

1.0 Business and Industry Waste

1.1 Target 1

By December 2005, over 500 Hamilton businesses will be receiving support from the Waikato Advisory Service and other groups supporting this service and 100 of these businesses will be able to report on the quantity of waste they are diverting from landfill.

1.2 Issues

The above target is an adaptation of the national target, which was felt applied primarily to central government. The adapted target compliments the aim of the national target and at the same time provides Hamilton with it's own specific goal to work towards.

Commercial waste makes up over half the waste going to landfill. Business and industry waste programmes are designed to help businesses avoid or reduce the amount of waste they produce. However, to date, business waste initiatives in Hamilton have tended to be of a small scale and ad hoc nature but could provide a useful foundation for a more comprehensive programme in the future. Implementing comprehensive programmes will not only reduce waste but could make business more efficient and position Hamilton globally on the sustainable business management map.

1.3 Implementation Plan

It is proposed that information and service providers will:

Action	Organisation Responsible	When	Cost
Determine the barriers to businesses to reduce waste	Environment Waikato/Hamilton City Council/Waikato Environmental Business Network partnership	July 04	<ul style="list-style-type: none">▪ \$500 (Hamilton City Council)▪ \$2,000 (Waikato Environmental Business Network)▪ In kind support (Chamber of Commerce)
Provide easy systems for SME's to recycle	Hamilton City Council to investigate service provision and funding options with Recycling Operators	Following a trial Aug-Nov 04	<ul style="list-style-type: none">▪ \$2,000 (Hamilton City Council) to conduct a 6 week trial SME's▪ \$2,000 (Hamilton City Council) to conduct a 6 week trial with primary schools

Assist with the promotion of recycling services	Hamilton City Council with Recycling Operators	2006 onwards	<ul style="list-style-type: none"> ▪ In kind (Hamilton City Council)
Support a Regional Waste Advisory service to provide SME's with practical help to reduce their waste and to provide support of groups already working in this area such as the Waste Exchange and the Waikato Environmental Business Network	Hamilton City Council	Ongoing	<ul style="list-style-type: none"> ▪ \$30,000pa (Environment Waikato) ▪ \$30,000pa (Other Waikato Territorial Local Authorities) ▪ \$15,000 (Hamilton City Council) ▪ \$11,000 (Hamilton City Council – 3 year contribution to Waste Exchange)
Get businesses to make a public commitment to waste reduction	Regional Waste Advisory Service	Ongoing	<ul style="list-style-type: none"> ▪ Covered in above funding ▪ In kind (Chamber of Commerce)

2.0 Building Regulations

2.1 Target 2

By December 2006, Hamilton City Council will ensure that building regulations incorporate references to space allocation for appropriate recycling facilities in new multi-unit residential and commercial buildings.

2.2 Issues

The Solid Waste Analysis Protocol Survey (1995/96) estimated that in Hamilton, commercial waste made up 61% (55,000 tonnes), of waste going to landfill. This represents significant potential for reduction.

2.3 Implementation Plan

It is proposed that information and service providers will:

Action	Organisation responsible	When	Cost
Investigate a change to the District Plan	Hamilton City Council, Strategic Planning	Sept 04 – Jan 05	▪ Hamilton City Council staff time
Produce supplementary educational/design guidelines for builders and developers. Promote through workshops	Hamilton City Council, Sustainable Environment Team (in conjunction with recycling operators)	June 05	▪ \$3,000 (Hamilton City Council)
Investigate whether provision for recycling space can be included on consent check-list	Hamilton City Council, Planning Guidance	Oct 05	▪ Hamilton City Council staff time

3.0 Internal Waste Management

3.1 Target 3

By December 2004, Hamilton City Council will ensure that procedures for waste minimisation have been addressed for all facilities and assets they manage and will have set target reductions based on public health, environmental and economic factors.

3.2 Issues

With a staff of 1,123, Council is one of the city's largest organisations and a major purchaser of products and services, all of which have some environmental effects associated with their manufacture, distribution, use or disposal.

Waste minimisation is limited to a paper recycling scheme, coordinated through the cleaning contract, and only operates in the tower block. Recycling of other materials is informal or ad-hoc.

Recent changes to the Local Government Act to include the requirement for triple bottom line reporting and the pending renewal of Councils cleaning contract provide Council an excellent opportunity to lead by example and reduce the organisations contribution to the waste stream.

3.3 Implementation Plan

It is proposed that information and service providers will:

Action	Organisation responsible	When	Cost
Develop a policy for internal waste management. Involve staff in programme development	Hamilton City Council, Sustainable Environment Team and Quality Manager	July 04	<ul style="list-style-type: none">Hamilton City Council staff time
Include recycling collection to the Hamilton City Council cleaning RFP process and contracting issues	Hamilton City Council, Property and Plant	Nov 04	<ul style="list-style-type: none">Increase in contract fee possible\$1,000 set up costs
Establish an internal waste management forum to develop an implementation plan and maintain a framework of waste policies, procedures and systems	Hamilton City Council, Sustainable Environment Team, Quality Manager	Feb 05	<ul style="list-style-type: none">Hamilton City Council staff time

4.0 Organic Waste

4.1 Target 4

By July 2004, Hamilton City Council will have instituted a measurement programme to identify existing organic waste quantities, and set local targets for diversion from disposal.

