

Building Name: Shangri-La Hotel, Singapore

Address: 22 Orange Grove Road, Singapore 258350

Shangri-La Hotel, Singapore underwent a major renovation in year 1999. Three chiller plant rooms were incorporated into one centralised chiller plant room, resulting in savings of \$1,000,000 in energy bills each year. This enabled the hotel to achieve the BCA EBBA Award in 2002 as well as the Asian Energy Efficient Award.

During the upgrading, Shangri-La Hotel also upgraded its BMS system with monitoring capability. The monitoring system assists the engineering department to keep a close watch on chiller plant room operations and performance, and help the department generate a maintenance and continuous improvement plan. Thanks to this maintenance plan, after seven years of operations, the upgraded chiller plant room still maintains a good system efficiency of 0.7kW/ton, a record that many buildings strive to achieve.

With plans for continuous improvements in energy savings, Shangri-La Hotel, Singapore reviewed all sensors and upgraded them to increase energy savings. The hotel also reviewed all kitchen exhaust operation hours and incorporated variable speed drives into the system. It also checks, calibrates and ensures proper settings of thermostats to reduce wastages.

One of the major initiatives the hotel undertook was to upgrade the lighting at the back-of-house areas. Shangri-La Hotel, Singapore upgraded the back-of-house lighting from the conventional Magnetic Ballast with T8 lighting to Electronic Ballast with T5 lighting. This change resulted in 25 per cent energy savings in terms of lighting and lighting in these areas was brighter by 10 per cent, thus improving working conditions for the staff.

Other improvements that Shangri-La Hotel, Singapore implemented are:

Installation of a heat recovery system to provide air conditioning system for the lift motor room and to provide hot water.

Replacement of the Service Residences' hot water electrical heater with a heat recovery system. This system harnesses heat from the existing air-conditioning system to produce hot water for guests.

Upgrading and replacement of the garden and landscape lightings. This has a huge impact on energy savings and beautifies the hotel's surrounds during sunset.

Replacement of existing diesel boilers to a newer and more efficient hot water system.

All properties under Shangri-La Hotels and Resorts have a commitment to save 12 per cent on the costs of total utilities. In order to achieve this goal, positive changes were made through cutting wastages, implementing best practices and carrying out a good preventive maintenance program.