

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

Inside this issue:

Exports from Recycling	1
New Recycling Graphics	1
100% Recycled Bottle	2
WasteBusters Trust	2
New Zero Waste Councils	2
Plascrete	3
EnviroSchools	3

Recycling in NZ - a \$100 Million+ Export Industry

Zero Waste New Zealand Trust is currently researching the size of the export market from the recycling industry in New Zealand. The recycling industry has not until recently been considered a significant export earner. In fact it has never really been identified as a discrete industry. However, when the earnings from its various components are added up, an interesting picture emerges.

Examples of export earnings from products made from recycled materials, recycling expertise (consultancy work) and technology (machinery etc.) are still being sought. However initial research has shown almost \$70 million of commodities, \$6 million of products made from recycled materials, in excess of \$6 million of technology and \$3 million of expertise were earned through exports in the last financial year.

If you or your business earns overseas funds from any area of the recycling industry that could be added to this report, please contact Sunshine on 09 486 0738 or sunshine@zerowaste.co.nz The full report will be posted on the website when complete.

The 100% Recycled Green Bottle

Plastic Technologies, Ohio, have developed the first commercially produced bottle in the world made entirely of 100% recycled plastic. It is also the first company to receive U.S. Food and Drug Administration approval to use recycled kerbside

PET resin for food packaging. The Green Bottle™ product is not only made from 100% recycled plastic, but it can also be recycled again and again, with no change in properties or performance. For further information contact: Get Green Program, 761 Berdan Avenue, Toledo, Ohio 43610 or fax 00 1 419 255 4687.

Your Comments Wanted for New Recycling Graphics

A new series of New Zealand specific recycling symbols, to assist the separation of materials, has just been developed by Waste Not Limited, in conjunction with the Recycling Operators of New Zealand. The project has been sponsored by Zero Waste New Zealand Trust and the Ministry for the Environment.



Although there are already a number a symbols used here and overseas, none of them fully met the requirements of the New Zealand recycling industry. When finished, the new symbols will be made freely available to recycling operators, councils, and any other organisation wanting to use them. However, before the designs are finalised, Waste Not Ltd would like to get feedback from as many parties as possible (particularly those involved in recycling). To view the complete set of images and make comments, go to www.wastenot.co.nz or call Duncan Wilson on 09 486 3635. This is your opportunity to have your say. Responses are required by 31 August 2001.

Zero Waste Website

www.zerowaste.co.nz

- "New Products and Innovations" has been updated with a number of products
- Check out the Zero Waste Bulletin Board - have your questions answered or help others with your expertise.



WasteBusters Trust: Leading The Way

What began in 1994 as a waste minimisation education programme run by two volunteers has developed into a nationally recognised WasteBusters Trust.

Since it was established, WasteBusters Trust Canterbury has developed a reputation for excellence with its school programme, composting demonstrations, public speaking engagements, worm farming, Reuse Waste Exchange, annual Winter Waste Fest and the establishment of three rural recycling depots at Methven, Mt Somers and Willowby.

In 1996 WasteBuster Trust Canterbury developed a contract with Ashburton District Council to deliver an education programme to the District's schools and community, and in 1997 this was extended to Selwyn District.

The Trust then developed an environmental business programme and a Reuse Waste Exchange to assist businesses find other uses for waste materials. The success of the Waste Exchange has led to Selwyn District developing a similar programme with support from Environment Canterbury.

In an effort to find a solution to the region's organic waste problem, WasteBusters Trust Canterbury has developed a 15m long vermiculture 'tunnel house' which visitors from all over New Zealand visit to see worms transforming food and other organic waste into dense vermicast.

A series of Zero Waste Workshops were developed during 1999 and 2000 to promote opportunities for rural communities to invest in resource recovery. Councillors, Council staff and waste practitioners from throughout the South Island travelled to Ashburton

to hear international speakers share the latest technological solutions for adding value and job potential to materials traditionally landfilled.



Feeding worms in 'tunnel house'

In 2001 a joint initiative between WasteBusters and the Ashburton District Council was set up to establish an innovative Education Centre at Ashburton's new Resource Recovery Park. With funding from Zero Waste New Zealand Trust, the Revolve Education Centre will incorporate WasteBusters' worm farm and compost displays along with many other waste minimisation solutions. Many features of the centre and its surrounds will be developed gradually through a series of environmental workshops incorporating re-used and recycled materials.

