

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

Inside this bumper issue

Page 1.... Packaged Goods Accord

Page 2.... Zero Waste Trust

Page 3.... Innovative News

Page 4.... Zero Waste Resources - EPR toolkits

Special Insert:

Page 5& 6 Zero Waste South Island Bus Tour

Zero Waste Grants Programme

We have some Ministry for the Environment funding remaining in our grants programme that must be spent by June.

Groups (based in New Zealand) who demonstrate a commitment to Zero Waste are invited to apply. Examples of eligible projects include lease of buildings, vehicles & equipment, development of education and training programmes, events, and research and development projects.

It must be noted that this source of funding cannot be used for capital items, wages or ongoing running costs.

For the full funding guidelines and an application form, please refer to our website www.zerowaste.co.nz/default,36.sm.

If you need any advice or have any queries relating to making an application please contact: Lindsey du Preez on 09 486 0734, lindsey@zerowaste.co.nz

Packaged Goods Accord '04

The responsibility and costs of dealing with the growing mountain of packaging waste (such as single use containers) is currently falling onto taxpayers, councils and communities.

What's happening about this?

The Ministry for the Environment is coordinating the new Packaged Goods Accord 2004 which will replace the 1996 voluntary Accord. The new agreement is being developed in association with the Packaging Council of New Zealand, Local Government New Zealand and the Recycling Operators of New Zealand.

The new accord is also based on voluntary action. There is growing concern that voluntary agreements are an ineffective way of slowing down the increase of packaging waste in New Zealand. The New Zealand Waste Strategy (March 2002) notes that "Voluntary agreements with industry have brought about mixed results. The 1996 Packaging Accord sought to minimise the environmental effects of packaging waste, and has improved rates of packaging recycling. Innovations such as lightweighting have slowed the growth in this waste. As in other countries, however, *the total quantity of packaging waste has increased*".

(More information regarding the Packaged Goods Accord can be seen on www.packaging.org.nz and www.ronz.org.nz)

Evidence shows that legislative measures, such as container deposit legislation and packaging levies (known as Extended Producer Responsibility), have a significant impact on reducing the amount of packaging waste going to landfill. Through Central Government implementing such initiatives, industry will have to accept more responsibility for the packaging waste they create, rather than imposing this problem solely onto consumers and communities. (More information regarding EPR initiatives such as container deposit legislation can be found at www.zerowaste.co.nz/default,534.sm)

The PGA 2004 states that "If a voluntary approach does not provide sufficient gains in design, packaging waste reduction and demonstrable adoption of product stewardship, the Government is prepared to consider mandatory regulatory measures."

What action can you take?

- RONZ is representing the interests of the resource recovery industry. (The draft sector action plan discussion document is on www.ronz.org.nz or call 09 623 8426.)

- Local Government New Zealand circulated a discussion document to all councils setting out the proposed contents of their sector action plan. **Councils have until Friday 23 April to get comments back to LGNZ.**

- There is an opportunity for you, as a consumer, to have your say on the Packaged Goods Accord 2004.

We have drafted a form letter that is on our website under www.zerowaste.co.nz/default,530.sm stating:

"While I feel all steps towards reducing waste are admirable as a consumer I would like to record my views on the following issues related to Extended Producer Responsibility initiatives (such as container deposit legislation, packaging levies)...."

Your comments will be sent directly to the Ministry for the Environment, RONZ and LGNZ.

Please take this opportunity to make your views known and ensure the best outcome of the Packaged Goods Accord.

Zero Waste South Island Bus Tour



See insert for the full story on the tour of waste minimisation initiatives in the South Island.

Zero Waste News

Zero Waste Trustees

The Zero Waste Trust would like to welcome three new Trustees to the board: **Rob Fenwick, Sally Buck and Kirsty Quickfall.**



Rob Fenwick co-founded Living Earth Ltd, the country's principal organic waste recovery business which converts biowaste streams in the main cities of NZ into compost. He was a member of the Government's working party to develop the National Waste Strategy. He is the chairman of Landcare Research, a founding member of the NZ Business Council for Sustainable Development, deputy chairman of TVNZ; a trustee of WWF and Motutapu Island Restoration Trust and a former director of NZWWA. He is chair of the Antarctic Heritage Trust and is a Commander of the Order of St John.

