

## Thomas Hotel

## Target Sustainability Programme

### About the Company

Thomas Hotel is an accommodation provider located in a two story building on Hereford Street. Thomas Hotel provides accommodation from backpacker short stay rooms to budget hotel rooms.

### Introduction to the Project

Thomas Hotel joined the Christchurch City Council Target Sustainability Programme in early 2009. The Target Sustainability Programme supports business to reduce waste and to be energy and water efficient.

The main objective for Thomas Hotel at the time of joining the programme was to reduce their waste and gas costs and to promote environmental responsibility to their guests and staff.

Thomas Hotel implemented a range of projects to reduce their waste sent to landfill and improve their energy and water efficiency.

### Key Achievements

**Reduced waste sent to landfill by 48%**

**Reduced lighting energy consumption by 8%**

**Reduced water heating energy losses from piping by 2820 kWh/year**

**Reduced water consumption by an estimated 136,000 litres per year**



Thomas Hotel building © Copyright

### Waste Reduction Initiatives

Thomas Hotel reduced their waste sent to landfill by 48%. This corresponds to an average of 7.3 full 240 litre waste wheelie bins per month being diverted from landfill (based on the reduction in full waste wheelie bin pickups before and after the waste reduction initiatives were implemented). Thomas Hotel implemented the following initiatives to reduce, reuse and recycle their waste:

- Established an efficiency team to monitor waste and recycling and to implement waste reduction and recycling projects.
- Implemented a full kitchen recycling station for organics, paper, plastic and glass waste. Guests who use the kitchen have full access to the bins which are then emptied by staff once full.
- Installed two additional commercial recycling bins to increase capacity for recycling within the building.
- Placed signs throughout the building giving guests information on what can be recycled and the benefits of reusing and recycling.
- Implemented paper reuse and recycling in the staff office. Reusing single-sided paper was an easy but cost efficient way to reduce the amount of paper consumed.



Thomas Hotel kitchen recycling station © Copyright

## Energy Efficiency Initiatives

Thomas Hotel has implemented a range of energy efficiency initiatives to reduce energy consumption within the building. Thomas Hotel runs a LPG boiler for heating and cooking and electricity for lighting. The following initiatives were implemented and have reduced lighting electricity consumption by an estimated 8% per year and improved gas efficiency:

- Established an efficiency team to monitor energy efficiency and to implement energy efficiency projects.
- Installed a sensor system which turns off lights in hallways when not in use

reducing lighting energy consumption by 50% in the hallways, assuming that the lights are turned off for half the time.

- Implemented an energy efficiency bulb replacement scheme whereby old inefficient bulbs are replaced with 15 – 20W compact fluorescent bulbs. These bulbs save up to 80% of energy compared to the older incandescent 75-100W style light bulbs. Thomas Hotel has reduced their lighting energy use by 657 kWh which is approximately 8% of the building's lighting energy use costs using the compact fluorescent bulbs.

- Replaced all of the internal pipe insulation lagging on the hot water system. This has reduced heat loss from the piping resulting in an increase in gas

efficiency. This insulation saves Thomas Hotel an estimated 2,820 kWh per year (\$540 saving a year in gas costs with a payback of seven months).



Full hot water pipe insulation lagging was installed to reduce heat loss © Copyright

## Water Efficiency Initiatives

Thomas Hotel installed a low pressure hot water system to increase shower and tap water efficiency. This system is estimated to save approximately 136,000 litres of water

per year based on eight minute showers and typical low pressure system flow rates compared with typical medium pressure systems.

## Summary

Since joining the Target Sustainability Programme, Thomas Hotel has implemented a range of projects that have resulted in a reduction in waste sent to landfill and an improvement in their energy and water efficiency. The business has also reduced its ongoing costs in energy use and waste, demonstrating that by taking an environmental approach towards business, it is possible to also be cost efficient.

*“Because of the Target Sustainability Programme Thomas’s has been able to make some very proactive changes to our general day to day running of the hotel. This programme has supplied us with the support and more importantly offered us an insight into how to be more cost effective and environmentally sound in today’s current climate. We are overall very happy with the outcome of this process and as we are already seeing the benefits of this venture*

*we will continue to implement more changes. I would fully encourage any business to be involved in this project”.*  
Maree Jack - Manager

Thomas Hotel’s main focus for the future is to reduce their LPG gas consumption by looking into options to reduce heat loss by improving building insulation and implementing an alternative energy efficient heating system for the building.