
Getting Serious

About Packaging Waste

**A Critique of the New Packaging Accord, an Analysis of Overseas Examples,
and Recommendations for an Effective Packaging Policy for New Zealand**



Envision New Zealand

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EXECUTIVE SUMMARY

A new voluntary Packaging Accord is currently being negotiated between the Minister for the Environment on behalf of the Government and the New Zealand Packaging Council¹ on behalf of the packaged goods industry. The Accord is scheduled for official launch and sign-off in August 2004.

There has been no study carried out to determine the effectiveness of the first Packaging Accord, however the New Zealand Waste Strategy launched in 2002 clearly states that, “the total quantity of packaging waste has increased”². It is hard then to understand why the Government, having already put the packaging industry on notice once, would reward its failure to perform with a second voluntary accord.

Although the new Accord is supposedly based on the principles of Extended Producer Responsibility, there is nothing in it to compel producers to reduce packaging waste. Voluntary agreements have been shown around the world to be ineffective, as well as highly susceptible to manipulation by the industries they are supposed to regulate.

The new Packaging Accord will be no exception and, if signed, will expose New Zealand to five or more years of unrestricted packaging waste growth.

Effective packaging waste programmes are operating in many parts of the world.

This report strongly recommends that New Zealand look to these examples, rather than industry-led voluntary agreements.

The specific recommendation is that the signing of the Packaging Accord should be cancelled and that New Zealand enacts well proven and highly effective Container Deposit Legislation (CDL) as the first stage in a comprehensive Product Stewardship programme that covers all packaging, and extends to every product that ends up as waste in our society

Successful examples of these programmes operate in British Columbia, South Australia and many other parts of the world – where container recovery rates of 80-90% are usual. Container Deposit Legislation also stimulates the creation of hundreds of new jobs (over 600 in South Australia), reduces roadside litter and is hugely popular with the public.

New Zealand should not settle for a repackaged “business as usual” voluntary accord that has been proved an abject failure, when Container Deposit Legislation is far more effective at reducing packaging waste and puts the responsibility for packaging where it belongs - back on producers and consumers.

¹ NZ Packaging Council: <http://www.packaging.org.nz>

² New Zealand Ministry for the Environment: <http://www.mfe.govt.nz>

1. INTRODUCTION

Since the first New Zealand Packaging Accord was signed in 1996, the tide of packaging waste in New Zealand has continued to grow. The same concern that forced the Government to act in 1996 is back, as confidence diminishes in the Government and industry's ability to deal effectively with packaging waste. In 1996 Government promised it would step in and act decisively if voluntary action didn't work. After eight years of non-performance, the Packaging Council is negotiating another voluntary Accord and the Government is making the same promises. Similar concerns in other countries have prompted governments to take bold and more effective action.

New Zealand's focus on voluntary action through the second Packaging Accord is considered by many to be inadequate and, on the part of the Packaging Industry, a diversionary tactic. The Packaging Industry is quite happy with the voluntary Accord as this approach does not require, and will not result in, any significant change to "business as usual" for at least another five years.

It is Government's role and responsibility to take a broader and longer-term approach that benefits the whole of society, rather than the interests of one vocal and well-funded sector that is focussed more on the collective needs of its members than those of the wider community.

New Zealand is on the verge of adopting policy that has been proved ineffective both in New Zealand and other developed nations. There is still time, however, for Government to pause and reappraise the situation.

This report makes the case for well proven regulatory approaches that will reduce packaging waste significantly, gain huge public participation and approval and create an environment of certainty and a level playing field for industry – all attributes that are lacking in the current Accord.

If the New Zealand Government is serious about reducing packaging waste it must seriously assess the options in this report before the Packaging Accord is signed.

“Packaging is the ultimate symbol of our consumer culture. It tells the story of our technological achievements preserves our food, protects what we buy, and raises our standard of living...At the same time, packaging is also the largest single contributor to one of our nation's most troubling environmental problems: the municipal solid waste crisis.”³

³ Stilwell et al. 1991. Packaging for the Environment: A Partnership for Progress. New York, American Management Association

2. THE PROBLEM WITH PACKAGING

Packaging waste is growing

All around the world packaging waste is increasing. Each year in Britain, over five million tonnes of plastic are used, barely one-tenth of which is recycled.⁴ Packaging also costs us a lot - in some cases more than the price of the product itself. A recent report from the Liberal Democrats calculates that supermarket shoppers in the UK spend a phenomenal £15 billion per year just on food packaging.⁵

In the USA the situation is even worse. Americans consume more packaged drinks per capita than in any other country - about 350 aluminium cans per person per year, compared to 103 in Sweden, 88 in the United Kingdom, and 14 in France⁶. On top of this, despite aluminium's high value compared to other recyclable materials, there has been a steady decline in recycling – from 65% in 1992 to 49.2% in 2001.⁷ In 2001, 759,000 tons of cans (equal to 50.7 billion cans) were not recycled – just over half those sold that year.⁸ The Container Recycling Institute reports that over one trillion aluminium beer and soda cans have been thrown in the trash—not the recycling bin—since Americans began buying these cans more than thirty years ago. The trillion wasted beverage cans weigh in at 17.5 million tons—a quantity of scrap aluminium worth about US\$21 billion at today's market prices.

In New Zealand, despite the Packaging Council's assertions that the old 1996 - 2001 Accord was 'successful'⁹, packaging waste has increased during this period. This definition of success raises deep concerns over the fact that the Packaging Council has a major role in developing the new Packaging Accord.

Thousands of tonnes of polystyrene cups, PET drink bottles, cardboard hamburger wrappers, glass bottles, aluminium cans and plastic shopping bags (and the list goes on) are now landfilled every year. The list increases as industry invents newer, brighter, more convenient and often less recyclable packaging in the rush to capture consumer spend and increase market share.

Distrust in industry's role in the new Packaging Accord is not without precedent. Back in 1980 Dwight Reed, President National Soft Drink Association (USA) made the following frank admission,

“Society is telling us in unmistakable terms that we share equally with the public, the responsibility for package retrieval and disposal... This industry has spent hundreds of millions of dollars....in the attempt to dispute, deflect, or evade that message. It is interesting to speculate on the state of our public image, and our political fortunes had that same sum been devoted to disposal or retrieval technology.”

⁴ Why can't we recycle all this plastic? BBC News On Line 19th September 2003

⁵ How Green is Your Supermarket? . March 2004 - <http://www.libdems.org.uk/documents/supermkts090304.doc>

⁶ The Price of Quenching Our Thirst. World Watch Institute www.worldwatch.org/pubs/goodstuff/beverages/

⁷ Extended Producer Responsibility: Container Deposit Legislation Report. Zero Waste New Zealand Trust, September 2002

⁸ Trashed Cans – the Global Environmental Impacts of Aluminium Can Wasting in America. June 2002. Container Recycling Institute. www.container-recycling.org

⁹ It's All a Matter of Timing, New Zealand Packaging Magazine, Spring 2003

Dwight Reed would no doubt be one industry spokesperson who would be pleased that to know there are now proven strategies that ensure producer responsibility and retrieval rates of as high as 92%.

