

BAYFAIR SHOPPING CENTRE LEADING THE WAY IN SUSTAINABILITY

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Abstract

How does a council start to engage a business? Is a waste audit really necessary? How much does it cost? Shouldn't businesses worry about their own waste? Should businesses pay the costs of a waste minimisation programme? How do you set a budget for working with businesses? Is council involvement really going to make any difference?

In the case of Bayfair Shopping Mall, it seems council involvement does make a difference. Bayfair receives over 5 million visitors every year – one of the highest per capita Malls in the country. With more than 90 stores located under one roof, it's a natural choice for a waste reduction project. Where else could you communicate your message to 5.8 million people?

With some start up help from Tauranga City Council and some creative thinking around recycling and energy efficiency, the centre has saved a small fortune – to date, \$240,000. AMP Capital, the owners of Bayfair now plan to implement similar practices in its 4 other New Zealand malls and another large retail group sent a team of executives to Bayfair Shopping Centre in 2008 to see what all the fuss was about.

Introduction

The Tauranga City and Western Bay of Plenty District Councils Joint Waste Management Plan was adopted in October 2001 with a vision of zero waste to landfill by 2015.

In 2002, Tauranga City Council began to develop its Cleaner Production Programme, co funded by its regional council, Environment Bay of Plenty. The programme is now in its sixth year of operation. Increased interest in recycling and waste reduction has led to our programme being fully subscribed for the past two years. We anticipate that over time the increase in interest in our programme will result in more and more businesses electing to pay for these services to be delivered privately rather than going on what might become a lengthy waiting list. In the meantime we are making advantage of the popularity of the programme to

put pressure on the waste companies to deliver some new services not previously available in Tauranga.

We have worked with over 200 businesses since the programme began. Some of our involvement has been as simple as providing contact details for recycling service providers or putting people in touch with web-based services like The Waste Exchange. We can advise how to implement simple recycling systems in businesses with waste streams that we are familiar with, like food outlets and office blocks. Or, when a business has an unusual or complex waste stream we undertake an audit of their waste and provide tailored recommendations for waste reduction.

Waste Minimisation in Business – Should Councils be Involved?

Community participation is absolutely essential to achieving our waste reduction goals. As Tauranga City Council does not control the total waste stream we are reliant on the cooperation of our community to achieve our waste reduction goals. Programmes aimed at creating behaviour change are integral to the achievement of our vision.

Furthermore, business waste contributes to more than 60% of the total waste stream. With private waste companies offering inexpensive and convenient waste collection services there can be little incentive to reduce waste. Often, the implementation of recycling services will increase the overall costs of a businesses waste management and it is not until businesses take up the challenge of extensively reviewing their production and waste disposal practices that any savings can be made. Without Council involvement many businesses would not start the process.

Programme Champions

Tauranga City's Zero Waste Programme has many waste minimisation success stories but the most advantageous projects have been the ones where our assistance has been further built on by businesses who become committed to significantly reducing negative impacts on the environment. This year, two of the businesses we have worked with won their categories at the Bay of Plenty Sustainable Business Network Awards. Devan Group and Bayfair Shopping Centre are both great examples of how a small level of service from council can help towards some big progress in reducing waste to landfill. Businesses like these become the champions of our programme and the recognition that waste reduction practices receive through their marketing is worth far in excess of the \$40,000 in total that we spend each year.

Devan Group

Devan Group make high quality, rotationally moulded plastic rain tanks and waste water treatment systems for the agricultural, industrial and domestic market. The Tauranga based company has been in business for the past 20 years and for 18 years, sent all its waste to landfill.

A 3.0 cu metre skip emptied three times per week, was largely filled with empty sacks that once contained raw materials used in the production process. These sacks were of unrecyclable composite paper/plastic construction. Approximately 3000 sacks were sent to landfill every week with the company spending around \$8000 a year on waste disposal.

