

CMP Rakaia

Target Sustainability Programme

About the Company

CMP Rakaia is a meat processing facility located in Rakaia. They are part of the CMP group, which operates five meat processing facilities in New Zealand. CMP Rakaia has been operating at the current site for approximately 5 years and processes lambs, ewes and bobby calves.

Introduction to the Project

CMP Rakaia joined the Target Sustainability Programme in 2008.

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

CMP Rakaia's main objective at the time of joining the programme was to reduce their energy costs and to save water. CMP Rakaia implemented a range of projects to reduce their waste and improve their energy and water efficiency.

Key Achievements

Reduced waste sent to landfill from a weekly 1.5m³ skip pickup to a fortnightly pickup

Reduced total annual electricity use by 16% almost 300,000 kWh as well as reducing the electricity spend by over 40% (almost \$150,000 per year)

Reduced annual LPG use by 22.8% and saved over \$60,000 per year

Reduced water use through the stock wash by approximately 60% equivalent to over 10,000m³ per year



Stock wash and pen area © Copyright

Waste Reduction Initiatives

CMP Rakaia has been able to reduce their waste sent to landfill collection frequency from a weekly collection of a 1.5m³ skip to a fortnightly collection. CMP Rakaia implemented the following initiatives to reuse and recycle their waste:

- Working with an adjacent site, Mountain River Processors, to send recyclable materials to the Rakaia Resource Recovery Park.
- Improved the recycling of chemical containers by setting up specific collection points and training staff
- Repairing damaged pallets and reusing, or returning to suppliers instead of sending them to landfill as had been occurring previously.

Being located remotely from recycling contractors limits current options for recycling, however site management intends to further seek opportunities to improve recycling systems at the site.



Waste collection skip © Copyright

Energy Efficiency Initiatives

CMP Rakaia reduced their annual electricity use by almost 300,000 kWh (16%) and annual electricity spend by over 40%, saving almost \$150,000 per year. CMP Rakaia implemented the following initiatives to increase their energy efficiency:

- Reduced fixed flow rates on non-sensor operated sterilisers (which use very hot water to sterilise knives used by site personnel), reducing hot water use.
- Installed additional 'electronic eye' sensors where appropriate so that hot water only flows to sterilisers when required.
- Insulated hot water and hot gas lines to minimise heat loss.
- Assigned personnel responsible for turning off the boiler and lights at the end of daily operation.
- Optimised chiller use, ensuring that chillers are only turned on when required by ensuring a chiller is full before turning the second chiller on, and ensuring that chillers are not left on for weekends when empty or with very low loadings.

Additional insulation on piping around the site and additional movement sensors on sterilisers for controlling hot water use are planned, and this is expected to further improve energy efficiency.



Chiller area © Copyright

Water Efficiency Initiatives

Water efficiency has been an ongoing focus for CMP Rakaia, as there is a limited consented water take. CMP Rakaia has implemented a new stock washing system which has reduced water use by an estimated 7m³ per cycle of animals washed, which represents a water reduction of approximately 60% over the previous stock wash system. Based on 150 animals per cycle, this equates to over 10,000m³/year water saving.

Having recently implemented this system, CMP Rakaia is looking forward to measuring the water savings achieved.



New stock wash area © Copyright

Summary

Since joining the Target Sustainability Programme, CMP Rakaia has implemented a range of projects that have resulted in a reduction of waste sent to landfill and an improvement in energy and water efficiency.

"A real benefit of the Target Sustainability Programme was the increased focus on resource efficiency that resulted from our participation in the programme. We make regular reference to the reports provided and have implemented several recommendations." Dallas Woodford - Plant Manager