Sally Buck has been on Christchurch City Council and Community Board for over five years - she serves on several committees including: Sustainable transport and utilities, Canterbury hazardous waste, Canterbury Waste Subcommittee, Parks and Recreation, Arts, Culture and Heritage and the Urban Planning Committee.



She is a strong advocate of waste minimisation, sustainability and greening businesses.

She has a masters degree in education but has worked in a variety of jobs including teaching (all ages), advocacy, employment consultancy and event organising. Sally is also a trustee of The Recovered Materials Foundation, The Young Inventionz Trust and the 40+ Employment Trust.

In her spare time Sally is an artist.

Kirsty Quickfall originates from Scotland and found her way into the recycling world through becoming manager of Kaikoura Wastebusters, the initial community-led recycling group in Kaikoura. She then became Environmental Planner for Kaikoura District Council.



Her initial involvement with Green Globe in Kaikoura led her to her role as the national Green Globe 21 Coordinator for the Tourism Industry Association.

Kirsty took a break from this role last year to have a baby and, since with her husband, has set up an Independent Consultancy, Quickfall Associates, which provides sustainable tourism and resource management advice.

Kirsty was also recently appointed as the South Island Green Globe Asia Pacific Representative.

Zero Waste Academy



On 5th April a number of people representing a range of industry and community perspectives attended a meeting entitled 'Get Go Forward'.

The immediate context for this meeting was the confirmation (via notification from the associate Minister of Education, Steve Maharey) of EXITO as the ITO with coverage for "waste metal recovery, resource recovery, waste management (excluding water), recycling, and zero waste industry" with effect from 1 March '04. Tom Reece, CEO of EXITO, acknowledged the Scrap Metals Recycling Assn of NZ, Recycling Operators of NZ (RONZ) and the Zero Waste Academy as having supported this application for coverage. Each of these organisations have been invited to submit two representatives to make up a resource recovery sector advisory group (RRSAG). This progress paves the way for the development of unit standards and national qualifications for our sector. For further info please contact Jonathon Hannon at jonathon@zerowasteacademy.ac.nz or call 06 350 5016.

Green Party of Aotearoa

An Update from Laura Beck, Executive Secretary to Mike Ward MP.

The Green Party's MP Mike Ward is increasingly active on 'waste-free Aotearoa' issues. He is currently cycling around the South Island visiting waste minimisation initiatives.

One of the most important initiatives the Green Party is undertaking is drafting a solid waste bill. The bill will create a 'waste minimisation and management authority', which will encourage, promote and support the minimisation of waste and the reduction in the use of material resources. Also included are bans on disposal of material to landfill, extended producer responsibility, organisation waste minimisation and management plans, and a waste disposal levy. For more info on our policy and initiatives check out www.greens.co.nz/campaigns/waste/

For the government to ever adopt this we need to assert all the pressure we can. So writing letters, putting pressure on council to talk to government, and local activism all help in the movement towards a waste-free Aotearoa.

Please feel free to contact the Greens to speak to Mike on 04 470 6891 or Mike.Ward@parliament.govt.nz.

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Innovative News

Christchurch Cleanfill Levies

The Christchurch City Cleanfill Licensing Bylaw came into effect on 1st March 2004. It requires that "any person using land for the disposal of cleanfill must apply for and be granted a licence to do so and to comply with its terms and conditions".

Natural hardfill is acceptable for disposal at cleanfill sites and up to 1% per load of construction and demolition material and up to 2.5% of green waste. The levy for C&D material is \$9 (+GST)/ m³. Annual income from this levy is expected to be \$1 million which will be invested in Christchurch City's Waste Minimisation Fund.

The purposes of the bylaw include:

To clean up cleanfills; to ensure satisfactory regulation and to encourage the re-use or recycling or energy recovery from C&D materials.

