

Zero Waste Update

June 2002, Issue 24

Please pass on

Mission Statement: "To encourage and motivate all sectors of New Zealand society to work towards a target of zero waste."

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The Ministry for the Environment has set targets in the New Zealand Waste Strategy

to reduce the amount of organic waste going to landfill in New Zealand:

- **2003**, all Councils will have measures in place to identify existing organic waste quantities, and set local targets for diversion from disposal.

- **2005**, 60% of garden wastes will be diverted from landfill and beneficially used, increasing to 95% by 2010,

- **2007**, a clear understanding of other organic waste streams, eg. kitchen wastes, will have been achieved by the programme established by 2003.

- **2007**, over 95% sewage sludge will be composted, beneficially used or appropriately treated to minimise the production of methane and leachate.

- **2010**, the diversion of commercial organic wastes from landfill to beneficial use will have exceeded 95%.

Black Gold: Focus on food waste

It has been proven time and again that organic waste accounts on average for approximately 50% of a householders' bin.

It seems ironic that while organic materials are the biggest pollutant in our landfills through leaching and methane production, our soils are crying out for the application of organic products, micro-nutrients and microbes due to intensive agricultural processes.

By separating our waste stream into a range of manageable and useful resources we will begin to see much higher diversion rates. Eliminating organics from our household waste allows the dry and wet recyclables to be removed and be more easily sorted and marketed. By controlling what goes in to landfills we have a greater chance of controlling what comes out!

One of the biggest challenges in diverting organic waste is overcoming the perception that segregating this waste is even more work on top of our usual recycling habits, that it's 'dirty' and generally a nuisance. However, with a well-organised education and communication programme these obstacles can be overcome.

Commercial types of composting methods being followed in New Zealand include the Vertical Composting Unit (VCU), HotRot and EM Bokashi. The first two systems are in-vessel and take virtually all types of organic waste. Compost can be produced within four weeks. EM Bokashi uses micro organisms to ferment food scraps. Liquid is collected and food scraps then buried in the garden. Backyard composting and worm farming are also an important practise.

Current New Zealand Initiatives

Waitakere City Council's VCU processed 8000 tonnes of green waste in its first year.

Mackenzie District Council has become the first Zero Waste council to implement a three bag system including the collection of food and green wastes.

Kawerau District Council process three tonnes of sewerage through worm beds. All schools have worm farms.

Christchurch City Council recently started an eight week trial collection of food waste.

Rodney District Council operates a HotRot system for processing sewerage and green waste.

Wastebusters Canterbury has a range of worm farms and composting systems set up enabling the public to see how they work or bring their own problems in to the advisors on site! Over 50 schools in the district have worm farms.

Innovative Waste Kaikoura divert 2800m³ of green waste each year. They have completed the building of their own horizontal composting unit that will be fed food waste from restaurants and green waste.

Rakaia Resource Recovery Group operate a wet and dry bag collection system, feeding organic waste into a large concrete mixer which is then fed to worms.

Waitakere Special Needs Trust sell worm bins at a special school in West Auckland. Bins are made from recycled plastic barrels by the students.

Palmerston North City Council is aiming to target restaurants for food waste.

A 60% reduction in landfilled garden waste in New Zealand would bring total landfill volumes down by as much as 800,000 tonnes and save \$40 million per year in disposal costs (MfEWaste Strategy)

Overseas Initiatives

From Europe around to the USA and back to the southern hemisphere, people are waking up to the value of organics!

Stringent waste management laws including the banning of disposing of organics to landfills and the implementation of food waste recovery programmes for residents and businesses in many cities worldwide mean that diversion rates of up to 60% have been achieved.

For the full report including a list of reports, studies, contacts and web links contact Lu at the Zero Waste office (lucy@zerowaste.co.nz.) or download a PDF from the website

Guest Editorial - Kit Strange, Editor of Warmer Bulletin

The Warmer Bulletin is the journal of the World Resource Foundation, based in the UK & published six times a year. The foundation provides a world-wide information service on the sustainable management of, and the recovery of resources from post consumer wastes.