In 2005 the marketing manager at the company contacted Tauranga City Council requesting assistance with minimising waste at the factory. A few months later, the company was recycling almost all its office waste, including paper and cardboard, plastic, glass and metal beverage containers. They also stopped using single use products in the office like polystyrene cups. Next, they contacted their supplier and requested new packaging for the plastic powder that was shipped in 20kg sacks. Consequently, all polyethylene powder for the tank making process was shipped in new plastic bags, which are being sent for recycling. Devon Group now also recycles all toner cartridges, obsolete computers, plastic from factory off-cuts and shrink-wrap.

These initiatives have saved the company over \$8000 a year in landfill charges and have resulted in a 65% reduction in waste to landfill. Devon Group will continue to reduce waste to landfill with the ultimate goal of zero waste.

While Council's involvement ended at with waste minimisation, the company continued to review its environmental performance and has gone on to implement a Tank Take Away Programme. The new initiative is based on a Product Stewardship model where companies take responsibility for their products for the duration of their lifecycle. Devon has extended this idea one step further, and is taking responsibility not only for their own plastic products, but also those of others in the industry. The programmes main goals are to help customers dispose of old redundant water tanks with limited hassle and in a responsible manner. The tanks are then broken down and recycled.

Bayfair Shopping Centre

Bayfair Shopping Centre has been our most high profile project to date. With over 1000 people working in over 90 stores which occupy over 7.2 hectares of land, Bayfair Shopping Centre gets over 5.8 million visitors per year or an average of nearly 16,000 people every day. Bayfair is jointly owned by AMP Capital Shopping Investors and Tower Property Nominees and AMP Capital Shopping Centres (AMPCSC) have 100% management rights.

Bayfair Management contacted Council in April 2006 for assistance with reducing waste. At that time, the centre's recycling was limited to cardboard and deep fryer fat. They were sending 389 tonnes to landfill a year at a cost of \$60,000.

A waste audit conducted by Bayfair's waste contractor did not identify any significant presence of recyclable material in the waste stream so Bayfair sought a second opinion. Tauranga City Council's contractor, Waste Watchers, came up with a different result.

Here is what is happening now:

Plastic beverage containers fill 622 x 240l wheelie bins a year. That’s about 150,000 plastic bottles.

Glass bottles filled 106 x 240l wheelie bins in the last 10 months.

Aluminium Cans divert 476 kg from landfill a year.

Paper recycling diverts 75 tonnes from landfill a year. That is 378 x 240l wheelie bins. A significant increase was made when the bookshops and magazine sellers began to participate. They previously put their magazines in the waste compactor as they had supply agreements with publishers that unsold magazines were not to be available to the public for free. Mall security found a solution and provided locked recycling bins.

Cardboard recycling diverts 125 tonnes a year. That is 658 x 10m³ cages.

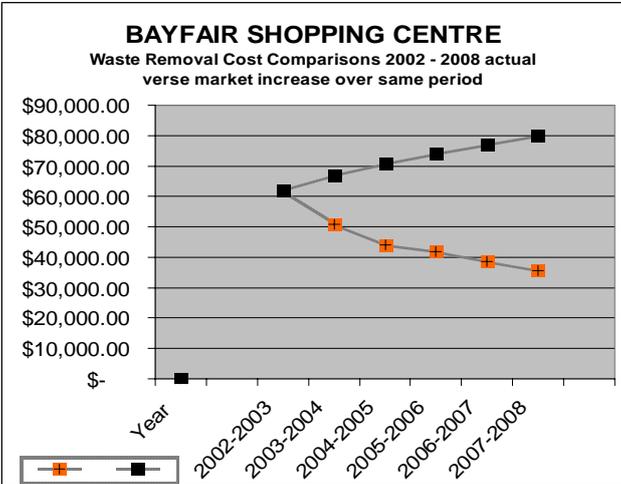
Food scrap collection diverts 50 tonnes a year from landfill. That is 160 x 240l wheelie bins or the equivalent of 350,000 Big Macs.

Shrink-wrap fills 198 woolsacks a year, which is enough to cover 65 rugby fields.

Deep fryer oil fills 49 x 200l drums every year, which weigh over 10 tonnes.