The effects of the bylaw have already been a success. The worst performing cleanfill was closed and sold before the bylaw came into force. The message has gone out that it is much cheaper for building and roading contractors to sort (and if possible, reuse) cleanfill before transport for disposal. There is also an accelerated move towards recycling materials at cleanfill sites. The effect of this bylaw is that it has allowed efficient operators the opportunity to reposition them

selves in the market to minimise the impact of the levy and maximise waste minimisation.

For more information contact Cllr Denis O'Rourke, Chair of Sustainable Transport and Utilities Committee for Christchurch City Council, on 03 379 1660

North Shore City food waste collection proposal

The North Shore City Council is asking for submissions on providing a household kitchen food waste collection service. Waste audit results confirm that kitchen waste makes up 45% of all waste currently going to landfill. Trials in 2003 showed that given the right containers and collection services, people are prepared to separate food scraps.

A successful and well supported waste reduction venture needs all the encouragement it can get. So why not write a submission to the council whether you are from the North Shore or not. If successful the collection service could be implemented by July 2005. The last date for getting submissions in is 22 April 2004. City Plan (Long Term Council Community Plan) information about this proposal is available on the council's website at www.northshorecity.govt.nz, at area offices or by calling Action line on 09 486 8600.

E-waste Update from Lindsey du Preez



Electronic waste is one of the fastest growing waste streams around the world. Rapid technological advances mean that the average computer has a life span of 3 – 5 years. The problem arises at the end of its useful life and is compounded by the hazardous nature of the waste. Computers contain an array of substances such as lead, mercury, cadmium, hexavalent chromium or brominated flame retardants. These have all been shown to be harmful to humans and damaging to the environment. According to an Australian study, e-waste accounts for the largest portion of heavy metals in landfill leachate which, amongst other things, can pollute ground water supplies.

Japan, California and the EU have implemented legislation to minimise the amount of electronic waste ending up in landfills. In Europe two directives have been introduced to deal with electrical and electronic waste: the WEEE (Waste from Electrical and Electronic Equipment) and RoHS (Restriction on the uses of certain Hazardous Substances in electrical and electronic equipment). For more info go to www.informinc.org/fact_WEEE.pdf.

In New Zealand the bulk of redundant electronic equipment is being landfilled. There is no legislation nor industry-related body coordinating an effort to deal with the problem. The lack of available data on the amount of e-waste generated makes it hard to ascertain the extent of the problem. However, IDG New Zealand has quoted approximately 450,000 computers were sold on the New Zealand market last year. A recent workshop hosted by the Rotorua District Council

indicated the ground swell of concern about the impacts of electronic waste. Small scale refurbishment and recycling is happening at a local level where individuals are making huge efforts to extend the usable life of equipment. Other organisations such as The Ark Recycling in Auckland will take old computers for refurbishment and reuse in schools and charitable organisations. Dell has initiated a recycling program in Auckland, Wellington and Christchurch (see www.ap.dell.com). However concern surrounds the irresponsible export of this hazardous waste to under-developed countries where poor environmental legislation has had devastating impacts on communities' health and the environment.

While New Zealand Central Government and industry need to increase their level of responsibility, individuals can still be proactive:

- ◆ Inform yourselves of the issues (see www.ban.org , www.svtc.org),
- ◆ Send old computers to organisations for refurbishment (eg The Ark www.the-ark.co.nz , Molten Media www.molten.org.nz , EzyPC – 03 322 9358)
- ◆ Lobby your local council to initiate a ban on electronic waste to landfill (remember it's election year).

Innovative Waste Kaikoura

Congratulations to Innovative Waste Kaikoura, who have been approved a bank loan, honoured by Kaikoura District Council, to upgrade the Resource Recovery Centre.

The upgrade will include purchasing an export baler, weighbridge, building a Horizontal Composting Unit from permanent materials (replacing the current HCU that was built as a pilot project using wood) and doubling the size of the sorting and processing shed. This means that IWK will be able to maximise resource recovery opportunities and extend the life of the landfill even further as the population of Kaikoura continues to grow .

