



Seasonal simple and clever actions to reduce energy costs

Energy efficiency at Eastwood Seafood Peking Restaurant, Eastwood

Background

Mr Henry Chan has been operating the Eastwood Seafood Peking Restaurant for twelve years. Until recently, energy efficiency has not been a priority for the restaurant, but when the premises were renovated to keep up with a competitive industry, Mr Chan decided to add in some new ways to save money and energy.

Eastwood Seafood Peking Restaurant seats 100 customers and usually has 6–8 serving staff and 11–12 kitchen staff working, depending on whether it is a weekday or weekend. Due to long shifts, there is usually a shift change in the afternoon. This makes the total number of staff ideally 1.5 times the number of staff needed in one shift.

For Mr Chan, the presentation of the business was very important as, compared to a decade ago, there is far more competition in the restaurant business. After twelve years of operation, Eastwood Seafood Peking Restaurant needed a facelift. He checked the savings with lighting suppliers, and realised he could save money by using less energy in the running of his business.



Measures Implemented

The restaurant has different zones which only need to be lit at certain times. A simple way Mr Chan started to save energy was ensuring that the different zones were lit according to business requirement; for example, less lighting is being used during cleaning hours and the lights of the seafood tank area are only turned on when there are customers present. In addition to modifying when the lights were used, he was advised by the lighting supplier that he could save 20–30% on his electricity bill with lights that suited his business' lighting needs. He asked the interior designer to design the layout with the new lighting in mind and had the process complete in three months.

Eastwood Seafood Peking Restaurant uses two inverter air conditioners (AC). Mr Chan has begun to use only one when it's not too hot, or when less customers are seated. The ventilating function of the AC uses less energy, so when the weather is cooler, this function is used instead. An air curtain has also been introduced to separate the dining area and the food preparation area to help the air temperature in both areas stay more easily controlled.

There were also significant energy savings made in the food preparation and storage areas. The freezer room was moved to be inside the cool room. This reduced the chilled air escaping and so used less energy to make more chilled air. The kitchen is zoned to reduce the appliances used; for example, some hood fans and lights are only used during busy periods.

Ventilation and temperature control in the kitchen have been more easily controlled by several measures. For kitchen ventilation, there are three switches; one for each of the two hood fans, and a third to let in outside air to reduce temperature and increase air quality. In addition, the range hood is cleaned at close of business every night and the grease collector/filter is cleaned every week by a specialist company to increase the air quality in the kitchen with less work by mechanical air filters. Fresh air is released from the air vents, which are well-spaced along the kitchen roof. This feature is used more in summer and switched off when not required.

Mr Chan is also educating his staff and customers on ways to save energy. He frequently reminds staff to notice what is not needed, for example, lights being turned on in unoccupied toilets, and closing the cool and freezer room doors to keep cool air in.

Outcomes

Mr Chan has found that the savings of energy and money have been very beneficial for his restaurant, totalling approximately \$4,000 each year. His looking into energy saving lighting has helped him to become a part of the national discussions such as the Carbon Tax and emission reduction. He feels reminded that as a business, he can do something to save costs and adapt to new technologies.

Energy savings lights have helped the restaurant provide softer lighting and lower heat output. Before installing these and making the changes to air flow, Eastwood Seafood Peking Restaurant needed six AC units, and now needs two. Significant energy and money savings have been made due to their three month renovation with energy efficiency in mind.

After participating in the BEST project, Mr Chan feels that the success of his project should be shared with the industry so that other businesses can receive the benefits of putting energy efficient measures in place in their daily operations.

