# **CASE STUDY Hotel Five**

Iding

SEATTLE

Hotel Five is a funky and fun boutique hotel in Seattle's downtown core boasting a lobby filled with games. Part of the Staypineapple brand, Hotel Five caters to families, professionals, and their furry companions.

The 52,000 SF hotel includes 116 guest rooms, a full-service restaurant, bar, and an espresso stand in the lobby. The hotel is within walking distance to major attractions like Pike Place market and six blocks from light rail transit. To further provide car-free options, guests also have free access to bicycles during their stay.

In 2018, Hotel Five participated in the City of Seattle's Building Tune-Up Accelerator Program to get a head start on their required Tune-Up, which is designed to help building owners identify smart, responsive ways to reduce energy and water costs. What hotel managers discovered, however, is that doing a Tune-Up not only helped them save energy, water, and money, it also helped them develop a tailored roadmap and budget for future improvements to the building to further boost the hotel's sustainability.

Near-term energy and water saving opportunities identified by the Tune-Up were implemented at the hotel right away. Hotel Five has an extensive number of heating and cooling (HVAC) units with independent controls—in the lobby, back of the house, and in guest rooms. Upon inspection of the guest room units, the Tune-Up Specialist found that several needed immediate maintenance and all units would benefit from better ongoing upkeep. Water fixtures were also evaluated, revealing that showerheads were leaking in more than 10 guest rooms. Hotel managers invested \$3,000 in addressing these issues and are already seeing the savings accumulate. These fixes are projected to save the hotel \$1,100 on utility bills annually.

HOTEL FIVE 52,000 SF				
	COSTS		PROJECTED ANNUAL SAVINGS	
ASSESSMENT	\$5,500	\$0.10/SF		
REQUIRED ACTIONS	\$3,000	\$0.06/SF	\$1,100	\$0.02/SF
TOTAL	\$8,500	\$0.16/SF	\$1,100	\$0.02/SF



#### Photos by Marcela Gara

# WHAT IS A BUILDING TUNE-UP?

Building Tune-Ups are assessments of building energy and water systems to detect and correct operational or maintenance problems. Through Tune-Ups, building owners find operational efficiencies and low- and no-cost fixes that improve building performance. The City of Seattle requires Tune-Ups every five years for buildings with 50,000 SF or more of non-residential space.



Want to learn more? seattle.gov/buildingtuneups "We participated in the Tune-Up Accelerator because it was a good business choice for us to get ahead of the game. The financial incentive helped; but more importantly, it allowed us to focus on energy efficiency and gave us a needed process, timeline and amazing support to get our necessary fixes done and create an informed plan for future capital upgrades."

DINA BELON-SAYRE PINEAPPLE HOSPITALITY, DIRECTOR OF REAL ESTATE ASSETS



Photo by Michael Sayre

## FINDINGS AND FIXES REVEALED

After assessing the building's energy and water systems, energy usage, and maintenance plans, the Tune-Up team identified three key required fixes:

- **Guest room HVAC units:** implementing an annual HVAC maintenance plan as part of a room refresh, including: opening outdoor vents, cleaning out condensate pans, brushing and cleaning coils, and washing filters.
- **Showerheads:** repairing the fixtures on more than 10 guest rooms, which will save about 2,000 gallons of water annually, and adding a leak check to the hotel's preventative maintenance checklist.
- **Hot water:** reducing hot water storage tank temperatures by eight degrees to improve efficiency while maintaining hotel water needs.

Projected energy savings for the required fixes are 10,000 kWh/year and projected combined electric and water utility bill savings are \$1,100/year.

## **GOING ABOVE AND BEYOND**

In addition to the required fixes, the Tune-Up Specialist found two fundamental inefficiencies that, if addressed,

would also save the hotel energy and money. Hotel Five voluntarily undertook these changes to ensure the building's systems would run more efficiently:

- Lobby HVAC system: Two HVAC units installed side-by-side in the lobby were "fighting" each other energy-wise: one was trying to heat while the other cooled, which wasted energy. A single wireless thermostat was installed to jointly control both units.
- Hot water boiler: The hotel's hot water boiler circulation pumps were running when the boilers were not firing. The pumps were adjusted so they only run when needed, thereby reducing energy waste.

Projected energy savings for these voluntary fixes are 100 kWh/year and 200 therms/year and projected utility savings are \$200/year.

## **UNEXPECTED BENEFITS**

Beyond the energy and water savings, undergoing the Tune-Up helped Hotel Five improve overall guest experience by spotting areas to improve lighting quality. The team replaced existing bulbs with LEDs with matching wattage and temperatures to improve the overall look and feel of the guest rooms.

#### **MEET THE TUNE-UP TEAM**

Lacey King, Pineapple Hospitality, General Manager; Ray Rodrigues-Reyes, Pineapple Hospitality, Field Maintenance Manager – Seattle; Dina Belon-Sayre, Pineapple Hospitality, Director of Real Estate Assets; Treasa Sweek, Sweek Consulting Engineers, Principal

This project was supported by the Seattle Building Tune-Up Accelerator Program through the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) under the Buildings Technologies Office Award Number DE-EE0007556. Seattle City Light provided a limited time incentive to owners of mid-size buildings that met the Building Tune-Ups requirement in advance of their mandated deadline.



seattle.gov/buildingtuneups | buildingtuneups@seattle.gov | 206-727-TUNE (8863)