Email iwk@xtra.co.nz or call 03 319 7148.

Zero Waste Resources

Seeking work

Tamsyn Hunnewell is a qualified and experienced **Environmental Engineer** relocating to New Zealand from the USA in May. She has experience in Phase 1 site assessments, soil and groundwater quality investigations, regulatory compliance and is an accomplished project manager. She is also skilled in Geographic Information System technologies and trained in Hazardous Waste Operations.

Contact: tamsynh@msn.com

Hannah Phoenix, is a 28 year old graduate, currently working in the UK as a Council Waste Minimisation Officer. She is looking for an offer of employment to complete a NZ visa application.

Hannah would like to continue this line of work preferably in Southland, but anywhere in South Island considered. She is hoping to visit and attend interviews later this year, and emigrate in approximately 12 months time.

Contact hannah@rampton9999.freeseve.co.uk.

Events

Wastebusters Trust Canterbury is running a Zero Waste Schools & Businesses Education day on Monday 17th May.

Contact Priska Ross on mcwastebusters@clear.net.nz or call 03 308 9998.

The **NZ Earthworm Association** is holding the 2004 AGM & Seminar in Cromwell on 21st & 22nd May.

Go to www.earthworms.co.nz or contact Melanie on 03 328 8853

New GAIA Report

The Global Alliance for Incinerator Alternatives (GAIA) has released a new report - 'Resources Up in Flames: the economic pitfalls of incineration versus a Zero Waste approach in the global South'.

The report describes a variety of programmes that recover, reuse, recycle or compost discarded material thus preventing or delaying its being wasted. The idea came from GAIA's founding meeting in South Africa in December 2000. GAIA members shared examples of successful community based discard management projects which lessened environmental impacts, created jobs and contributed to the local economy.

Go to www.no-burn.org for a copy of the report.

Extended Producer Responsibility (EPR)

Container Deposit Legislation is a form of EPR. It refers to the mandatory deposit on containers to encourage their return by consumers. Depending on the deposit system, containers can be returned to the manufacturers via the retailer, designated collection depot, reverse vending machines or recovered as part of existing waste or recycling collection systems. Any person returning the container receives a standard refund. CDL requires that manufacturers take responsibility for the returned containers either to refill, recycle or to dispose of them.

The system is a means to litter reduction, waste minimisation, resource conservation and EPR. It means less pressure and responsibility is placed on local government for managing container waste.

For more info

◆ The Institute for Sustainable Futures, Australia, produced an excellent Container Deposit Legislation review for the Minister of the Environment for New South Wales, Australia as part of the Waste Act review in 2000-01. The report clearly defines the social, environmental and economic costs and benefits of CDL to the community and industry. Go to www.isf.uts.edu.au/CDL_Review/

◆ **Clean Production Action** recently produced an **EPR** 'Producer Takeback' **toolkit** that is now available on line. It takes a comprehensive look at what EPR is, how it can help solve the waste problem, how it benefits local governments, taxpayers and businesses as well as examining existing EPR campaigns and examples of EPR programmes overseas.

For more information go to www.cleanproduction.org.

Pacific Ecologist

Envision New Zealand is working in partnership with the *Pacific Ecologist* on a special edition on the issues of Consumerism, Sprawl and Waste, and how they impact on the ability of society (and communities) to move towards sustainability. Thought provoking, ground-breaking articles looking at the way Hyper Consumerism leads to sprawl and waste generation are required. Please contact Warren Snow for a list of suggested titles or any ideas you may have.

Articles can be from 500 to 3,000

words. Deadline 5th June.

wsnow@envision-nz.com or call 09 489 2129.

Green Ribbon Awards

The Minister for the Environment is calling for nominations for the 2004 Green Ribbon Awards.

Categories include:

- *caring for the urban environment
- *caring for the rural environment
- *caring for our biodiversity
- * raising awareness of environmental issues
- *sustainable business
- * young people making a difference
- * caring for our water - fresh and sea
- * excellence in community action for the environment

Nominations close on May 7th and winners will be announced at the presentation ceremony on June 4th.