Industry and Consumers Externalise Costs to the Wider Community

Although manufacturers and distributors create packaged goods and drive consumer demand, they aren't held responsible for disposal once they reach the end of their usefulness. This burden falls on the shoulders of local authorities and the wider community through rates and the cost of developing new landfills.

Many of the communities battling with packaging disposal costs are those that can least afford them. For example Kaikoura, a small district of just over 5,000 people has over one million visitors every year. These visitors throw away a disproportionately large amount of single-use food wrappers and drink containers as they drive through the town, yet the Kaikoura community pays the cost of their disposal. Faced with the prospect of having to build a new \$2 million landfill the town chose to adopt a rigorous Zero Waste policy and is making steady progress towards that goal (currently achieving 60% diversion). However it is one step forward and two steps back as tourist numbers increase and the volume of one-way packaging increases. Like many other trailblazing communities around the world they have reached a threshold where there is little more that can be done at the community level.

There is a growing sense of desperation amongst many councils and communities that are on the receiving end of this avalanche of waste. They are now turning to Government to play a meaningful role in making brand owners responsible for the waste they generate. Based on our research, on all measures the new Packaging Accord will fail.

Products are Designed for Landfill

On top of increasing volumes, communities are faced with rapid changes in the types of packaging being produced. These can be extremely costly to recycle – sometimes impossible to recycle. For example PET drink bottles with PVC sleeves - and polystyrene meat trays that can't be reused due to their porous nature which means they can't be cleaned properly. There is only so much that communities can do with packaging that has been designed with little thought – meaning that landfilling is its final destination. What's needed is a comprehensive approach that ensures all producers understand what is expected of them.

A Gaping Credibility Gap

Added to this is the huge danger New Zealand faces through marketing itself as '100% Pure'¹⁰. Visitors already complain at the lack of recycling facilities available in New Zealand. Lack of integrity between the 'brand' and the experience has the potential to cause serious backfire on tourism.

¹⁰ On a recent visit to British Vancouver Envision Manager, Warren Snow was asked the purpose of his visit by Canadian immigration, to which he replied "recycling". The customs officer was damning in her criticism, saying that she couldn't find anywhere to recycle in New Zealand. When she left New Zealand she asked at the airport why they didn't have recycling in a country that claimed to be a clean green destination.

Conversely, there is huge potential for New Zealand to be seen as the cleanest country on Earth if we implement simple, effective measures to give credibility to our claims.

Burying Jobs and Local Business Opportunities

We are burying hundreds, perhaps thousands of jobs by failing to recycle packaging materials and putting them in landfills. Overseas experience shows that 600 to 1,000 jobs could be created in a city the size of Auckland by simply putting a price on every drink container (called a bottle or container deposit).

The potential for creating jobs from resources previously considered waste should be enough in its own right to implement serious resource recovery measures. We can't expect industry to do this without regulation because job creation is not its mandate. This belongs to Government, which must provide the vision, leadership and legislation.

The Way it Used to Be

New Zealand happily participated in a bottle deposit scheme for many years, reluctantly relinquishing it to industry pressure only a few years ago.

Richard Tong, a New Zealand environmental consultant who also takes an interest in the history of recycling and waste, makes the following comments:

“Bottles used to be incredibly valuable and were the only means of packaging most liquids – we had deposits on milk beer and soft drinks. They were extraordinarily successful for milk, successful for beer and surprisingly only moderately successful for soft drinks. The growth of supermarkets as outlets was one factor in the decline of bottle deposits. They didn’t want to allocate the space for storage of empties. The next biggest factor was that the range of packaging began to increase as packaging became more integrated with marketing. Different shapes of bottle were used for different brands. Another force was the promotion of recycling by ACI to ensure that they had sufficient glass to make the new non returnable bottles they were producing”.

Industry Opposition to Change

Packaging and manufacturing industries make huge profits out of single use containers and have worked determinedly around the world against the interests of the community and the environment in order to defend their right to avoid responsibility. They want a “business as usual” approach and have permanent lobbying power - which people fighting for the community perspective do not have. Latterly, although Coca Cola is a major participant in South Australia’s container deposit programme, it has lobbied against the introduction of container deposit legislation into other Australian states. As another example, in the US the American Plastics Council (APC) spent \$50 million on a communications programme launched several years ago to improve its image. The APC spends most of its money on TV commercials that focus on young, married women to help them feel that they and their families are safer because of plastic products. “The concept has worked extremely well” according to the APC.

3. THE (SECOND) NEW ZEALAND PACKAGING ACCORD

The first Packaging Accord signed in 1996, has been singularly unsuccessful in slowing down the increase of packaging waste in New Zealand - which raises concerns that a new packaging accord based on the same voluntary action is soon to be signed between the Minister for the Environment on behalf of the New Zealand Government and the New Zealand Packaging Council.

In March 2002 the Ministry for the Environment and Local Government New Zealand launched a new 'Waste Strategy for New Zealand' with the vision 'Towards Zero Waste and a Sustainable New Zealand'. The strategy makes little mention of packaging waste and its contribution to the waste problem, though it does note:

“Voluntary agreements with industry have also 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 light weighting have slowed the growth in this waste. As in other countries, however, the total quantity of packaging waste has increased.”

The Packaging Council of New Zealand is currently developing the new Packaging Accord 2004 in association with its other key signatory, The Minister for the Environment (on behalf of Government), and endorsing parties, Local Government New Zealand and the Recycling Operators of New Zealand. The Accord's objective is: "To improve the sustainability of packaging used in New Zealand through:

- Improved partnerships, policies and processes
- Brand owners and retailers accepting the primary responsibility for product stewardship over the full packaging life cycle
- Supply chain initiatives to foster markets for sustainably produced packaged goods, including greater utilisation of recovered packaging materials”

Measures of progress towards the objectives of the Accord include:

- Mass balance data
- Trends of annual estimated per capita packaging waste to landfill
- Packaging design
- Development of sustainable markets for reused and recycled packaging materials
- Sustainable Management practice
- Consumer information and involvement
- Awards

The duration of the agreement is for 5 years with an option for renewal subject to agreement between the parties. There are no penalties for non performance.

The Accord 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 regulation measures. However, this is what the Government more or less promised with the first accord.

4. THE AUSTRALIAN PACKAGING COVENANT

The Australian Packaging Covenant, although stronger than the New Zealand Packaging Accord, is coming under criticism by many – including Mr Peter Woods, Former President of Local Government New South Wales (until 2002)

Warnings from Peter Woods, Former President, NSW Local Government Association¹¹

Peter Woods summed it up when he outlined Local Government's aspirations:

- “We want Extended Producer Responsibility, where those who produce and derive profits (in the case of the beverage industry, massive profits) are financially and ecologically accountable for the impacts of their products”.
- “We want a “user pays” system which imposes financial imposts on those community members (in this case beverage consumers) who choose to shirk or avoid their environmental responsibility and, more importantly, rewards those community members who make environmentally sound decisions”.
- “We want high percentage return rates for containers in good condition for reuse and recycling, which will demonstrate clearly to the consumer community, just how much environmental impact they are having, in sheer volume of consumption terms, and will force beverage container manufacturers to come up with the solutions and markets that will close the loop and ultimately lead to a reduction in resource consumption.
- “Ultimately we want environmentally informed community choice at the supermarket to drive corporate policy. Not the other way round as is currently the case”.

