

## Appliances chew up energy in the Waitakere NOW Home

Home entertainment systems and computers were energy guzzlers.

The Waitakere NOW Home was a live research project showing that a sustainable home can be designed and built using products, technologies and methods available now. Its performance was comprehensively monitored in real life conditions.

### Selected appliances

As the Waitakere NOW Home was a live research project, appliances were supplied for the house. Appliances with the best possible energy efficiency ratings available in 2005 were installed. More efficient models are now on the market.

- Dishwasher - 3 star energy rating with an energy consumption of 280 kWh per year.
- Fridge - a 4 star energy rating with an energy consumption of 454 kWh per year.
- Washing machine - a 2 star energy rating with an energy consumption of 57 kWh per year for cold washes, and 518 kWh per year for hot washes.

However, as the lower power bills of the energy-efficient house meant more money in their pocket, the family were able to invest in further appliances and began to use the house as a home office, complete with server and computer equipment.

### Surprising energy guzzlers

The energy use of appliances was more intensively monitored in the second year to see what part they play in household energy use. Appliance use was high; on average the TV was on 40-45 hours per week, the stereo 30 hours per week and the home computer/s 50 hours per week.

The home office, with several computers and a server, was a high energy user, forming 10% (847 kWh) of total energy use. When calculating the cost of a home office, it is important not to underestimate the associated energy costs.

Also of interest for many households is the high energy use of the large screen TV which used 5% (391 kWh) of total energy use, more than the oven and fridge.

For more information:

- Beacon website [www.beaconpathway.co.nz/new-homes/article/what\\_is\\_the\\_waitakere\\_now\\_home\\_project](http://www.beaconpathway.co.nz/new-homes/article/what_is_the_waitakere_now_home_project)