

## Carlton Taylor Industries Ltd

## Target Sustainability Programme

### About the Company

Carlton Taylor Industries Ltd is a design and manufacturing business which specialises in metal products, mainly for the electronics and electrical industries.

### Introduction to the Project

Carlton Taylor Industries' Disraeli Street office and manufacturing site joined the Christchurch City Council Target Sustainability Programme in 2008.

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

Carlton Taylor's objective at the time of joining the programme was to focus on reducing their waste sent to landfill and reduce their energy and water use.

### Key Achievements

**Reduced waste sent to landfill by 11%**

**Reduced water consumption by 17%**

**Reduced energy consumption by 6.3%**



Carlton Taylor Industries manufacturing building © Copyright

### Waste Reduction Initiatives

Carlton Taylor Industries reduced their waste sent to landfill by an estimated 800 kg/year (based on skip weights before and after initiatives were implemented). This corresponds to an 11% reduction in waste sent to landfill. Carlton Taylor Industries implemented the following initiatives to reuse and recycle their waste:

- Established an efficiency team to monitor waste and recycling and to implement waste reduction and recycling projects.
- Installed office paper recycling bins at each office workstation.
- Implemented a paper recycling system whereby all paper collected onsite for recycling is shredded and used in packaging for manufacturing products. This has reduced the amount of paper being sent to landfill and saved on the purchasing of packaging materials.
- Implemented an organic collection system to collect organic waste from the staff room. This is emptied by staff into the Christchurch City Council organic recycling bin which is collected weekly.
- Implemented a cardboard reuse collection system where cardboard boxes still in good condition are reused for packaging by Carlton Taylor Industries.



Shredded paper being reused in product packing © Copyright

- Implemented a co-mingled recycling collection system within the offices and manufacturing floor for staff to recycle co-mingled materials. This material is then recycled through the Christchurch City Council recycling bins.
- Installed a cardboard recycling collection crate for damaged cardboard boxes that cannot be reused.
- Made an arrangement with one of their major customers to palletise and return customised sized plastic and polystyrene packaging for reuse by Carlton Taylor Industries.

## Energy Efficiency Initiatives

Carlton Taylor Industries reduced their electricity consumption by 10,152 kWh per year (based on average energy consumption before and after initiatives were implemented). This is a 6.3% reduction in energy consumption, corresponding to a \$2,030 electricity saving per year based on current electricity prices. Carlton Taylor Industries implemented the following initiatives to increase their energy efficiency:

- Established an efficiency team to monitor energy efficiency and to implement energy efficiency projects.
- Implemented a staff policy whereby lights are actively switched off in all rooms which are not in use.
- Implemented staff policies to turn off machines, computers and heaters and to keep doors closed during breaks and when not in use.
- Installed switches so that lighting in powder coat booths are now individually switched on and off rather than all lights being controlled from one switch.
- Repaired airline leaks and have regular servicing of the air compressor.
- Mounted a PVC strip curtain between the stores and pre-pack departments to keep draughts out in winter, resulting in reduced heating requirements.
- Implemented spot pricing and energy discounts with their energy provider to reduce energy costs.



Cleaning basin water reuse system  
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Cardboard recycling collection for damaged boxes that cannot be reused  
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## Water Efficiency Initiatives

Carlton Taylor Industries reduced their water consumption by 0.106 L/\$ of sales. This is a 17% reduction in water consumption (based on metered KPI water consumption before and after initiatives were implemented). Carlton Taylor implemented the following initiatives to increase their water efficiency:

- Installed a system to reduce the amount of water being used in a process treatment rinse tank. This system takes water from the final cleaning tank and reuses it in the initial cleaning tank. This system effectively halves the water being used in the process (approximately 0.6m<sup>3</sup> per wash cycle, equating to 26,000 L per year water saving).
- Established a water leakage programme which involves identifying water leaks and repairing them as quickly as possible.
- Implemented staff policy to turn off treatment water rinse flow taps when not in use.

## Summary

Since joining the Target Sustainability Programme, Carlton Taylor Industries has implemented a range of projects that have resulted in a reduction in waste sent to landfill and a reduction in energy and water consumption.

The business has also reduced its ongoing costs in energy and waste, demonstrating that by taking an environmental approach towards

business, it is possible to also be cost efficient.

*“Post audit recommendations provided by the Target Sustainability Programme gave our company excellent direction and focus. We were able to determine the quickest and most cost effective methods to help protect the local environment, make savings and reduce waste. An excellent programme and*

*highly recommended to any business considering environmental approaches to business improvements”.* Mark Nihoniho - Quality Manager

Carlton Taylor’s future plans are to continue to look for ways to reduce and recycle their waste and to focus on implementing further energy and water efficiency projects.