Mr Woods minced no words when he stated:

“These sorts of criteria amount to no less than heresy in the boardrooms of the multinational beverage container industry, who are much more inclined to pursue “shared responsibility”, (i.e. their responsibility ends on the supermarket shelf) as espoused in the Covenant. This, in a nutshell is why we support container Deposit Legislation (CDL) and do not support the National Packaging Covenant”.

¹¹ Waste Conference 2002.CDL: The NSW Experience

'To quote an old adage "you can fool all of the people some of the time, but not all of the people all of the time". And international and interstate experience is clearly telling us that the community are starting to see through the smokescreens of "Covenants" and "voluntary approaches" based on industry goodwill and are forcing governments to act in their interests, not the interests of big corporations. As an example, Hawaii and Israel recently introduced CDL and South Australia is currently amending its legislation to cover the increasingly varied avalanche of (often un-recyclable) packaging types being foisted on the community'.

He further criticised the Australian National Packaging Covenant as 'seriously flawed and will not achieve positive outcomes for Local Government, our communities, waste minimisation or the environment. By effectively removing and "watering down" the responsibility on industries who produce packaging waste, it will in fact, enshrine everything that is wrong about waste management. I am completely confident that history will bear this out'.

Mr Woods hit out at how 'during the consultation process for the CDL inquiry in NSW, the packaging industry showed a totally relentless, totally unethical, orchestrated effort to derail the Inquiry process'.

"The community are starting to see through the smokescreens of "Covenants" and "voluntary approaches" based on industry goodwill and are forcing governments to act in their interests, not the interests of big corporations".

Independent Review of the Australian National Packaging Covenant

The Institute of Sustainable Futures at the University of Technology, Sydney reached similar conclusions after conducting an independent review of the National Packaging Covenant for the NSW Nature Conservation Council¹². The review determined that, based on ten key performance criteria, "the Covenant system is not an effective instrument for reducing the generation of packaging waste and therefore an alternative policy framework will be needed to achieve this goal."

Green Groups Demand Action

Green groups in Victoria are calling on State and Federal Environmental Ministers to set targets to cut packaging waste as part of the revamped National Packaging Covenant. They call the Covenant a national disgrace and say that it has just been a tick-the-box exercise for many companies' who signed on. Jeff Angel, Total Environment Centre's Executive Director says ***"This is the last chance. If it can't be quickly made effective, then it should be dumped."***¹³

5. THE CASE AGAINST VOLUNTARY AGREEMENTS

There is a growing acceptance by many leading international packaging waste experts, that voluntary agreements, such as the current Packaging Accord, are ineffective. A recent 2003 OECD report, 'Voluntary Approaches for Environmental Policy: Effectiveness, Efficiency and Usage in Policy Mixes' concludes:

¹² Review of the National Packaging Covenant. White, Cordell, Lansbury and Nheu. March 2004 .
www.isf.uts.edu.au

¹³ Media Release, Total Environment Centre - 17th April 2004

- While the environmental targets of most – but not all – voluntary approaches seem to have been met, there are only a few cases where such approaches have been found to contribute to environmental improvements *significantly different* from what would have happened anyway.
- Hence, the environmental effectiveness of voluntary approaches is still questionable.
- “This *could* indicate that a significant degree of “regulatory capture” has taken place.

Tom Galimberti, author of the successful British Columbian industry stewardship agreements puts it more bluntly saying, on hearing of New Zealand’s voluntary accord:

“Another “voluntary” initiative! How novel! How depressing! Don’t be gullible and don’t be fooled. Don’t follow the Australians!!”

No need for Heavy Handed German Model

There is no need to create a heavy-handed ‘command and rule’ system like the German Duales system. A balanced regulatory approach will provide significant environmental, economic and social benefits, along with a level playing field for industry and consumers.

If the Accord is signed it will add another five years of inaction to the eight years that have already passed. We now have a world-leading strategic vision of ‘Towards Zero Waste and a Sustainable New Zealand’, but need a leading-edge policy framework to achieve it. Accepting a “repackaged” voluntary initiative that has made no impact at all on the waste stream over the past five years is completely at odds with the vision and intent of the Waste Strategy.

The New Zealand Government must look closely at whose interests are best being served by the Packaging Accord and at the Packaging Industry’s track record of self-regulation over the past five years. It should hold signing off the 2004 Packaged Goods Accord until proven alternatives have been properly assessed.

Advice from South Australia

When asked, for this report, what advice he would give to any Government about to implement a voluntary programme for packaging waste, Vaughan Levitzke, Executive Director of Zero Waste South Australia, stated the following:

“Do not misjudge the inability of the industry to comply with a voluntary system. Experience in Australia shows that our Covenant was not strong enough with regard to action plans submitted by companies, i.e. no auditing of actual outcomes; it did not enforce its own code of practice i.e. allowed non-recyclable containers to be produced and sold; had no promotion either among industry or the public; funding was too narrowly focussed to kerbside recycling; and has effectively delayed a legislative solution; industry did not come up with the total \$ promised (they stated up

*to \$17.5m. I think we got around \$11m); communication re the outcomes and the Covenant have been non-existent”.*¹⁴

Advice from the Container Recycling Institute, USA

Pat Franklin, the Executive Director of the Container Recycling Institute (CRI) provided the following quote for this report:

*“Packaging waste in general and beverage container waste in particular, are on the rise in the United States. Voluntary efforts have failed to address the problem, but a system of mandatory deposits in 10 states is making a real difference. Nationally, the beverage container recycling rate has declined from 52 percent a decade ago to 37 percent in 2002, despite an increase in the number of taxpayer funded, municipal kerbside recycling programs from about 2,000 in 1990 to more than 9,000 in 2002. The policy that mandates a returnable deposit on beverage containers in 10 U.S. states, in contrast, results in an average container recovery rate of 70-95 percent, depending on the amount of the deposit. Voluntary efforts in 40 states are achieving beverage container recycling rates that are one-half to one-third the rates achieved with mandatory deposits. The numbers speak for themselves.”*¹⁵

6. SUCCESSFUL PACKAGING POLICIES AROUND THE WORLD

New Zealand has an opportunity to replace its outdated and ineffective voluntary packaging agreement with leading edge policies based on best practice examples from around the world. There are a number of legislative tools that can be used to enact the philosophy of Extended Producer Responsibility including:

- **Bans** on certain types of materials – such as those imposed in many places for recyclable or hazardous wastes
- **Quotas** for recovery – such as Germany’s requirement for 72% of most beverage containers to be refillable
- **Eco-taxes** - or Advance Disposal Fees, to influence types of materials used and to finance recovery systems - as used in Manitoba, Canada
- **Deposit refunds** to encourage container return and to finance recovery systems – as used in Australia, Canada, USA, Israel, Europe and Asia.
- **Product stewardship agreements** - Government regulated, industry-run programmes - such as those used in British Columbia, Canada.