By December 2005, 60 percent of *garden wastes* will be diverted from landfill and beneficially used, and by December 2010, the diversion of *garden wastes* from landfill to beneficial use will have exceeded 95 percent

4.2 Issues

Organic wastes form a big proportion of the waste stream. They include garden waste, kitchen waste, food processing and sewage sludge. In June 2003, a Solid Waste Analysis Protocol (SWAP) survey was undertaken in Hamilton to estimate the composition of the waste stream. Organic waste was found to make up 48% of the average rubbish put on the kerb for weekly collection. This represents 4 kg per household per week.

One of the biggest problems associated with the management of landfills is organic waste. In a landfill, organic material is broken down under anaerobic conditions which causes the release of leachate and methane gas. Reducing the amount of organic waste going to a landfill could reduce the problems associated with leachate, gas and odour. Diverting organic waste could also reduce by half the overall volume of waste going to landfill.

At present, the industry could not handle immediate increases in green waste, organic recycling facilities and infrastructure need to be developed and new markets sought for the finished product.

4.3 Implementation Plan

It is proposed that information and service providers will:

Action	Organisation responsible	When	Cost
Co-ordinate a measurement programme to identify existing organic waste quantities going to landfill	Environment Waikato	July 04	<ul style="list-style-type: none">▪ \$7,500 (Environment Waikato)▪ \$3,000 (Hamilton City Council)

Develop and implement an environmental education campaign that encourages householders to compost and involves the use of incentives such as subsidised compost bins	Hamilton City Council (Sustainable Environment Team)	Dec 04	<ul style="list-style-type: none"> ▪ \$5,000 (Hamilton City Council)
Investigate the establishment of a service to facilitate garden waste diversion at the refuse transfer station. Investigate the redesign of the refuse transfer station to allow for service delivery	Hamilton City Council, Waste Management Ltd and Perry Environmental to resolve	Oct 04	<ul style="list-style-type: none"> ▪ Unknown until investigation complete (capital works project)
Hamilton City Council to further commit to using local green waste products	Hamilton City Council (Procurement Manager)	Sept 2004	<ul style="list-style-type: none"> ▪ Hamilton City Council staff time
Investigate ways of making the cost of disposal very clear to Hamilton residents	Hamilton City Council, Communications, Sustainable Environment Team, Water & Waste Services	On-going	<ul style="list-style-type: none"> ▪ Hamilton City Council staff time

5.0 Construction and Demolition Waste

5.1 Target 5

By December 2004, Hamilton City Council will have instituted a measurement programme to identify existing construction and demolition waste quantities and set local targets for diversion from landfills.

By December 2008, there will have been a reduction of construction and demolition to landfill of 50 percent of December 2004 levels measured by weight.

5.2 Issues

National surveys undertaken in the last ten years indicate that C&D waste contributes approximately 15 to 20 percent of all waste sent to landfill. If the amount of C&D waste that is sent to cleanfills is to be included in this calculation, the overall amount is likely to exceed the total amount of waste going to landfills from all other sources combined.

At present, there is no comprehensive C&D recycling infrastructure available in Hamilton. However, a number of operators divert materials for reuse, such as doors and windows, timber beams, and concrete crushing.

On a national level, a working group is looking at the challenges posed by construction and demolition waste and is trying to identify the most appropriate ways of dealing with the problem, such as opportunities for education, provision of infrastructure and regulation. Hamilton City Council is represented on the steering group of this working group and involved in the project.

The National Waste Strategy uses the word "landfill" for the measurement and diversion of construction and demolition waste, therefore it was agreed by the working group to focus exclusively on landfills at this initial stage. However, any actions suggested will be conscious of not driving material flows to cleanfills, and accordingly the effects on cleanfill volumes will be monitored.

5.3 Implementation Plan

It is proposed that information and service providers will:

Action	Organisation responsible	When	Cost
Co-ordinate a measurement programme to identify existing C&D waste quantities.	Environment Waikato	December 2004	<ul style="list-style-type: none">▪ \$7,500 (Environment Waikato)▪ \$3,000 (Hamilton City Council)▪ \$5,000 (Ministry for the Environment)

<p>Investigate the establishment of a service to facilitate C&D waste diversion at the refuse transfer station. In conjunction with garden wastes, investigate the redesign of the refuse transfer station to allow for service delivery.</p>	<p>Hamilton City Council, Waste Management Ltd to resolve</p>	<p>Oct 04</p>	<ul style="list-style-type: none"> ▪ Unknown until investigation complete (capital works project)
<p>Support National SMF project to: investigate most appropriate way to impose C&D recycling remove barriers to the reuse/recycling of C&D wastes</p>	<p>National Working Group</p>	<p>2003-2006</p>	<ul style="list-style-type: none"> ▪ \$6,000 (Hamilton City Council) ▪ \$15,000 (North Shore City Council) ▪ \$15,000 (Christchurch City Council) ▪ \$9,000 (Wellington City Council) ▪ \$5,000 (Environment Waikato) ▪ \$15,000 (Auckland City Council) ▪ \$12,000 (Rodney District Council) ▪ \$100,000 (Sustainable Management Fund) ▪ \$22,475 (Industry) ▪ \$4,000 (Building Research Association of New Zealand)
<p>Implement findings from National SMF project</p>	<p>Hamilton City Council</p>	<p>2003-2007</p>	<ul style="list-style-type: none"> ▪ \$5,000 (Hamilton City Council)
<p>Provide local demonstration project for best practice waste minimisation</p>	<p>Hamilton City Council and the building and construction industry</p>	<p>Jan 07</p>	<ul style="list-style-type: none"> ▪ \$2,500 (Hamilton City Council)

Ensure that cleanfill operators comply with consents & cleanfill guidelines.	Environment Waikato	Ongoing	▪ Hamilton City Council and Environment Waikato staff time
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