

Grand Mercure Nelson Monaco is right behind its Energy Audit.

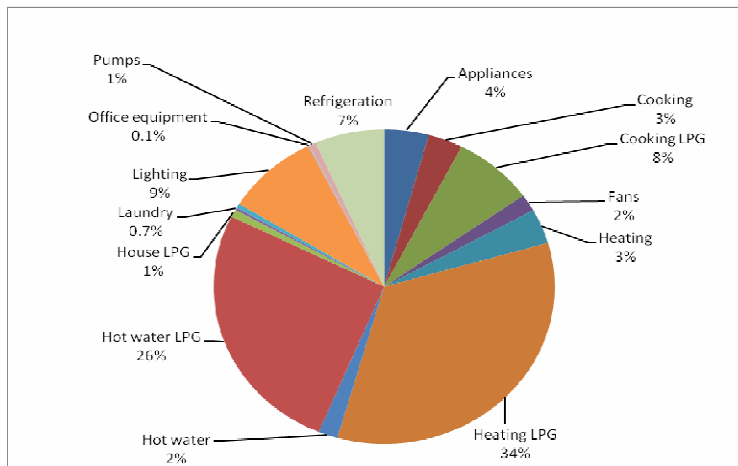


The Grand Mercure Nelson Monaco had its Energy Audit completed in October 2008 as part of the TEEP (Tourism Energy Efficiency Programme) and within a month had a committee ready to implement the recommendations in the audit.

“The process was really great,” said Clare Davies, Managing Director “It was fantastic to have the auditors work with the whole team. The audit clearly shows our energy

usage and how we can save costs through implementing the recommendations.”

An Energy Balance was used to determine the amount of energy used by each technology at Grand Mercure Nelson Monaco which has a range of facilities including a restaurant, 20 hotel Rooms, offices, laundry services for guests, four cottage blocks with 75 apartment units, and guest facilities.



The total energy used was just over 1million kWh which included electricity and LPG. Domestic hot water and space heating were the largest loads, at 28% and 37% of total energy use respectively, with lighting at 9%, refrigeration 7% and cooking 11%.

The audit showed that energy savings between \$22,000 and \$32,000 a year could be achieved by adopting a number of energy saving initiatives. The energy cost for the complex was \$167,800 for the year ending July 2008, so this represents a potential saving of 13–19%.

"Our first priority is to insulate 300m of hot water pipes," Mrs Davies said.

Installing the lagging to insulate the pipes will cost \$7,800, but will save the Monaco \$14,600 per year, making payback on the investment in just over six months.

Replacing the incandescent lamps with energy efficient ones is also a high priority. At a cost of \$6,588 and with estimated savings to be \$6700, this enables a return on investment in just over a year.

Other savings highlighted in the report were cost neutral and involved housekeeping issues such as:

- switching off fridges when they're not in use
- ensuring that refrigerator temperatures are not set any lower than required and adjusting them seasonally
- making the timing on the heaters more efficient
- switching off the restaurant lights during sunny periods and after 1am

The potential savings for being vigilant in these areas is estimated at over \$2,300 per year.



A suggestion made by the auditors that the Monaco could investigate further is to select some of the hotel's buildings as wintering units, and turn the power off completely in these blocks. An alternative is to install 1-2 units in each block with efficient standalone heating and use these units first in winter. This would save significant standby energy losses.

"Once we have the smaller things ticked off, the energy committee will look at the bigger ticket items recommended in the audit, things such as installing a new meter to enable the Monaco to use the night rate or controlled electricity supply for pre water heating; or installing a hot water heat pump or solar hot water system need to be carefully considered. But the Monaco is committed to investing time and money to reap the long-term benefits that implementing energy efficiency initiatives can provide."