More information (including nomination forms) can be obtained from www.mfe.govt.nz or by calling 04 917 7400.

Eco-Nappies

A Christchurch mother has put together an informative and practical website challenging the myths of cloth vs disposable nappies.

Rebecca Washbourn investigated the realities of cloth nappies after having her first child. She was concerned about the volume of nappy waste going to landfill and decided to test cloth nappies. The website provides a mine of information about the issues and also details about purchasing cloth nappies, covers and liners.

www.econappies.co.nz

Zero Waste International News

The Australian TV industry has made a commitment to accept shared responsibility for managing used TV's. The industry will set up a Producer Responsibility Organisation by the end of the year to recycle up to 15,000 tonnes of used TV's going to landfill each year.

The computer industry is also set to establish a recycling scheme. Australians currently send one million computers to landfill each year. Environment Ministers recognised that Australia, as an importer of electrical goods, needs to continue to align itself with international trends in product design, including phasing out of hazardous substances. They are investigating measures such as those adopted by the EU for designing E-waste to minimise hazardous substances.

Zero Waste South Island Bus Tour

The **Zero Waste Bus Tour**, largely funded by the Ministry for the Environment, which took place from 22-26 March, was a resounding success! Councillors and Council staff joined the Zero Waste team and Ministry for the Environment representatives on a whirlwind five-day tour of champion waste minimisation and recycling initiatives throughout the South Island. The tour took in a wide range of initiatives including organic waste processors, resource recovery centres, eco-banking of materials (many glass mountains), education programmes, reuse shops and kerbside collections. We also encountered a number of interesting legislative issues.

A full report is now available, with great photos and identified areas for discussion and action, and can be downloaded from www.zerowaste.co.nz/default,532.sm or email lucy@zerowaste.co.nz.

A summary of our findings follows:

Organic Waste

Organic waste was seen as important because it constitutes a large proportion of the waste stream and is a significant producer of greenhouse gases and leachate if landfilled.

Backyard composting and worm farming on a community level are a partial answer, however large scale composting, while minimising smells and flies in urban areas, demands a higher technical response.

The big lesson gained was that communities need to carefully investigate and evaluate what is the most appropriate method before investing too much money in infrastructure. Another major result that came out is that the compost (if that was the end product) needs to be of high quality and free from any 'nasties' that will harm crops or soil in which it is placed. A range of organic waste processing operations were visited. These varied from low tech to high tech and highly controlled systems.

- **Central Otago District Council** spreads green waste into windrows and runs over it with a bulldozer.
- **WasteBusters Trust Canterbury** has a number of composting and worm farm displays, are trialling the EM Bokashi method of breaking down organic material and has recently taken over the green waste contract for Ashburton District Council.
- **Central Wormworx** has turned one hectare of land into rows of worm farms. The worms process organic waste from local orchardists, freezing works, stock truck manure, dairy shed waste and household waste. They can process 25 tonnes of organic waste per week. (Fig 1)
- **Rakaia Community Recyclers** process putrescible kitchen waste and green waste in an old cement mixer, turning it occasionally. The partially decomposed material is then fed to worms to produce a finished product, which is used on community projects. (Fig 2)
- **Innovative Waste Kaikoura** designed and built a Horizontal Composting Unit (HCU). This cost \$30,000, including the purchase of the backhoe which drives beside the container turning the organic matter each day. The HCU processes 1800m³ greenwaste per year. Organic material stays within the HCU for 30 days, however the finished product is removed each day at one end and new mulched organic matter added at the front end so there is a continuous production. (Fig 3)
- **Mackenzie District Council** uses a Vertical Composting Unit (VCU) from VCU Technology. The equipment cost the Council \$380,000 and processes a mixture of kitchen (putrescible) and garden wastes (half of the waste stream.) The process can take 30 days and produces very high quality compost.
- A **biodigester** has been built by farmer Mike Lindsay to produce and bottle gas from farm effluent. A real possibility in stationary uses and in farming areas.