¹⁴ *Vaughan referred to the following reports by Australian Local Government Association and Nolan ITU respectively for further information:*

<http://www.alga.asn.au/policy/environment/npc.php>

<http://www.deh.gov.au/industry/waste/covenant/evaluation/volume-1/index.html>

¹⁵ Patricia Franklin, Executive Director, Container Recycling Institute, Arlington, VA 22209, Email to Warren Snow 12 June 2004. pfranklin@container-recycling.org <http://www.container-recycling.org> <http://www.bottlebill.info>

6.1 INDUSTRY STEWARDSHIP AGREEMENTS

Industry Product Stewardship Programmes developed in British Columbia combine strong government direction with industry initiative to deal with packaging and a range of other products and materials. The Environmental Management Branch of the Ministry of Water, Land and Air Protection is responsible for the design, development, implementation and evaluation of a wide array of pollution prevention and remediation activities throughout British Columbia to fulfil its goal of preventing pollution at source and remediation where necessary¹⁶.

British Columbia defines Industry Product Stewardship¹⁷ as "a management system based on industry and consumers taking life-cycle responsibility for the products they produce and use". Using this definition and the polluter-pays principle, British Columbia has focused on beverage containers and products that contribute to the household hazardous waste stream. In addition to beverage containers, industry product stewardship programmes have been applied to lead-acid batteries, medications, paint, scrap tyres, solvents/flammable liquids, gas, pesticides and used motor oil. Programmes for lead-acid batteries and scrap tyres are examples of first-generation stewardship programs - funded by consumers and administered by government.

By regulating stewardship responsibility the provincial government has moved away from government-managed and taxpayer-financed waste management programmes. Industry product stewardship programmes are "second generation - cradle to cradle" environmental management programmes based on the principles of industry efficiency, accountability and environmental responsibility. A key advantage of this system is that recycling costs are borne largely by industry and consumers rather than by society at large.

The British Columbian Industry Stewardship system and similar ones in other Canadian provinces are a 'systems' approach to solving environmental problems. They make the producer and user pay and put the responsibility for creating the solutions clearly in the hands of the brand owners.

Funding Mechanisms for Stewardship Programmes:

"Eco-Fees"

In order to fund regulated industry stewardship programmes including the collection depot network, some affected brand-owners, for example - paint, solvents/flammable liquids and pesticides, decided to increase their product prices and list the increases as a separate line item or "eco-fee" on distributor invoices and consumer receipts. The "eco-fees" are managed entirely by non-profit, industry associations and the provincial government neither sets the amount of the "eco-fees" nor receives or administers the funds that are collected. The programmes are required by regulation and/or ministry approved stewardship plans to submit annual statements of programme revenues and expenditures to the ministry.

¹⁶ Much of the following can be found on the British Columbia website - <http://wlapwww.gov.bc.ca>

¹⁷ <http://wlapwww.gov.bc.ca/epd/epdpa/ips/index.html>

Industry Funded

Some industries, such as the gasoline and pharmaceutical industries, have chosen to internalise the cost of their share of the stewardship programmes. "Eco-fees", or other visible consumer price increases, are not assessed.

Deposit/Refund

Deposit/refund, with an additional fee¹⁸ charged to brand-owners based on container type, is a successful model for managing non-hazardous wastes, such as used beverage containers. This funding model cannot be utilized for collecting household hazardous waste, i.e., paints, solvents and pesticides, due to their toxic nature.

Beverage Containers:

When the Litter Act was enacted in 1970, British Columbia became the first jurisdiction in North America to establish a mandatory deposit-refund system for soft drink and beer containers as a litter control initiative. The success of this approach was recognised by other jurisdictions in Canada and the United States, many of which followed BC's lead by enacting similar legislation. Over time, the beverage industry expanded to include sales of products and container types not envisioned under the Litter Act, and significant numbers of beverage containers started entering landfills and the litter stream, at considerable taxpayer expense. By the mid 1980's, local governments began to petition the province for relief from the burden of litter clean-up and from the cost of managing used beverage containers in landfills and municipal recycling programmes.

In response to local government concerns, the province enacted the 'Beverage Container Stewardship Program Regulation' in 1997¹⁹, replacing the outdated Litter Act. The regulation achieves fairness for taxpayers by requiring all beverage brand-owners of ready-to-drink beverages with the exception of milk, milk substitutes, liquid meal replacements and infant formula to establish a province-wide return collection system for beverage containers under a deposit-refund system. The regulation establishes the goal of a minimum 85 percent recovery rate and requires that redeemed containers be either refilled or recycled.

Funding for the return programme is generated through unredeemed deposits, revenue from sales of recyclable materials and brand-owner fees, as necessary.

The Beverage Container Management Board

The Beverage Container Management Board meets on a quarterly basis and provides advice to the Minister on the province's deposit-refund system. The ten member board comprises representatives nominated by Encorp Pacific (Canada), Brewers Distributor Ltd., the Liquor Distribution Branch, the BC Bottle Depot Association, local government, labour, retail grocers, the Recycling Council of BC, an environmental non-government organization and the Ministry of Environment, Lands and Parks.

6.2 CONTAINER DEPOSIT LEGISLATION (CDL) - South Australia

Although Australia has a National Packaging Covenant to manage packaging waste, this did not stop South Australia from expanding its own highly successful

¹⁸ For example the fee or cost to industry per container in Alberta is approx .06 cents per container

¹⁹ The Beverage Container Stewardship Program Regulation can be found on http://www.qp.gov.bc.ca/statreg/reg/W/WasteMgmt/406_97.htm

Container Deposit Legislation (CDL) in 2003²⁰. This occurred despite opposition from other Australian States and industry.

Container deposits were imposed on disposable beverage containers in 1975 – initially to combat the litter problem. Collection depots were set up with existing ‘marine stores’ as well as with charities, scouts etc. There are now around 140 collection points around South Australia – spaced at least every 5 km in the Adelaide metropolitan area. There are two return mechanisms – refund at collection depot (99% of containers come back this way) or refund at point of sale (1%). Consumers get their 5 cents back at these points.

CDL used to apply just to carbonated drinks up to 3 litres in capacity but public demand ensured this increased to all drink containers (including tetrapacks) in Jan 2003, with a 6 month transition phase.

Return rates

Besides reducing litter, a major benefit of CDL is reduced Council costs as far fewer containers are landfilled. Return rates (in 2002) were:

PET – 74%

Glass – 86%

Cans – 86-92%

Employment

More than 600 people are employed directly because of CDL (Adelaide, the main population centre in South Australia has a population of 1.5 million). A recent report indicates that the whole programme costs just \$1.14/person/year. The South Australian EPA administers and oversees the programme.

EPA has also recently set up Zero Waste South Australia²¹, funded by an increased waste levy (doubled to \$10/tonne) to drive and implement further waste reduction measures in South Australia.