Zero Waste – more a journey than a destination

When I first heard the phrase zero waste bandied around several years ago it seemed to be too good to be true. Zero Waste was predicated on either defining landfills as *long term storage* rather than disposal, or by shipping waste into another authority's area.

Now it seems that Zero Waste can mean different things to different people, mainly the following:

Zero Waste – a new way of thinking, looking both upstream (process engineering) and downstream (end-of-pipe) seeking to eliminate wastage at every stage. This is the domain of the sustainability planners, the industrial ecologists, the eco-engineers and realistic dreamers.

Zero Waste – a new way of defining materials and processes, so that the word *waste* disappears, although the actual waste can persist.

Zero Waste – a new way of positioning the 'NIMBY' (not in my back yard) syndrome, so that opposition to, for example, an incinerator, landfill or recycling facility can be endorsed through the neutral aspiration that no waste needs no waste management.

I used to be more cynical about Zero Waste but have gained the impression in the last couple of years that different groups choose to support the zero waste concept for different reasons.

Zero Waste New Zealand Trust is to be applauded for taking the deepest perspective in defining Zero Waste in a suite of clear goals and aspirations that are at once realistic and holistic. These goals include the following:

- aim to eliminate rather than manage waste
- operate across the entire chain of production and consumption
- embrace existing and emerging technologies
- regard wastes and resources as two sides of the same coin

- attempt to close loops in the resource/ -waste cycle
- help communities achieve sound local economies

As long as the Zero Waste New Zealand Trust continues to promote this sound zero waste philosophy, you can be sure we are moving in the right direction.

Mackenzie Launches Zero Waste Campaign

Congratulations to *Mackenzie District Council* who have recently opened three new Resource Recovery Centres as well as implementing a three bag collection system to include the recovery of all compostables (kitchen and garden waste) from households and restaurants. These compostables will be processed in a VCU, the first installed by VCU Technology in the South Island.

Mackenzie is the first New Zealand Council to ask residents to sort their waste into three major types – regular recyclables, compostables and residual.

Mayor Stan Scorrington says "Our commitment is to achieve zero waste to landfill by 2014 and we believe our unique three-bag kerbside refuse collection, resource recovery parks and recycling valuable organic waste into compost will all help us achieve this commitment. All three landfills have recently been closed and capped, and we transport the residual waste out of the region for the time being."

Mackenzie District Council's waste implementation manager and accountant, Rachael Harrison says: "Feedback from residents and businesses in the region has been positive. We have held a series of

Hon. Jim Sutton opening Mackenzie's Zero Waste Campaign



public education meetings to help everyone develop practical solutions within their own home or business premises for waste separation and disposal."

For more information contact rachael@mackenzie.govt.nz.

"Problems cannot be solved at the same level of awareness that created them"

Albert Einstein

Clean Stream Waiheke

The Waiheke Resource Trust are about to celebrate their first anniversary of operating Clean Stream, the island's resource recovery operation.

A recent project by Glenda Neal, Education Officer for the Trust, looked at how the island's restaurants were disposing of their waste cooking oil and fats. Each week about 700 litres were being landfilled and even disposed of through the waste water system.

In the best Waiheke tradition some of this oil is already being re-used by a local boatie to run his modified diesel engine. Most of the oil however is freighted to Auckland where it is recycled into animal foods.

Despite handling challenges local businesses are keen to do their bit and are being supported by The Rubbish Company and the Clean Stream.

Restaurants and takeaways on the island can now separate out their oil and fat. Clean Stream supply 44 gallon drums or 20 litre plastic containers and charge \$10 for pick-up and delivery of the drums.

Call Clean Stream on 09 372-1070 for more details.

Zero Heroes: Innovative Waste Kaikoura

Zero Heroes for this month are Josie Uren and John Ransley of Innovative Waste Kaikoura (IWK). Employing eight staff currently, IWK runs initiatives that include developing a home education area with model worm farms for people to view and 'worm wee' on sale, building a second hand shop and designing their own in-vessel composter, to name but a few.

