



A Case Study

A leading international hotel chain uncovers significant energy cost savings

The Challenge

A leading chain with over 200 properties across North America was looking to improve its bottom line by reducing energy costs and controlling maintenance costs and to establish a leadership position by proactively managing energy usage and improving its carbon footprint at the same time. It decided to target its energy cost which has a significant impact on its profitability.

The challenge was to identify significant energy cost reductions with ease of implementation and minimal interruption to hotel operations during implementation.

The Solution

Star Energy was engaged to develop a comprehensive energy cost reduction program to deliver sustainable and significant energy cost savings to achieve the client's ambitious target. To ensure that the energy savings are sustained over the lifetime of the retrofit, a rigorous monitoring and tracking system was also developed and implemented. Star Energy also prepared a list of maintenance schedules that helped to optimize the maintenance cost.

A total of 24 locations were selected comprising of various formats of the hotels to represent the entire portfolio

The Result

Utilizing our energy auditing service, a series of energy efficiency improvement opportunities were identified which uncovered up to a 34% reduction in baseline electricity consumption with a 24% IRR on the overall project. A comprehensive rollout plan was also prepared for the other qualifying locations for implementation over the next 24 months.

Profile

The chain has different hotel formats spread across multiple weather zones and has a variety of HVAC and lighting systems. Some of the hotel banners included full-service kitchens.

4 Million Sq. Ft.

Average area of the Pilot locations

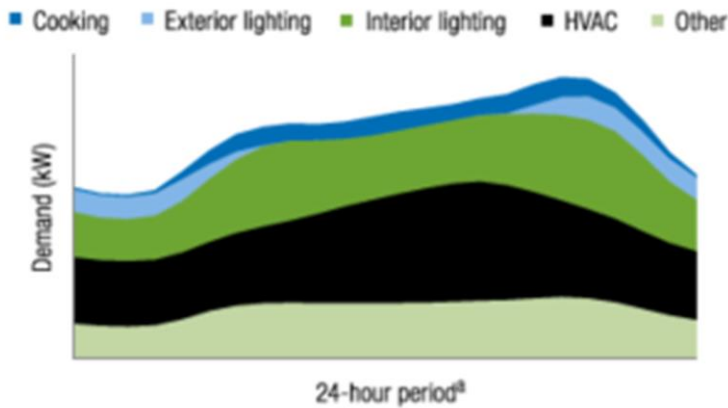
\$250,000

Average electricity cost per location

3,900

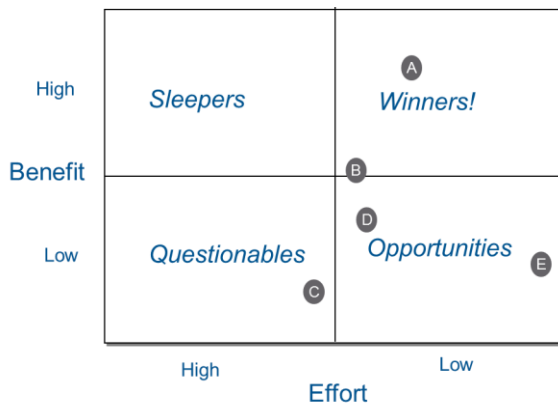
Total rooms for the pilot

Identified Opportunities



Notes: kW = kilowatt.
 a. 24-hour period = midnight to midnight. © E Source; data from ITRON

- A Lighting retrofits
- B HVAC Retro-Commissioning
- C Occupancy based controls
- D Ozone Laundry
- E Energy awareness plan



Highlights

Pilot locations

17 kWh/Sq.Ft.
 Average electricity use index

27% Average savings on annual electricity cost of the location. Range 15% - 34%

Less than **4** years
 Average simple payback from all identified measures.

24% IRR

\$1.5 to \$5
 RevPAR incremental improvement



Star Energy is an energy management company that specializes in the hospitality sector. Our experience working with major clients across North America has helped us to develop a program that not only optimizes the returns on capital but also improves asset values and the life of mechanical and electrical systems. We have worked with utilities across the US and Canada and our program is typically eligible for utility incentives that reduce implementation costs and further improve payback from the program. Our program is highly customizable to each client's financial and operational requirements.

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