Costs of the South Australian programme

Vaughan Levitzke established Zero Waste South Australia and is its Executive Director. In response to being asked if the South Australia Container Deposit system is any more expensive than the old methods he replied,

*“The consumer pays for CDL. If they litter or dispose of the container in waste or kerbside they forego the deposit. It is essentially an ‘Advanced Disposal Fee’ but the consumer can get an incentive to recycle and not litter.”*²²

6.3 ENVIRO-LEVIES - Manitoba, Canada

Manitoba has taken a different approach to other Canadian provinces, choosing a multi-material system over a container deposit system. The reason for doing so was to collect a wider range of household materials for recycling. The scheme is

²⁰ More information on the CDL legislation can be found on www.environment.sa.gov.au/epa/cdl.html

²¹ www.environment.sa.gov.au/zerowaste/

²² For more information refer to: http://www.environment.sa.gov.au/epa/pdfs/cdl_report.pdf

financed by non-refundable levies placed by government on the distributors of certain disposable beverage containers. This "enviro-levy" of 2 cents per container is shown separately on grocery bills across the Province and is used to fund municipal multi material recycling programmes. In 2001 \$6.6 million was returned to municipal recycling programmes.

6.4 PLASTIC TAXES AND BANS

The Indian state Himachal Pradesh has outlawed plastic bags.²³ The law is based on legislation passed by the national parliament, but is the first state to have implemented it. Under the new law, anyone found even using a polythene bag could face up to seven years behind bars or a fine of up to 100,000 rupees (\$2,000). The new law bans the production, storage, use, sale and distribution of polythene bags.

In May, the South African Government banned the use of thin plastic bags, threatening a 10-year jail sentence for offenders. And in Ireland a tax on plastic shopping bags has reduced their use by nearly 90% and the tax paid by the 10% of people who use plastic shopping bags has created a significant fund for further recycling programmes. Taiwan has placed a ban on disposable bowls, bags and other utensils made out of plastic. The products are banned in supermarkets, department stores, fast-food chains, restaurants and convenience stores. The Taiwanese Government estimates that plastic utensils and bags account for 60,000 tonnes of waste every year.

Scottish Liberal Democrat Mike Pringle has called for a plastic bag levy in an attempt to cut down on waste and a scheme has also been proposed in the English city of Durham. Australia also, is looking at banning plastic bags. In March 2004 the Australian Environment Minister, Dr David Kemp launched the "Say No to Plastic bags" campaign. Coles Bay in Tasmania became the first town to ban plastic bags outright in April 2003, and in January 2004 South Australia's Kangaroo Island became a plastic bag free zone. Retailers such as Bunnings and Ikea have taken the levy option, charging customers for each bag. "If this voluntary campaign isn't working then of course we have to consider what we do [next]." Kemp said.²⁴

Korea bans certain PVC and polystyrene foam (EPS) packaging. It also requires packaging reduction plans from electronics manufacturers, complete with rates and dates. A major toy company recently got fined for using EPS packaging. Meanwhile it appears China may make its local EPS foam restrictions a national law.²⁵ Whilst this report is not advocating banning plastic bags, the fact that so many places are doing so indicates the level of frustration that is growing at the problem that plastic bags pose in the environment and in landfills.

²³For the full BBC report go to: http://news.bbc.co.uk/1/hi/world/south_asia/3132387.stm

²⁴ New Zealand Herald 30th March 2004

²⁵ Extended Producer Responsibility Laws: A Global Policy Analysis. Michael Raymond. Raymond Communications, Inc. www.environmental-center.com/articles/artcile 996

7. REFILLABLE CONTAINERS VS RECOVERED CONTAINERS

Refillable beverage containers represent possibly the best solution for reducing packaging waste. Before 1960, locally owned and operated refilling systems were the standard way of delivering soft drinks (as well as milk and beer) in New Zealand. When purchasing a soft drink at the store, people would pay a deposit on the bottles. The store would refund the deposit when the bottle was returned and it would be returned to the bottling plant to be washed and refilled. A soft drink bottle could make 21 such trips. Although the technology has advanced significantly since 1959, the basic processes of refilling systems have remained the same.

Unlike New Zealand, countries like Denmark, Finland and the Canadian province of Prince Edward Island have kept their refilling systems and a high proportion of soft drinks are still packaged in these containers. Policies have also been put in place in Norway, the Netherlands, Belgium and Germany to preserve and protect refilling²⁶.

Lack of protection in New Zealand, along with a concerted effort by major manufacturers to introduce one-way packaging has seen the demise of locally owned and operated soft drink manufacturing and with it the bottle washing industry. As Richard Tong explains:

“The Bottle Collection Association (BCA) closed down around 1990. The final death knell for the bottle washing industry came when Edwards Enterprises closed down their bottle washing operation in West Auckland around 1994²⁷.”

While legislation to promote use of refillable containers is the best option from a sustainability point of view, decimation of the local soft drink industry means that on a national level we may have to look at the next best option, legislation to promote recovery for recycling as an immediate goal, while continuing to investigate options for re-introducing refillable containers.

Why target beverage containers?

Unlike most other packaging types, beverage containers:

- Are readily identifiable and highly recyclable
- Are often consumed away from home so are thrown into rubbish bins (or the environment) rather than kerbside collection bins
- Are durable, creating a long-lasting litter problem on roadsides, beaches and parks
- Contents are generally consumed quickly – not stored after opening
- Successful return schemes for them have run in New Zealand in the past which many people still remember positively

²⁶ Reduce, Reuse, Refill! - www.grrm.org/beverage/refillables/refill_report.pdf

²⁷ Richard Tong, Environmental Consultant, Phone Conversation 14th June 2004

We have to start somewhere and beverage containers present us with an ideal opportunity to change direction and seriously work towards a comprehensive system of market based Industry Stewardship agreements.

8. SUPPORT FOR CONTAINER DEPOSIT LEGISLATION

Support for container deposit-refund schemes range from between 60% and 80% in almost every survey that has been done around the world.²⁸ In the USA public support ranges from 72% in Maine to 85% in Iowa and over 70% in national polls.²⁹

Places that have container deposit legislation

- USA - 11 states California, Connecticut, Delaware, Hawaii (to be implemented 2005), Iowa, Maine, Massachusetts, Michigan, New York, Oregon and Vermont.
- Canada - several provinces (92% return rate in Saskatchewan)
- Sweden (86% aluminium can recycling rate)
- India (high recycling rates are achieved by way of a deposit value equivalent to about 50 percent of the price of the beverage)
- South Australia - Over the years many surveys have been undertaken. Vaughan Levitzke, Executive Director of Zero Waste South Australia explains, ***“The public approval rate in South Australia” “is very high- over 90% whenever we survey them”***.
- New York State - a recent (January 2004)³⁰ survey of New York voters revealed overwhelming support for the State’s existing container deposit law or ‘bottle bill’ and proposals to expand it.
 - 84% said they supported the existing law
 - 78% agreed the programme made the State much cleaner
 - 70% supported expanding the law to include non-carbonated beverages such as bottled water, fruit drinks, iced teas and sports drinks
 - 86% supported the transfer of unclaimed deposits from beverage distributors to fund state environmental programmes
 - 81% agreed that kerbside recycling by itself is not enough to control litter

²⁸ Dr Stuart White. Broadcast interview Monday 25/03/2002. Radio National

²⁹ The 10 Cent Incentive to Recycle. The Container recycling Institute. 2004 www.bottlebill.org

