

Woolston SuperValue

Target Sustainability Programme

About the Company

Woolston SuperValue is a supermarket selling general supermarket goods at their St Johns Street, Woolston store. Woolston SuperValue employs approximately 29 staff.

Introduction to the Project

Woolston SuperValue joined the Christchurch City Council Target Sustainability Programme in 2009.

The Target Sustainability Programme supports business to reduce waste and to be energy and water efficient.

Woolston SuperValue's objective at the time of joining the programme was to be a more resource and cost efficient business, reduce their energy and water consumption costs and to reduce the amount of waste being sent to landfill.

Woolston SuperValue implemented a range of projects to reduce their waste and improve their energy and water efficiency.

Key Achievements

- **Reduced the total waste being sent to landfill by 29% (5.5 tonnes) per year**
- **Reduced 90% of the shop floor lighting energy consumption by 15 to 20% per year**
- **Reduced total electricity energy consumption by 5.2% per year**



Woolston SuperValue store © Copyright

Waste Reduction Initiatives

Woolston SuperValue reduced their waste sent to landfill by 29% per year (based on the weight of recycling and landfill skips before and after initiatives were implemented). After the Christchurch earthquake Woolston SuperValue experienced an 81% increase in turnover. Even with the significant increase in products and packaging associated with this, Woolston SuperValue maintained their pre-quake level of waste sent to landfill by increasing their level of recycling and reducing their waste. Woolston SuperValue implemented the following initiatives to recycle their waste:

- Established an efficiency team to monitor waste and recycling and to implement waste reduction and recycling projects.
- Ensured that their waste service provider recorded the weight of their landfill skip so that the store could measure baseline weights of waste being sent to landfill.
- Implemented a collection system for all produce offcuts from the produce department. The produce offcuts are collected at a central point and collected by a local pig farmer. This has reduced the waste being sent to landfill by 25% (based on the weight of produce recycling before and after the initiatives were put in place).
- Implemented a collection system for all office and staff room recyclable paper. This paper is collected by staff at various locations around the store and placed into a commercial recycling bin for collection.

- Implemented a collection system for co-mingled waste from the store room such as plastic bottles, newspaper and small cardboard packaging. All co-mingled recyclable waste is managed through a commercial recycling provider. This has reduced the amount of waste being sent to landfill by 4%.
- Encouraged staff to be responsible for minimising waste and to recycle their waste through positive communication and encouragement from the store owners and department managers.



Co-mingled recycling bins © Copyright

Energy Efficiency Initiatives

Woolston SuperValue reduced their electricity consumption by an average of 10,000 kWh per year (based on electricity consumption before and after initiatives were implemented) and reduced 90% of their shop floor lighting energy consumption by 15 to 20%. Woolston SuperValue implemented the following initiatives to increase their energy efficiency:

- Established an efficiency team to monitor energy use and to implement energy efficiency projects.
- Replaced 90% of the store's magnetic ballast fittings used within the fluorescent lighting on the shop floor with digital electronic ballast fittings. The electronic ballasts increase the lighting efficiency of the bulbs by 15 to 20%. Replacing these ballasts reduced lighting electricity consumption by 4,000 to 5,300 kWh per year with a payback period of approximately 3 to 4 years.
- Replaced a stand-alone produce chiller with a more modern chiller fitted with a night blind to reduce cooling losses during the night. Night blinds reduce the electricity consumption of the chiller by approximately 20%. This night blind saves approximately \$280 per year in electricity and has a payback period of approximately 1 year.
- Installed night-time polystyrene covers on the frozen goods chiller to reduce refrigeration energy consumption when the store is closed. These covers are 2 inch thick polystyrene covers that fit over the top of the chiller.
- Implemented a regular maintenance regime for the deli and butchery refrigeration system to monitor and adjust to the correct temperature.
- Implemented a maintenance regime so that heat pumps are maintained at optimal efficiency. This involves regularly cleaning the heat pump air filters.
- Implemented training as part of staff induction to encourage staff to minimise un-necessary heating and lighting.



Shop floor lighting fitted with new electronic ballasts © Copyright



Night-time frozen goods chiller covers © Copyright



The new chiller with a night blind © Copyright



Produce recycling bin ready for pick up from the pig farmer © Copyright

Water Efficiency Initiatives

- Implemented a maintenance regime to regularly check and fix water leaks.

Summary

Since joining the Target Sustainability Programme Woolston SuperValue has implemented a range of projects that have resulted in a reduction in waste sent to landfill and a reduction in energy consumption. These projects have demonstrated to their staff and customers that they are an environmentally responsible business. The business has also reduced its on-going costs in energy use and waste demonstrating that by taking an environmental approach towards business, it is possible to also be cost efficient.

Woolston SuperValue future plans are to continue to look for ways to reduce and recycle their waste and to implement further energy and water efficiency projects. These projects include improvements to their current organic collection and further developing their monitoring of waste production and energy and water use.

“The Target Sustainability Programme has improved our knowledge of which products were going to landfill from our business that could be recycled. It allowed us to implement an achievable recycling programme which heavily reduced our rubbish sent to landfill. It also showed us where we could make energy savings through better knowledge of our current lighting units and heating unit. We were able to replace around 70% of our lighting with digital ballasts, thus saving on energy use”.

Cheryl and Rob De Thier, Woolston SuperValue owners

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