

ANANTARA MANGROVES HOTEL CASE STUDY

ANANTARA
EASTERN MANGROVES
ABU DHABI · HOTEL



INTELLI-HOOD®

Overview

Anantara Mangroves Hotel is a luxurious five-star resort located in Abu Dhabi and is known for its commitment to sustainability and delivering exceptional guest experiences. The hotel faced a challenge regarding escalating utility costs, particularly in its commercial kitchens. To address this concern and enhance operational efficiency, the hotel opted to install Intelli-Hood's Demand Control Kitchen Ventilation (DCKV) system.

Reason For DCKV

Before the installation of Intelli-Hood's DCKV controls, Anantara Mangroves Hotel was grappling with substantial utility costs. The annual utility expenditure for the hotel's commercial kitchens

KEY SAVINGS



Total Energy Savings

129,729 AED/Year



Carbon Dioxide

810,809 lbs./Year



Simple Payback Period

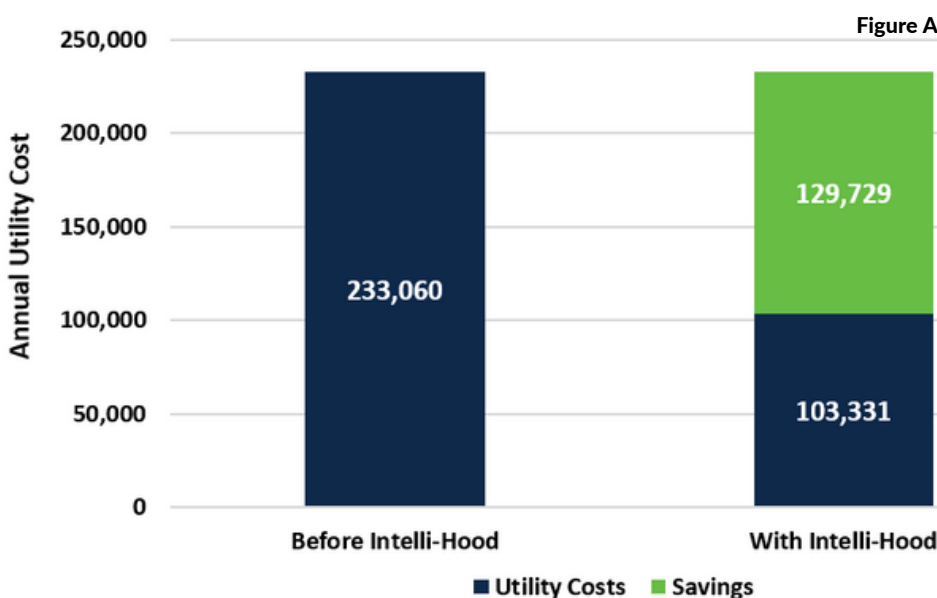
1.9 Years



Operating Expense Reduction

56%

Annual Kitchen Hood Energy Costs (AED)



amounted to 233,060 AED (Figure A), reflecting a significant operational overhead.

To address this issue, Anantara Mangroves Hotel decided to invest in Intelli-Hood's DCKV system, renowned for its energy-efficient and adaptive kitchen ventilation controls. This innovative solution was expected to help the hotel optimize its kitchen exhaust ventilation based on actual cooking activities, reducing energy consumption and costs.

Performace

The Intelli-Hood DCKV system was installed in all the hotel's commercial kitchens, seamlessly integrated into the existing infrastructure. The installation process was carefully executed to minimize disruption to the hotel's daily operations.

Utility Savings: The hotel achieved an annual utility savings of 129,729 AED following the installation of Intelli-Hood. The post-installation utility costs decreased from 233,060 AED to 103,331 AED (Figure A), marking a substantial reduction in operational expenses (56%).

Return on Investment (ROI): Anantara Mangroves Hotel experienced an impressive ROI of 1.9 years, underscoring the economic viability of the Intelli-Hood DCKV system. This result highlighted the substantial cost savings and operational benefits derived from the investment.

Improved Efficiency: The average fan speed in the hotel's kitchens was optimized to 65% (Figure B), ensuring that ventilation was precisely aligned with the cooking

activities. This contributed to a more energy-efficient and environmentally responsible operation.

Sustainability: By reducing energy consumption, the Intelli-Hood installation aligned with the hotel's commitment to sustainability. Anantara Mangroves Hotel improved their environmental sustainability by reducing their carbon footprint by 810,809lbs. per year.

Guest Experience: The quieter and more efficient operation of the kitchen ventilation also positively impacted the guest experience by reducing noise levels and enhancing the ambiance of the hotel's dining areas.



Anantara Eastern Mangroves Hotel Abu Dhabi - Average Fan Speed

Figure B