³⁰ New York Bottle Bill and Proposed Reforms: Summary of Opinion Poll Results. Container Recycling Institute. www.container-recycling.org

9. DEMAND FOR CONTAINER DEPOSIT LEGISLATION

Independent Review of CDL in New South Wales

New South Wales commissioned an independent review of CDL by Dr Stuart White to assess its environmental, financial and social costs and benefits to the community and industry³¹. Key findings were that:

- There is strong support from local government and environment groups for CDL, majority support from the community, limited support from the recycling industry, and opposition from the beverage, packaging, and retail industries.
- When both financial and environmental impacts were considered on a whole of society basis, the potential benefits of introducing CDL in NSW were found to significantly exceed the costs.
- The annualised net economic benefit of CDL in NSW in the case where recovered container materials are recycled was of the order of \$70-100 million per year compared to the current situation.
- The estimated value of the environmental cost of disposing of a single average beverage container to landfill, compared to recycling that container, is 8-9¢. The cost of recovering that container through a combined CDL and kerbside recycling strategy is approximately 2-3¢.
- Consumers of containerised beverages would bear the largest cost burden if CDL were introduced in NSW. The beverage industry and both large and small retailers would also be likely to incur net costs under such a system. The magnitude of these costs would depend strongly on the extent to which they were able to pass them on to consumers and also on the type of CDL system established.
- Local government, would realise financial benefits, through reduced costs of kerbside collection and through the value of unredeemed deposits in the material collected at kerbside.
- CDL will ultimately improve the financial performance of kerbside recycling by reducing its costs. There would be no financial justification for any council to reduce the frequency and convenience of kerbside collection of paper as a result of the implementation of CDL.
- There would be a net employment increase of between 1,000 and 1,500 full time jobs if CDL were implemented, depending on the option.
- Other stakeholder groups likely to benefit financially from CDL due to collection and donation of deposit bearing containers are charities and some disadvantaged sections of the community.

The CDL Review concluded that NSW would obtain overall benefits from the significant improvement in the container material recycling rate and the reduction in litter that could be expected to result from the introduction of a best practice form of CDL. The Review considers that the desired outcomes of high recycling rates and reduced litter are also achievable through other regulatory mechanisms

³¹ Container Deposit Legislation – An Independent Assessment of CDL in NSW. July 2002. Institute for Sustainable Futures, University of Technology, Sydney

such as mandatory recovery and recycling targets. However, it notes that international experience has found deposit-refund systems to be the most effective mechanism for achieving high container recovery rates. The review's recommendations are that:

1. Container deposit legislation be introduced that establishes a container deposit and return system with the following features:

- Deposit applicable to all beverage containers made from aluminium, glass, PET, HDPE, PVC, liquid paper board and steel;
- Mandatory acceptance of used containers and refund of deposits by all retailers of deposit bearing containers. This should be subject to exemptions and/or qualifications that would prevent an inequitable burden being placed on small retailers where these exemptions would not compromise consumer access and convenience;
- Should point of sale return not prove possible to implement, a depot or collection centre based CDL system should ensure accessibility, preferably requiring retailers with a threshold turnover level to provide facilities near retail outlets;
- A uniform deposit level of ten cents initially with provision to alter the level of deposits on certain container types at the discretion of the Minister for the Environment;
- A mechanism for ensuring that those parties involved in the acceptance of used containers and refunding of deposits are adequately compensated for those services, and
- A mechanism for expanding the range of containers subject to a deposit.

Or

2. The strengthening of industry recycling targets to levels that achieve equivalent outcomes to those that could be expected to result from the introduction of CDL. These targets should therefore:

- Achieve recovery rates for the recycling of used container materials of ninety percent, and; Apply as a minimum to beverage containers, with provision for expansion to encompass other container types.

CAPE TOWN, South Africa

A new tax on a range of consumer goods is about to be introduced by the government in an effort to promote recycling and reduce South Africa's growing mountain of waste³². Local media reports indicate that the new legislation, which was approved by the Cabinet will be tabled in Parliament shortly.

Its aim is to put an economic value on waste, which the government hopes will discourage dumping. The legislation will also transfer the control of landfill sites from the Department of Water Affairs and Forestry to the Department of Environmental Affairs. Compulsory deposits will be added on the purchase price

³² August 12, 2003 (ENS)

of a variety of items still to be decided upon, but which are likely to include vehicle tyres, bottles, cans and plastic. These deposits will be redeemed by consumers when the items are taken to a recycling depot or returned for reuse.

The legislation grew out of the government's White Paper Policy on Integrated Pollution and Waste Management and a ministerial workshop held in the Nelson Mandela Metropolitan Municipality in 2004.

The workshop was an effort ***“To move South Africa away from fragmented and uncoordinated waste management to integrated waste management to ensure clear definitions and understanding of the role by all stakeholders including communities,”*** said Deputy Minister for Environmental Affairs and Tourism, Rejoice Mabudafhasi.

10. THE WAY FORWARD FOR NEW ZEALAND

Based on analysis of overseas examples, recommendations from international experts and feedback from local communities, the best option for New Zealand is the introduction of mandatory Container Deposit Legislation developed under a Product Stewardship framework.

Introduction of Container Deposit Legislation (CDL) should occur as soon as possible, using the British Columbian mandatory Container Deposit Legislation (used similarly in South Australia and other parts of the world) as the model. This is preferred to the Manitoba multi-material eco-tax system (which does not provide a refund component) simply because the public have a greater degree of participation in a refund system, with financial reward reinforcing the right behaviour. This helps the broader goal of public education. The system would not be hard to promote or explain as people still fondly remember the old system of bottle deposits in New Zealand. There are also successful examples of the system in operation around the world so there would be a low level of risk - we would not be reinventing the wheel.

British Columbia's Product Stewardship Agreement framework provides us with a strong yet flexible model for industry and government to work together to extend waste reduction legislation to other packaging types, products and materials. We should not wait, however, to develop this broader framework before introducing CDL. We simply do not have the luxury of time. We risk losing key members of our community recycling sector if tangible support is not provided soon. Also, Product Stewardship Programmes, although well-proven in British Columbia, are not as well known elsewhere. Container deposit-refund programmes are much better known and understood and are the easy 'starting point', proving themselves extremely popular with the public, effective logistically and effective in creating jobs. We know deposit-refund programmes fit easily within a Product Stewardship framework so they are the logical place to start.

11. HOW IT WOULD WORK

Government

Government would be responsible for prioritising the development of Container Deposit Legislation to make rapid progress towards reducing this part of the waste stream, and providing a sustainable support system for the community and private recycling sector. It would also be responsible for developing a comprehensive Industry Stewardship Agreement framework informed by the goals and objectives of the New Zealand Waste Strategy: 'Towards Zero Waste and a Sustainable New Zealand'.

Management Agency

A Management Agency for Beverage Containers would be established by Industry to design, administer and promote the Container Deposit Legislation. This organisation, perhaps called the **New Zealand Beverage Container Recycling Association** (or some other appropriate name) would have a similar brief to that of British Columbia's Beverage Container Management Board or the Alberta Beverage Container Recycling Corporation and other similar organisations.