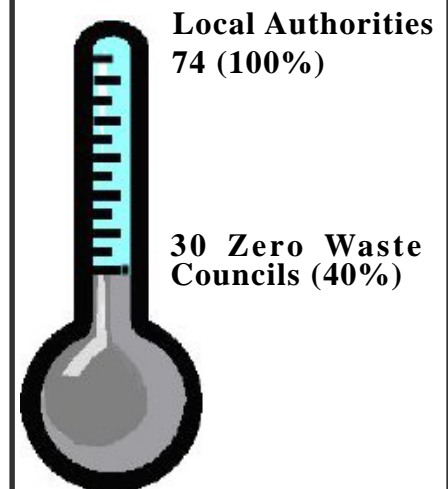
It is envisaged that local schools, community groups and other members of the public will benefit from regular visits to the centre as will tourists, representatives from other Councils and visiting waste practitioners.

WasteBusters Trust is currently negotiating to extend current activities to run the recycling at the Ashburton Resource Recovery Park.

Following the example set by WasteBusters Trust Canterbury, four more WasteBusters groups have since been set up in the South Island - in Wanaka, Central Otago, Taieri and Southland.

This month WasteBusters Trust will be running its Winter Waste Fest 2001 from the 3rd of August to the 18th of August. For further information on the Waste Fest or the Trust visit their website at <http://wastebusters.orcon.net.nz> or contact WasteBusters Trust Canterbury on 03 308 9998 or mcwastebusters@clear.net.nz

Zero Waste Councils



30 Councils have now officially adopted goals of Zero Waste to landfill, most by 2015.

The latest five councils to adopt Zero Waste goals are:

- * Ruapehu District Council - July 2000
- * North Shore City Council (adopted in draft waste reduction plan) November 2000
- * Waitaki District Council - March 2001
- * Kapiti Coast District Council - April 2001
- * Central Hawkes Bay District Council - June 2001

Have you become a RONZ member yet?

For further information on the Recycling Operators of New Zealand go to

www.zerowaste.co.nz "Zero Waste Network"/ "RONZ" or contact Karuna Douglas on 09 488 9449 or ronz@pl.net

Plascrete - Plastic/ Cement Composite

New Zealand business, Enviroplas Ltd has developed technology to use mixed plastic waste as an aggregate replacement in its plastic/cement composite - Plascrete.

Plascrete appears similar to concrete but is between 30% and 50% lighter. It has good specific strength, superior machineability and can be manufactured to produce specific decorative effects.



Plascrete Pavers

Plascrete is currently used in paving, pre cast and ready-mix and is being developed for use in blocks, roofing tiles, bench tops and floor toppings.

In addition to this, Plascrete removes up to 50 tonnes of mixed plastic waste from New Zealand's waste stream every month, mostly post industrial. This plastic would otherwise be destined for landfill.

The business was initially set up in 1993 to repair automotive tail light lenses and aviation plastics. In 1996, with the purchase of a granulator, Enviroplas began to granulate waste plastic and plastic equipment beyond economic repair for reuse in the plastics industry. Then in 1997, with funding assistance from the NZ Recovered Materials Enterprise Trust, Enviroplas developed Plascrete.

Enviroplas Ltd, now a division of Plascrete International Ltd, employs twelve staff in the

Enviroschools Programme A whole school approach to environmental education

As of next year, schools around New Zealand will have access to a new environmental education programme called Enviroschools.

The Enviroschools Programme focuses on students planning, designing and implementing environmental projects and covers a range of environmental topics, including:

- Living Landscapes
- Ecological Building
- Healthy Water
- Precious Energy
- Zero Waste

In the Programme schools form an Envirogroup, create a Vision Map and work with the support of an Enviroschools facilitator to undertake long-term, sustainable changes in their school. Environmental improvement and learning opportunities are created through students developing the school's physical surroundings, management and operational practices and working towards a healthy, peaceful, sustainable school and community.

The Enviroschools Programme is a partnership between Councils, community groups

and schools and is being offered to Councils to support existing environmental education programmes and achieve strategic environmental goals.

Initiated by Hamilton City Council, Enviroschools was further developed with assistance from Environment Waikato, Environment Bay of Plenty and Matamata Piako District Council, and supported by funding from the Ministry for the Environment's Sustainable Management Fund (SMF). Heidi Mardon, who is part of the team involved in developing Enviroschools, is being contracted by the New Zealand Association for Environmental Education (NZAAEE), with Zero Waste New Zealand Trust and SMF providing funding to support the programme around New Zealand.

