

Riccarton PAK'nSAVE

Target Sustainability Programme

About the Company

Riccarton PAK'nSAVE is a supermarket located within the Riccarton Mall, Christchurch. The store sells general supermarket goods.

Introduction to the Project

Riccarton PAK'nSAVE 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.

Riccarton PAK'nSAVE's goal at the time of joining the programme was to continue to develop their resource efficiency initiatives and promote environmental responsibility to their customers. This involved focusing on waste reduction and energy efficiency initiatives with short payback periods. Riccarton PAK'nSAVE implemented a range of projects to reduce their waste and improve their energy efficiency.

Key Achievements

- **Reduced waste sent to landfill by 10.4% (16.5 tonnes) per year**
- **Increased the amount of produce and bakery waste recycling by 254% (15.6 tonnes) per year**
- **Increased the amount of co-mingled recycling by 134% (900 kg) per year**
- **Reduced total energy consumption by 5.5% per year**
- **Reduced lighting energy consumption by 35% per year**



Riccarton PAK'nSAVE store entrance © Copyright

Waste Reduction Initiatives

PAK'nSAVE reduced their waste sent to landfill by 10.4% (16.5 tonnes) per year. Riccarton PAK'nSAVE implemented the following initiatives to reduce and recycle their waste:

- Nominated an efficiency team member 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 waste weights of waste being sent to landfill.
- Improved their existing collection system for produce and bakery waste by installing additional collection bins within the produce and bakery departments. These bins are collected weekly by a pig farmer for pig feed. This has reduced the amount of produce and bakery waste being sent to landfill by 254% (15.6 tonnes) per year based on the number of full collection bins before and after the initiative was implemented.
- Increased co-mingled recycling by purchasing an additional two recycling bins for the store. Co-mingled waste includes plastic bottles, newspaper and small cardboard packaging. These bins are collected weekly by a commercial recycling provider. This has reduced the amount of co-mingled recyclable waste being sent to landfill by 134% (900 kg) per year compared to the co-mingled recycling before the two additional bins were installed. The increase in this amount of recycling was based on the number of full collection bins before and after the initiative was implemented.
- Installed recycling bins throughout the stores office area to recycle predominately office paper and plastic. The recycling bins are then emptied into a bin at a central point for collection by a commercial recycling provider.
- Promoted the use of re-usable bags to customers and gave customers the opportunity of using used cardboard cartons instead of plastic bags. The store promotes the re-usable bags by offering discounts on the bags throughout the year. These initiatives will have reduced the amount of plastic bags being sent to landfill and makes use of used cardboard packaging.
- Implemented fluorescent tube recycling for old used fluorescent tubes. Proper disposal of fluorescent lamps is important to reduce the amount of hazardous waste entering the landfill.
- Included brief staff training, within staff induction, outlining the resource efficiency policies and procedures.

Energy Efficiency Initiatives

Riccarton PAK'nSAVE has reduced their electricity consumption by an average of 157,000 kWh per year. This corresponds to a 5.5% reduction in electricity consumption per year (based on electricity consumption before and after initiatives were implemented). Riccarton PAK'nSAVE implemented the following initiatives to increase their energy efficiency:

- Replaced 100% of their existing 400W metal halide bulbs to 54W T-5 tubular fluorescent bulbs. Based on the supermarket's operating hours this has reduced the lighting energy consumption by 107,000 kWh per year. This corresponds to a 22% reduction in electricity energy consumption and a saving of \$16,000 per year. This initiative has a payback period of 5 years.
- Implemented a half lighting policy on the supermarket floor after operating hours. Based on the supermarket's operating hours this has reduced the lighting energy consumption by 48,000 kWh per year. This corresponds to a 13% reduction in electricity energy consumption and a saving of \$6,000 per year. This initiative had an immediate payback period.
- Replaced existing 50W bulbs with 35W energy saving bulbs in the shop entrance to reduce lighting energy consumption. This small initiative saves approximately 2,000 kWh (\$270) per year and has a payback period of approximately 6 months.
- Installed an automatic chiller door on one of the supermarket's dairy and deli bulk storage chillers. This automatic door reduces the loss of cool air from the chiller and reduces refrigeration energy consumption.
- Replaced pull down blinds on the dairy, deli and meat chiller units to prevent the loss of cool air from the chillers when the supermarket is closed. Night blinds typically have a payback period of approximately 1 year.
- Installed plastic flaps on the butchery chiller door to reduce cooling losses from the butchery room while still maintaining easy access to the butchery room.



Used cardboard boxes available to customers © Copyright



Cardboard ready for recycling collection © Copyright



New shop floor T-5 tubular fluorescent bulbs © Copyright



Produce and bakery collection bins ready for collection by the pig farmer © Copyright



Automatic chiller door © Copyright

Summary

Since joining the Target Sustainability Programme Riccarton PAK'nSAVE has implemented a range of projects that have resulted in a significant reduction in energy consumption and waste sent to landfill. These projects have demonstrated to their staff and customers that they are an environmentally responsible business.

"The Target Sustainability Programme team came in and assisted us by conducting a waste audit which identified waste that could be diverted from landfill. These changes were implemented immediately. The team also conducted an energy assessment which assisted us with our energy efficiency projects including the installation of 54W T-5 tubular fluorescent bulbs within the retail area and implementing a half lighting policy. These and other energy efficiency initiatives combined to significantly reduce our energy consumption".

Ken Adams, Operations Manager.

Riccarton PAK'nSAVE future plans are to continue to look for ways to reduce and recycle their waste and to implement further energy saving projects that have cost efficient payback periods.

Want more information? Visit www.target sustainability.co.nz