

## Air Force Museum of New Zealand

## Target Sustainability Programme

### About the Company

The Air Force Museum displays artefacts that tell the story of New Zealand Military Aviation and is located at 45 Harvard Avenue in Wigram, Christchurch. The museum is open to the general public and presents various exhibitions and educational programmes for school children.

### Introduction to the Project

The Air Force Museum joined the Christchurch City Council Target Sustainability Programme in 2009. The Target Sustainability Programme supports businesses to reduce waste and to be energy and water efficient.

The Air Force Museum's objective at the time of joining the programme was to reduce waste sent to landfill and to become more energy and water efficient.

The Air Force Museum implemented a range of projects to reduce waste sent to landfill and to improve energy and water efficiency.

### Key Achievements

- **Reduced waste sent to landfill by 35% (1.6 tonnes) per year.**
- **Reduced museum display case lighting electricity use by an estimated 52% (26,300kWh) per year, saving an estimated \$3,700 per year.**



Main entrance of museum © Copyright

### Waste Reduction Initiatives

The Air Force Museum reduced the amount of waste sent to landfill by 35% (1.6 tonnes) per year<sup>1</sup>.

The Air Force Museum implemented the following initiatives to reduce and recycle waste:

- Implemented a co-mingled recycling collection system for plastic containers, glass bottles and metal cans.
- Removed rubbish bins from individual work stations and replaced them with paper recycling units.
- Reduced paper use by using reusable games and activities in the kids' corner rather than colouring activities, utilising an electronic booking system instead of a paper based one, introduction of reusable laminated survey forms and making notepads from scrap paper.
- Implemented recycling collection systems for public visitors, events and school groups. Two collection units for both recycling and general waste collection have been placed in the atrium and they are able to be moved if required.

- Worked with the cafe to improve waste management practices, including implementation of a food waste collection system and a co-mingled recycling collection system for plastic containers, glass bottles and metal cans.
- Implemented a regular Oscar the Grouch Award for the staff member contributing most positively to waste reduction initiatives.
- Conducted additional waste audits to identify further waste reduction opportunities.

<sup>1</sup> The calculations are based on figures supplied by the waste collection service provider and compare data from January and February 2011 with October 2012 to February 2013 periods when the majority of the recycling initiatives had been implemented and business disruption associated with the Canterbury earthquakes had been resolved. The 2012/2013 annual estimates are based on 5 months of real data, extrapolated over one year.

## Energy Efficiency Initiatives

The Air Force Museum implemented the following initiatives to increase energy efficiency:

- Installed new sensors, controls and energy efficient lighting fixtures throughout the museum display cases, reducing lighting electricity use by an estimated 52% (26,300kWh) per year, saving an estimated \$3,700 per year. This project involved the replacement of approximately 470 light bulbs to energy efficient LEDs and fluorescent bulbs. The majority of the power consumption at the Air Force Museum is dedicated to illuminating the permanent displays.
- Switched off Zip water heaters in areas where they are not often used.
- Switched off lights in 2 Store (large warehouse) when the store is unoccupied.
- Increased “switch it off” signage and spot checks for office equipment being switched off at the end of the working day.
- Set up a regular monthly email to all staff about energy use improvements, as well as hints and tips on how to save energy and costs in the workplace.

## Water Efficiency Initiatives

The Air Force Museum implemented the following initiatives to increase water efficiency:

- Set up a system to conduct monthly water meter readings to monitor water use.
- Installed automated garden irrigation to water outside the heat of the day.
- Fixed leaking taps.
- Created a water leak reporting system.
- Installed new signage around the museum encouraging staff to be water efficient.



Oscar the Grouch Award  
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Creating note paper from  
scrap paper © Copyright



Kitchen food waste collection  
© Copyright



New LED lights for  
exhibition spaces © Copyright

## Summary

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

*“The Air Force Museum’s involvement in the Target Sustainability Programme has helped the Museum to implement a number of resource efficiency opportunities and maintain these long term. The Museum found that monitoring waste, energy and water use, then twice yearly adding to its initiatives, is effective in improving resource efficiency. This approach has allowed the Museum to show, with real data, that we are acting more sustainably.”* Charlotte Robertson, Public Programmes Officer, Air Force Museum.

The Air Force Museum plans to continue to look for ways to reduce and recycle waste and to implement further energy and water efficiency projects.

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