

# CROWNE PLAZA HOTEL CASE STUDY



## INTELLI-HOOD® KEY SAVINGS

### Overview

Crowne Plaza Hotel on Yas Island, Abu Dhabi, is renowned for providing a luxurious and unforgettable guest experience. However, the hotel faced a significant challenge regarding high utility costs in its commercial kitchens. To tackle this issue and improve operational efficiency, the hotel decided to install Intelli-Hood's Demand Control Kitchen Ventilation (DCKV) system.

### Reason For DCKV

Prior to incorporating Intelli-Hood's DCKV controls, Crowne Plaza Hotel on Yas Island dealt with substantial utility costs linked to its commercial kitchens. The annual utility expenditure for the hotel's kitchen operations reached a significant \$79,552, presenting a financial challenge for the establishment.



**Total Energy Savings**  
\$44,431/Year



**Carbon Dioxide**  
1,019,802 lbs/Year



**Simple Payback Period**  
1.9 Years

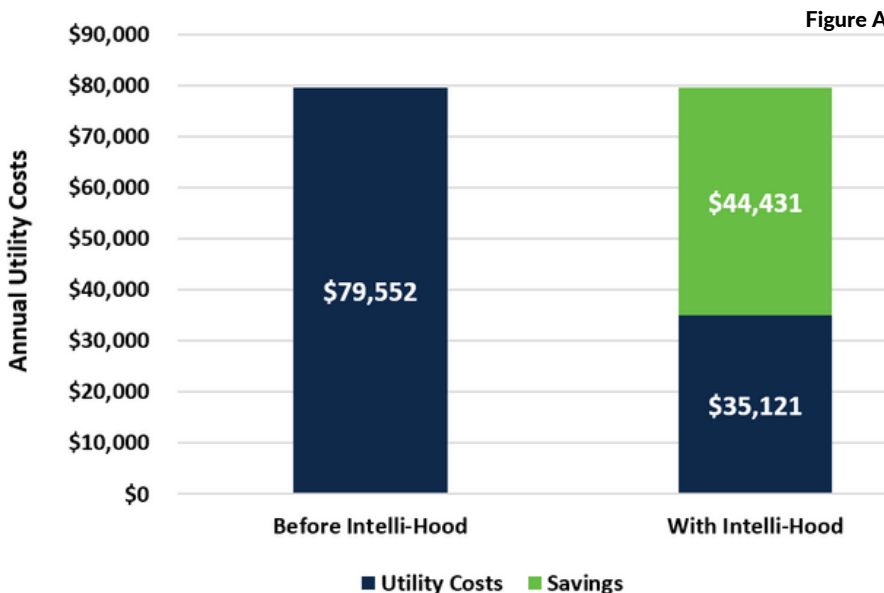


**Operating Expense Reduction**  
56%

Crowne Plaza decided to address this challenge by investing in Intelli-Hood's DCKV system. This dual-sensing solution is known for its ability to optimize kitchen ventilation, reduce energy consumption, and improve operational efficiency.

The hotel seamlessly integrated Intelli-Hood® into all of their commercial kitchens. The installation process was carefully designed to minimize any disruptions to the hotel's day-to-day operations, ensuring a flawless transition.

### Annual Kitchen Hood Energy Costs (USD)



## Results

The following results of Intelli-Hood's installation at Crowne Plaza Hotel, Abu Dhabi, were considerably favorable:

**Utility Savings:** An annual utility cost savings of \$44,431 was achieved by the hotel following the installation of Intelli-Hood. The post-installation utility costs decreased from \$79,552 to \$35,121, marking a substantial reduction in operational expenses.

**Return on Investment (ROI):** Crowne Plaza experienced an ROI of 1.9 years. This outcome highlighted the significant cost savings and operational benefits realized through the investment of DCKV.

**Operational Expense Reduction:** The installation of Intelli-Hood resulted in a remarkable 56% reduction in operational expenses, significantly enhancing the hotel's financial sustainability and profitability.

**CO2 Savings:** The kitchen's improved energy efficiency led to a reduction of 1,019,802 lbs of carbon dioxide emissions annually. This helped reduce the hotel's overall carbon footprint.

**Improved Efficiency:** The average fan speed in the hotel's kitchens was optimized at 65%, ensuring that ventilation closely matched cooking activities. This contributed to a more energy-efficient and cost-effective operation.

## Conclusion

The installation of Intelli-Hood's DCKV system at Crowne Plaza Hotel, Abu Dhabi, proved to be a beneficial investment. The implementation of DCKV controls resulted in substantial utility cost savings, an impressive ROI, a significant reduction in operational expenses, and noteworthy CO2 emissions savings.



Crowne Plaza Abu Dhabi Kitchen & Dining Area

Crowne Plaza Abu Dhabi Yas Island - Average Fans Speed