By the end of 2007, Bayfair had reduced their waste by 42 tonnes a year and saved \$30,000 into the bargain. By June 2008, Bayfair had reduced their yearly waste by 99 tonnes from what it was in 2005. Had Bayfair not taken stock of their waste, the waste bill in today’s costs would be about \$80,000 per year and the waste quantities would have remained unmeasured.

Bayfair Shopping Centre’s Annual Waste to Landfill (tonnes)	
2005	389
2006	347
2007	311
2008	290



When Bayfair changed the frequency of compactor collection from daily to twice weekly, it saved the centre about \$20,000 per annum in removal fees. By taking a closer look at the waste stream Bayfair took the first steps down the waste minimisation path. This initial action set a new course for the shopping mall and Bayfair embarked on a long term goal of reducing its impact on the environment and contributing to the community while increasing its value in the market.

Summary of Bayfair's Work to Date

2006

- Apr Opportunity to recycle identified and council involvement begins
- Apr Discussions with tenants and staff about recycling
- May Waste contractor approached about recycling services
- Jun Waste audit completed by the waste contractor determined that there were no significant volumes of recyclables in the waste stream.
Tauranga City Council's contractor, Waste Watchers Ltd, completes an audit
- Jul Recycling bins introduced next to the waste compactor
- Jul Food court identified as source of heavy waste
- Aug Waste audit conducted with focus on the food court
- Sep OCS (cleaners) trial of separating liquid waste at food court.
- Dec Bayfair wins environmental award from Environment BOP

2007

- Jan Second Tauranga City waste audit conducted
- Jan Bayfair management meet with pig farmer to discuss collection of food waste from food court stall holders
- Feb Investigate the option of installing waterless urinals
- Feb Start the Sustainable Business Challenge with SBN Bay of Plenty
- Mar Change paper collection to incorporate magazine/paper pickup from key tenants
- Jul Eleven waterless urinals installed. Start investigation of rainwater collection for amenities use.
- Jul Study completed on coat hanger recycling
- Sep Introduce the recycling of cans
- Oct Introduce the recycling of glass
- Oct Common area waste audit completed
- Oct New uniforms include sustainability logo
- Oct Sponsor EERST's Paper 4 Trees programme
- Nov Common area waste (second) audit completed
- Nov Investigate e-waste collection for computers
- Dec Donate income from metal recycling to NZ Life Saving

Bayfair's media tracking company estimates that sustainability initiatives at the shopping mall have resulted in \$450,000 worth of free advertising through print, radio and television media over the past 12 months. Council's programme and waste minimisation in general, also benefit from this exposure.

Councils Role in Creating Local Networks

As long as waste disposal continues to be inexpensive and convenient there will be a role for Councils to play in persuading businesses to reduce waste. Tauranga City Council's 'Waste Minimisation in Business' programme operates on a very small budget but is producing big results. Our annual budget of \$40,000 is not enough for us to work with every one of the 5000 businesses that operate within Tauranga City, but it is enough to create a network of businesses that are committed to waste reduction and it is enough to start people talking about the importance of waste reduction.

The programme has evolved over the past five years and the waste audits we have conducted have given us good data on the volume and make up of business waste streams. We now, no longer need to conduct waste audits in office buildings and food premises because we know what makes up the waste stream. The increased media attention that is being given to environmental sustainability has increased the interest in our programme and we believe that, as economic instruments, like the waste levy and extended producer responsibility take effect, businesses will recognise the need to minimise their waste and council funded waste minimisation programmes will give way to user pays services.

Tauranga City Council is pleased to have worked with Waste Watchers Ltd in building our Waste Minimisation in Business programme. The contract for the initial development of the programme was awarded to Meritec and Waste Not Ltd. The strength of their tender lay not only in their expertise but also in their intention to work with a local service provider, which was seen by council as good for Tauranga's future self sufficiency in cleaner production. Meritec's own philosophy supported this and Waste Watchers Ltd is now in a strong position to offer user pays services in Tauranga as the market allows.