Fig 1



Fig 2



Fig 3



Legislative Areas

It became increasingly clear that many councils made poor use of contractual provisions, bylaws and government legislation. There is a lack of knowledge and clarity in this area which is endangering waste reduction initiatives in some areas. An example is one city where the kerbside and rubbish collection contract is let to a large waste firm. The same firm is competing against the council income for sale of the rubbish bags and aggressively marketing its wheelie bin service in the market. This firm has reportedly taken 40% of the market. Clarity and guidelines in this area of what is possible within the law would be a great assistance to the local bodies.

So with this in mind, the Zero Waste Trust has organised a presentation at the WasteMINZ workshops in June on contracts, bylaws and waste minimisation legislation.

Council/Community/Company

Several points were reinforced after visiting a range of community groups, Councils and one private enterprise.

- That councils are by law responsible for dealing with waste
- That waste was a resource and councils must retain control over the waste stream
- That community groups tend to be under-funded, and struggle
- That community groups, councils and commercial operators were often in competition and that where there was good cooperation the results were excellent.
- The bigger and more successful community groups were winning and maintaining contracts with the councils on the open market.
- That councils, in contracting community groups, should take into account the other benefits that well-run community groups offer the wider community.
- That regional groups of councils cooperating allowed a more strategic approach and that South Island-wide there was potential for this with materials such as glass and waste plastic at the very least.

Kerbside Recycling Collection

Kerbside recycling services were provided in many areas visited, collecting a variety of recyclable materials. Generally paper, cardboard, aluminium & steel cans and plastics 1 & 2 were collected. Where possible glass was collected and in most cases stockpiled.

Various methods of source separation were employed, such as a wet/dry recycling system where one bag contained dry recyclables including clothing and wood, the other organic materials (kitchen waste).

The viability of kerbside pickups was threatened in areas where significant private operators competed for materials.

Some collections were funded through a user pays system whereas others charged a uniform fee incorporated in the rates bill.

Glass



The collection and recycling of glass in the South Island is an issue for many areas.

The huge distances travelled to collect and transport this material to the only large-scale reprocessor, based in Auckland, as well as issues of contamination, make the recycling of glass prohibitive for many areas. Where there is space, depots are stockpiling the resource with the hope that markets will be found.

Innovative ways for utilising recycled glass are also being explored (eg. RMF, WasteBusters Trust 'Marvel glass').

Small scale local recycling projects are being developed. For instance, a bottle washing plant at the RMF enables re-use of wine bottles for a New Zealand vineyard based in Nelson. One solution is to introduce Container Deposit Legislation.

No coordinated South Island strategy has been developed to address the issue and therefore mountains of glass continue to accumulate, both above and below the ground.

Re-use Shops

Re-use shops operated at most centres and proved to be a valuable asset both financially and educationally. The profits of many of the shops contributed a significant amount to the wages of employees and some were self sustaining.

Resource Recovery Centres

Most of the initiatives visited called their facilities 'Resource Recovery Centres' (RRC's) and there were road signs directing the public to such centres. This replaces the term 'transfer station' and 'recycling centre', placing emphasis on waste as a resource. The RRC's provided the public with an opportunity to drop off recyclable and reusable materials for resale, and in some instances, green waste for composting. They also incorporated space (although limited) for sorting and processing of materials. Occasionally education centres formed a part of these facilities.

Education

All areas visited have developed public education campaigns.

Methods used included brochures, fridge magnets, information on residual waste sacks and recycle bins and radio and TV adverts.

Community based facilities, particularly with re-use shops, have the added benefit of engaging and educating the local population.

Schools education programmes were common - this was often an important part of the communication plan as operations got underway in the community.

Two groups had built a dedicated education centre that provided a small classroom type facility as well as a centre that other community groups could access.



Conclusion

This bus tour provided a unique and invaluable opportunity for decision makers of the community to see firsthand the range of resource recovery initiatives in the South Island.

If funding allows, we will be organising a similar trip for North Island Councillors and Council staff later in the year.