

Energy audit well worth it for Pipi Patch



Designed with the needs of modern day global travellers in mind, Base Backpackers Paihia Hostel (the Pipi Patch), is part of a chain of 13 hostels throughout New Zealand and Australia.

Base Pipi Patch provides centrally located accommodation from private units to shared rooms.



When it was audited in September 2008, the hostel was found to already be using many energy-saving processes. Chief Operating Officer - NZ Peter Webster said Base's core clientele – backpackers in the 18-30 age bracket – is very aware of green issues and wants to see energy saving in practice.

Accordingly, Base hostels around the country already had a range of energy-saving initiatives in place.

These included the replacement of incandescent lighting and use of timers on heaters. The flow rate of Pipi Patch's showers was measured at the relatively low level of 9 litres/minute, removing any potential to reduce hot water energy consumption in that area.

"We have a commitment to reducing energy consumption. The TEEP audit was really worthwhile in confirming the direction we are heading in, as well as suggesting some new ideas," Peter said.

The audit found ways to potentially save more than \$10,753 a year in energy costs, approximately 23% of Pipi Patch's annual energy bill.

These included:

- \$6475 from installing a solar water heating system
- \$2077 from installing an air-to-air heat exchanger on the main hostel dryer exhaust
- \$1421 from installing a timer on the dryer and writing a use policy

- \$780 for various small equipment improvements and changes in use practices.

The payback period for the smaller items of work was instant, but ranged up to 6.3 years for the larger investments.

The hostel has a large Maytag dryer which is used for about five hours a day, but is often run only partially loaded. Considerable savings would be made if the dryer was only used when fully loaded, the audit said.

In addition, an exhaust duct currently releases heat generated from the dryer into the atmosphere. If an air-to-air heat exchanger was fitted to the duct, this heat could be recovered and used.



Peter says the installation of solar heating and the air-to-air heat exchanger did not meet Base's Return on Investment (ROI) policy at this time, but will be reconsidered when Pipi Patch is due for refurbishment in a few years time.

The smaller items will be implemented as soon as practical.

"We sent the audit report to all our group to help them spot potential areas for energy saving," Peter said. "I'd recommend this process to anybody, especially smaller businesses – they could save themselves a fortune."