, or roughly \$34,000 annually

70% Wattage Reduction for Lighting (Phase 1 & 2)



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