Their latest venture is the launch of a programme to help at risk unemployed youth in the district by employing them at their recycling operation. Targeting school leavers too young to go on the dole, the project will work towards building self-esteem and understanding positive work ethics by creating proper paid jobs. IWK have developed strong links with a wide range of local businesses & community organisations as well as Kaikoura District Council.

IWK came into being when the waste management contract came up for renewal in 2000. Wastebusters Trust and Kaikoura District Council formed a partnership company to run both the landfill and resource recovery centre – called Innovative Waste Kaikoura (49% owned by Council and 51% by the Trust.) Currently IWK are diverting 51.2% by volume from landfill.

Their target projection for zero waste is by 2015 and they are slightly ahead of projected volumes at this stage, but Kaikoura's population is predicted to double within the next five years.

Happy faces at IWK!



"You might not see things yet on the surface but underground it's already on fire" Y. B. Mangunwijaya

Zero Waste Council News in Brief

Hastings District Council has doubled the size of its reuse shed as part of its campaign towards Zero Waste. The Recycling Depot offers a free drop off for reusable/ recyclable material and the extension to the shed will enable them to accept a wider range of recyclable items. This, in combination with the kerbside collection means there has been a 60% increase in recycling in the past two years.

For more information contact Dominic Salmon, Waste Minimisation Officer, dominics@hdc.govt.nz or on 06 878 0546 or Caroline Peacock, Solid Waste Planner at caroline.peacock@hdc.govt.nz or on 06 878 0500.

Signs at Hastings DC drop off centre



Kawerau District Council has put out a Zero Waste plan for consultation in the community. In the next 12 months it will be looking at how to modify collection systems, with weekly recycling collections in 40 litre bins, green waste in wheelie bins and residual waste in bags. For more information contact Tom McDowall at tom.mcdowall@kaweraudc.govt.nz.

Rodney District Council took another step towards its goal of Zero Waste by 2020 last month when it commissioned a new HotRot composting unit.

The unit is processing screenings from sewage sludge with green waste to reduce the moisture content. The processing times are typically 10 to 20 days and the compost will be used on the council's parks and reserves.

In the last 12 months the environment committee has introduced a three-month kerbside recycling trial in Warkworth and Wellsford and a pilot scheme using worms to process sewage sludge at Warkworth.

For more details contact Cr. John Ross at john.g.ross@xtra.co.nz or 09 425 6260.

Auckland City Council has implemented its own in-house recycling system in three administrative buildings. Fifty tonnes of waste were being sent to landfill but a diversion target of 70% has now been set. They are operating a full inorganic waste collection, office paper is being collected by Paper Reclaim, and food waste is being collected and sent to the VCU at Unitec in Mt. Albert.

Zero Waste Advisor, Jessica North of Waste Not, was confident the systems were being well received by the workers at Auckland City Council. She has implemented an effective monitoring and auditing system being run by "waste watchers" within each department. Staff are rewarded for their recycling efforts by offering mint Belgian chocolates embossed with a recycling logo. For more information contact Jessica at wastenot@xtra.co.nz.

Business News

Toyota aims for Zero Waste

The staff at the Toyota factory in Palmerston North are aiming to be one of the first Zero Waste businesses in Manawatu. Currently they shred paper and use it for packaging, use returnable plastic carry bins and give wood to the Salvation Army and schools for fundraising. They also have a "handyman" on site who can make anything out of anything. The only thing causing problems with recycling is laminated windscreens.

Whitireia Polytechnic has slashed its waste management costs whilst diverting large quantities of waste from the Spicer Landfill since taking part in Porirua City Council's BusinessCare programme which aims to support businesses and organisations to adopt cleaner production. After three months the Polytechnic was diverting one tonne per month of all types of paper and cardboard from landfill and waste disposal costs were renegotiated as part of a review of their waste management system resulting in a cost saving.

For more details contact Helen Schafer, Zero Waste Coordinator, Porirua City Council, 04 237 1475.

