

ALOFT MIDTOWN ANCHORAGE, USA

Objectives

The owners of the 146-room Anchorage Aloft Midtown Hotel, aiming to address a 260% surge in downtown electrical costs over 8 years and align with Marriott's goal to reduce carbon intensity by 30% at branded hotels, chose Arctic Energy based on their proven success with the Anchorage Midtown Hyatt Place hotel.

Solution

Relying on Arctic Energy's recommendation, the hotel owners installed the Capstone C65 grid-connect CHP system on the rooftop for its smooth and quiet operation, ensuring no disturbance to guests. With a capacity to generate up to 1,560 kWh per day, the system lowers electrical costs, and also effectively provides heating for the hotel, pool, and hot tub. It covers nearly 50% of the daytime electrical needs and fulfills the entire demand from 9 pm to 6 am.

Results

In Anchorage, where electricity rates are among the highest and energy intensity is significant, a percentage reduction of electricity usage equates into much higher dollar value than elsewhere, which helped the hotel reduce its electrical spending by approximately 50% through Combined Heat and Power (CHP), as well as a noteworthy 60% decrease in the hotel's carbon footprint.

Hotel owners in Alaska can explore valuable options such as capital-free system implementation through C-PACE partners. Additionally, federal programs like the Investment Tax Credit and 100% bonus depreciation offer potential benefits for consideration to lower the total cost of ownership and accelerate the payback period.