The NZBCRA would be responsible for ensuring that there is an effective collection system in place to recover container packaging. This would probably entail brand owners and retailers contracting this work out to existing commercial and community enterprises already working in the recycling arena.

All brand owners would be required to be represented on the NZBCRA which would set minimum recovery rates and a fair system for payment of deposit refunds and administrative costs. Government's role would only be to require that they establish themselves, to approve of the system that they would introduce for beverage container recycling and to monitor progress in terms of the reduction in packaging waste against international benchmarks.

Brand owners would be responsible for complying with the mandatory regulation requirements and would face stiff penalties for non compliance.

Consumers

Consumers would pay a deposit on all containers. This would be refunded to them when the container is returned either to the place of purchase or a collection depot. Alternatively they could continue to put them out at the gate with the normal kerbside collection or deliver them to a charitable organisation of their choice (scouts, girl guides etc).

The Economics

There are a number of ways that deposit-refund programmes are structured to ensure they are economically viable for all participants. Some give the full refund (e.g. 5, 10 or 20 cents) back to the consumer. Regulated handling charges³³ on

³³ In Alberta for example the consumer receives the full refund of the deposit (5 to 20 cents) and the cost to industry for participation in the programme is .approximately 06cents per container.

each container sold fund the collection process along with unclaimed deposits (containers returned via kerbside collections and other means). Others give a partial refund to consumers (e.g. Hawaii which has a deposit of 6 cents, but refunds 5 cents) using the balance to fund the programme.

In either case a handling fee needs to be paid to the collection depots or retailer to cover collection costs. Oregon has no handling fee in its bottle bill and, as a result, independent collection depots are not economically viable.

Process for Implementation

In consultation with Tom Galimberti³⁴, (former Director of the Pollution Prevention Branch for the British Columbia Ministry for the Environment) the following steps are recommended for the establishment of industry run / government regulated product stewardship programmes.

- 1) Notify brand owners of intentions – indicate an expectation that they will have to participate in an industry stewardship / government regulated programme to ensure collective industry-wide brand owner responsibility for the waste that each sector creates.
- 2) Set out some objectives of what is expected of the programmes which must be
 - Comprehensive (all containers)
 - Inclusive (EVERY producer has to take back ALL products)
 - Cover the entire country
 - Ideally be “return to Retail” – or as approved “Return to Depot”
 - A level economic playing field
- 3) Give brand owners 3 months to explain what they will be doing and then 9 months to implement. Government must create a level playing field – that includes everyone and all containers. As Tom Galimberti advises “Cost is of no interest to the Government, that’s for the brand owners to sort out. The main trick is to “maintain the economic level playing field ***through the establishment of the regulation***”.

Additional comments from Tom Galimberti

“The key principle of the Product and Industry Stewardship / Government regulated approach is that the person that creates the problem is fully responsible for creating the solutions to that problem. It’s about making people accountable for the pollution they create.

“We have proven that the consumer, who is also part of the problem, is prepared to pay for the solution. Producers though are the experts. When you make industry responsible it pushes them to look at redesign. The goal is to eliminate the landfill as an environmental option. The brand owners should organise the

³⁴ Prior to his work in British Columbia, Tom was Assistant Deputy Minister for the Saskatchewan Ministry of Environment. He is currently Principal, Global Environmental Management Systems Ltd

Management Agencies to run the stewardship programmes. This privatises the problem, creates added value jobs and makes brand owners responsible for the products they produce.”

As a result of beverage container deposit system a 92% return rate has been achieved in Saskatchewan. I would first establish a beverage container deposit regulation that would enable “Return to Retail” and Depots, as well as encourage local governments to ban the products from Landfill as soon as the programme is set up.”

12. THE OUTCOMES WE CAN EXPECT

12.1 WASTE TO LANDFILL

Because container deposit–refund systems achieve consistently high return rates, waste to landfill is significantly reduced. Introduction of CDL could lead to a reduction in total solid waste to landfill of between 4 and 6%.³⁵ This is a significant and easily achieved fraction of the total.

Measurements of packaging waste and diversion percentages can be deceptive because packaging waste takes up significantly more space than many other categories of waste. The Packaging Council of New Zealand states on its website that: **“Research in New Zealand shows that packaging waste in 1994 accounted for just 11.8 percent by weight of total solid municipal landfill waste. However as the percentage of packaging materials recovered has risen from 29 percent in 1994 to an estimated 39 percent in 1997 it is likely that the volume of packaging waste to landfill has fallen”**. This is in contrast to the view of the New Zealand Government’s Waste Strategy which as previously pointed out states that **“the total quantity of packaging waste has increased”**.

It’s self evident that the New Zealand Packaging Council would not want to draw attention to the true impacts of packaging waste. It’s for this reason that they state packaging waste in terms of a weight rather than volume which would make it more like 15 -20% of total municipal landfill waste.

Interestingly the Packaging Council’s website claims in another section that: **“The Council’s research has established that packaging is less than 12% of the municipal waste stream”**. This time the reader is left to decide for themselves if they mean weight of volume. Either way it’s a huge proportion of domestic waste to landfill, one that could be addressed by taking a product stewardship approach.

12.2 KERBSIDE COLLECTIONS

One of the most frequently asked questions is whether kerbside recyclable collections can remain viable with the introduction of CDL.

Container deposit -refund schemes run successfully alongside kerbside collection schemes in many places around the world. In fact a comprehensive programme

³⁵ Bringing Back Returnables. Container Deposit Legislation for New South Wales. Peter Hopper, Friends of the Earth, Sydney. 1992

of kerbside recycling and container deposit recovers more containers at a lower cost per tonne to councils than kerbside alone. In the USA, the 10 states that have implemented deposit systems (and where 79% of the populations are served by kerbside recycling) recycle more than twice as many beverage containers per capita as the 40 non-deposit states³⁶.

In 1991 the Seattle Solid Waste Utility studied the impact of CDL (called 'bottle bills' in the US) on its successful kerbside collection system and found that a combined deposit-kerbside system would divert more tonnage and result in annual savings to the City of \$591,245 to \$849,219. Even after compensating recycling companies for lost revenue related to the collection and sale of recyclables, the City would realise a net gain of \$236,917 to \$632,774.³⁷

Kerbside Recycling and Container deposit systems are also working side by side in South Australia. Vaughan Levitzske, Chief Executive of Zero Waste South Australia explains, ***"Most CDL materials go back through depots, the remainder through kerbside. This means that while we have fewer containers in kerbside, they are worth a lot more, hence it still helps reduce costs of kerbside services."***³⁸

Kerbside schemes are currently run at the expense of councils and ratepayers – not consumers and industry. Beverage and container industries are, in actual fact, being subsidised through kerbside collections by having the cost of their container disposal paid for by ratepayers. This runs counter to New Zealand's much vaunted 'market' economy where the concept of 'user pays' has been instilled into the national psyche. CDL puts the cost where it belongs – with the user of the product or service.

12.3 EMPLOYMENT

New Zealand could create anywhere between 750 to 3,000 jobs with the introduction of a nation-wide container deposit-refund system. This projection is simply an extrapolation of job creation achieved elsewhere. For example:

- British Columbia, with a population of 4 million, has created 750 new jobs in 122 independently owned bottle depots.
- South Australia, with a population of 1.5 million has created 1,000 new jobs, many in the 140 locally run collection depots.