EMAIL YOUR NEWS AND STORIES TO lucy@zerowaste.co.nz

Resources

IT'S ALL ABOUT WWW....
Check out our choice of websites for this month:-

www.saveabottle.org - provides an opportunity for visitors to learn about beverage container waste and bottle bills.

www.wrap.org.uk - The Waste and Resources Action Programme (WRAP) has launched a new website for environmentally aware businesses in the UK. The site aims to increase recycling levels in the UK by providing companies with all the information they need to buy, process, collect and sell recycled products and materials.

www.montage.org.nz - View the exciting Junk to Gems project that gives students and teachers within New Zealand the opportunity to create works of art whilst gaining an awareness of the need to reduce, reuse and recycle, locally and on a global basis. It is open to all ages, and integrates the visual arts, science, technology, and social science curricula.

www.ilsr.org lists excellent new titles on recycling from The Institute for Local Self Reliance. These include 'Deconstruction: Salvaging Yesterday's Buildings for Tomorrow's Sustainable Communities' providing an understanding of and advocating for deconstruction locally, regionally and nationally.

There are also a number of new US EPA reports available free on this site.

Coming soon, a list of case studies of innovative recycling strategies prepared for the California Integrated Waste Management Board (CIWMB) available free at www.ciwmb.ca.gov/lgcentral/events/innovations. These include 'Food Waste Recovery' by Brenda Platt and 'Recycling at Special Events' by Kelly Lease.

Contact the Zero Waste office for a full list of titles. Some are available at a small copying charge.

ASIDE FROM THE WEB ...

RONZ Recycling Symbols are available on CD, as stickers or can be sent as a PDF. These symbols have been designed for use in assisting the public to separate materials for recycling. Contact info@ronz.org.nz or call 09 488 9449 for more details.

Free e – Book, Easy Steps to a Greener Office

The book catalogues easy methods for reducing the environmental impact of office/home office, computer and business operations.

Using step by step instructions users can reduce waste and save money.

To register for your Free Easy Steps to a Greener Office e-Book please go to www.ecocomputerservices.co.nz

“On the road to zero waste - Part 1, Nova Scotia: community responsibility in action” video now available from the Zero Waste office for \$14. This inspiring short film narrated by Paul Connett showcases methods undertaken in Nova Scotia contributing to their diversion rate of 50%!

Bargain offer!

Recycled Photocopy Paper

Canon NZ is bringing in a shipment of 100% recycled copy paper which arrives in July. This paper is recommended by Environmental Groups in Australia. Indicative price is around \$7.50 per ream which makes it very competitive. Orders can be placed directly with Canon, contact Chris Shaw via email at: chris.shaw@canon.co.nz.

Events

British Council Environmental Democracy e-Conference

10th June until 21st June 2002.

The e-conference will expand on the discussions and conclusions reached at the British Council's May 2002 seminar: 'Global Approaches to Environmental Democracy: access to information, public participation, decision-making and environmental justice' being held in the UK. (See www.britishcouncil.org for more details)

It is intended to help spark new ideas and share diverse perspectives in advance of the World Summit on Sustainable Development in Johannesburg this August.

To book your place, please sign in at: www.mailbase.ac.uk/lists/environmental-democracy/join.html

EXHIBITION

Reclaimed: Recycling in Contemporary British Craft & Design

is touring around New Zealand until May 2003.

Reclaimed has 53 items by 22 resourceful British artists, featuring a fantastic array of masterpieces such as furniture made from recycled polythene bags and empty shampoo bottles and jewellery crafted from beer cans.

To see a list of tour dates or if you can't visit Reclaimed in person, you can view the exhibition on line at the Junk to Gems website at www.junktogems.org.nz.

For more information about Reclaimed, please contact Felicity Connell, Projects Manager for the British Council, at felicity.connell@britishcouncil.org.nz



Redesigning Resources Conference, Christchurch, 7- 9 July 2002.

Redesigning Resources is a journey towards sustainable development undertaken by seven New Zealand and one Australian companies. Check out the website www.redesigningresources.org/about.cfm for more details about this conference.

International news

Zero Waste World Summit

GAIA and Earthlife Africa have led the campaign to make the Johannesburg Earth Summit being held in August a Zero Waste event. Applying International Best Practice within the Global Forum will lead the way to showcasing truly sustainable development. For more details contact Muna Lakhani at muna@iafrica.com

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