Facilitator-training workshops will be run between September and December 2001, in regions that wish to undertake the Programme.

For further information, contact: Heidi Mardon 04 235 5939, email heidi.mardon@enviroschools.org.nz

production of Plascrete and other plastic related businesses and expects this to rise shortly with increased demand for its products. Plascrete has now been fully patented in New Zealand with patent registrations pending in Australia, Japan, USA, Canada, Mexico and Europe. It is predicted that by 2010 Enviroplas license and royalty streams will be worth in excess of \$400 million annually. For further information contact Peter Barrow on 09 298 2722 or info@plascrete.co.nz



Plasag Production

Resources

Building a Deconstruction Company: A Training Manual for Facilitators and Entrepreneurs

This report provides an excellent resource for anyone interested in starting a deconstruction company. Whether you are an entrepreneur, community-based organization, construction-related company, or governmental organisation, this manual will introduce you to many of the steps needed to form a solid company. From setup and funding, to planning, deconstruction, and material resale. Order the book at <http://www.ilsr.org/>

Events

On September 5-8, 2001 the Institute for Local Self-Reliance, USA, will be co-sponsoring *Harvesting The Future*, a conference on deconstruction and reuse of building material, with the Used Building Material Organization (UMBA) and other organizations. Events include an early bird one-day deconstruction workshop, denailing demonstration, a products and services trade show, and conference tracks on business and management development, deconstruction A to Z, and material sales and marketing. Get details and registering information at the UMBA Web site: www.ubma.org/jsmenu.htm.

International News

Food residuals collection

In April 2001, Hutchinson, a rural city of 12,000 people in Minnesota, USA, started collecting food residuals and yard trimmings from its 3,500 households.

Each household received a 90-gallon (408 litre) wheelie bin for their yard trimmings, pre and post consumer food residuals, and soiled and non-recyclable paper. They also received a two month supply of 20-gallon (90 litre) compost bags for their wheelie bin. "Detractors were saying that there was already enough recycling and no one would do another sort", notes Laurence Winter, Hutchinson's resource recovery coordinator. However, participation during an initial pilot averaged 70 to 75 percent.

From BioCycle, June 2001. For full article contact Zero Waste.

Bottle Bill Turns 30

Thirty years ago on July 2, 1971 the Oregon Bottle Bill was signed and made law. The bottle bill had a number of effects on litter, recycling, and employment right from the start. Litter from beverage containers fell sharply, while recycling of containers increased greatly. Redemption rates for beer and soft drink containers jumped to more than 90 percent.

Although the buying power of the nickel has decreased since 1971, the motivating power of a refund has not. Return rates under the bottle bill have dropped only slightly. About 85% of the beer and soft drink containers sold in Oregon end up being recycled, much higher than the 40% recycling rate in states that do not have deposit legislation.

In Germany, citizens consume more than 70% of all drinks in refillables. In Austria, 95% of beer and 65% of soft drinks are sold in refillable containers. In Finland, refillables make up 95% of beer and 99% of soft drinks. Throughout Canada, 91% of beer sales are in refillable bottles.

From Summer 2001 Container and Packaging Recycling and the Institute for Local Self Reliance.

Zero Waste Korea

A 'Reduce the Use of Disposable Goods' campaign has been running in Korea for the last four years to tackle the 30% of urban waste that comes from fast food chains. The Korea Waste Movement Network (KWMMN) sees tackling the waste from fast food chains as a great way of educating Korea's young people about recycling.

In 1999, the government declared that every fast-food store should recycle 90% of their disposable items. Due to this regulation, many large chains have instigated recycling systems and reduced the use of paper cups, napkins and other disposables. "Lotteria", the largest fast food franchise in Korea, has set up a model store in Jongro, downtown in Seoul, which uses no disposable items. It is hoped that this will encourage other stores to follow lead. *For further information see Zero Waste website under "International"*



Reusable Fast Food plates and glasses in Korea

Zero Waste India

A Zero Waste group is currently being established in Southern India - Zerowaste Kovalam. This group has been set up as a result of lobbying against a proposed incineration plant in the area, and is currently supported by Greenpeace India, the Indian Tourism Department, Thanal and GAIA. The group hopes to launch its Zero Waste plan in November 2001. For further information contact thanal@vsnl.com