A 1992 report from Friends of the Earth in Australia estimated that 3,000 jobs could be created in New South Wales if it were to introduce CDL.³⁹ The same report noted the following centres of job creation:

- Vermont, population 450,000, added 350 jobs
- Maine, population 1.08 million (1979), created 626 jobs

³⁶ Understanding Beverage Container Recycling: A Value Chain Assessment Prepared for the Multi-Stakeholder Recovery project. Global Green USA. January 2002.

³⁷ Potential Impact of a National Bottle Bill on Seattle's Curbside Recycling Program. Seattle Solid Waste Utility. 1991

³⁸ For more information go to:

<http://www.environment.sa.gov.au/epa/pdfs/kerbside.pdf>

³⁹ Bringing Back Returnables. Container Deposit Legislation for New South Wales. Peter Hopper, Friends of the Earth, Sydney. 1992

- Oregon, with a population of 2.1 million created 576 jobs
- Connecticut, population 3 million, created 700 jobs
- Michigan, population 9.2 million (1979) created 4,888 jobs

On this basis Auckland alone (with a population similar to South Australia) could expect the creation of 1,000 jobs. Job creation would not be limited to the large centres though, as collection has to be done at local level, most jobs being created at the collection depots. Smaller numbers of jobs would be based in large industry-organised consolidation points and in transport, logistics, marketing and regulatory roles. The local nature of these jobs and the fact that many would suit low skill entry-level workers makes them especially attractive to isolated communities with high unemployment. The other attractive feature is that the collection depots can be owned and or run by councils, community enterprises or commercial businesses – or any combination of these.

Some of the collection depots could be established in existing resource recovery centres run by community enterprises, commercial businesses and councils. Income earned from the deposit-refund system would provide financial stability for these facilities, enabling them to concentrate on developing recovery systems for other, more difficult to recycle materials, and creating more jobs.

Potential exists to create jobs for people with disabilities through deposit-refund programmes. In Saskatchewan SARCAN Recycling, a division of the Saskatchewan Association of Rehabilitation Centres (SARC) employs over 250 people, 80% of whom have disabilities (Saskatchewan's population is 1 million). They operate 70 depots in over 60 communities. Current return rates are running at 92%.

“The deposit law has had a positive effect in fostering over 1,600 jobs with annual wages of \$22.8 million at local redemption centres throughout the state.” Angus King, the Governor of Maine, 1996

12.4 THE PRIVATE SECTOR

Container Deposit Legislation ensures more materials are collected – creating more business opportunities for recyclers. Good operators should be well positioned to become suppliers of services that will be needed for the deposit-refund infrastructure: depots/collection centres, intermediate processors, transporters etc Even IT suppliers will find opportunity providing electronic money management systems to track deposits/refunds/handling commissions etc.

Container Deposit Legislation which include glass containers also help maintain quality of other recovered materials such as paper because there is less contamination with broken glass.

“If the goal is to capture the maximum amount of materials possible, then kerbside recycling, deposits and drop-off centres should all be part of a well-thought out pollution prevention and waste reduction plan.” Lainier Hickman, Former Director, Solid Waste Management Association of North America.

12.5 LITTER

Beverage containers represent 40-60% of roadside litter in non-deposit states in the USA⁴⁰. Container deposit-refund legislation was originally introduced in the USA (and in South Australia) to combat this litter problem. Government funded studies in the USA showed reduction in beverage container litter ranging from 69-84% and reductions in total litter from 30-65% after the introduction of CDL. And, according to industry figures, South Australia is the least littered state in Australia⁴¹.

CDL creates an incentive for people to clean up after themselves or, if they won't, someone else will, to claim the deposits. Friends of the Earth in Australia estimate that total litter volumes could be reduced by up to 50% with CDL. Reducing litter would have positive implications for New Zealand's largest industry, tourism, and its national brand '100% Pure'.

A visit to British Columbia or South Australia will quickly dispel any doubts as to the effectiveness of deposits on beverage containers - they are simply not seen in rubbish bins, on roadsides or in drains and creeks as they are in New Zealand.

“As a tourist-orientated state whose major attraction is its natural beauty, we are very aware of the contribution of the deposit system in keeping our roadsides clean.” Angus King, the Governor of Maine, 1996.

13.6 THE ECONOMY

Local and national economies benefit through the introduction of CDL through:

- Reduced litter clean-up costs (the Maine Department for Transport estimated its highway clean-up costs halved since the introduction of CDL)⁴²
- Reduced landfill costs
- Increased employment opportunities especially for those people disadvantaged in the labour market through the effects of the increasingly globalised world economy.
- More money circulating in the local economy due to an increase in the number of jobs
- Increased income from sale of recovered materials locally or to overseas markets.
- Overseas funds saved through the reduction of imported raw materials

⁴⁰ The 10 Cent Incentive to Recycle. The Container Recycling Institute. 2004. www.bottlebill.org

⁴¹ Recyclers of South Australia – www.recyclesa.com.au/FAQ.htm

⁴² ⁴² Bringing Back Returnables. Container Deposit Legislation for New South Wales. Peter Hopper, Friends of the Earth, Sydney. 1992

CDL is based on the principle of 'polluter pays' rather than the community pays. Consumers who dispose of containers, rather than return them, help fund the system.

The report produced for New South Wales by Dr Stuart White from the Institute for Sustainable Futures at the University of Technology, Sydney, found that a deposit and refund scheme in NSW would save the State up to \$100 million.

12.7 COMMUNITIES

There is overwhelming public support for container deposit-refund schemes wherever they operate. Their popularity is partly due to the fact that they empower and encourage individuals to do the right thing – giving them an opportunity to contribute positively to society and the environment. A less obvious effect is that they encourage consumers to differentiate between products and packaging designed for re-use, recycling and disposal. In effect they are highly effective educational tools, heightening environmental awareness and influencing purchasing decisions.

Currently there is a citizen led campaign in New York to widen and expand the State's bottle bill⁴³.

“Our 20-year old bottle bill has been a phenomenal success at keeping billions of containers out of landfills and off our streets. However, the bottle bill can be made even better if we update it to include categories of containers that barely existed in the marketplace when the law was enacted.” Eliot Spitzer, New York State Attorney General in support of the new 'bottle bill'.

12.8 LIKELY RESPONSE FROM INDUSTRY

The beverage industry worldwide is fighting the introduction of Container Deposit Legislation. They are fighting in many ways – from direct lobbying to more subtle measures such as supporting anti-litter campaigns conditional on CDL not being introduced. In New South Wales the beverage and container manufacturing industries funded the NSW Government to operate the 'Do the Right Thing' (put it in the bin) programme on this condition⁴⁴.

Since the beverage and container manufacturing industries profit greatly from production of one-way containers it is unlikely that they will voluntarily support the introduction of Container Deposit Legislation.

The Packaging Council of Australia is already labelling CDL the “lazy” policy option, arguing in its submission against it that it applies only to a small part of the waste stream, will be costly to develop the infrastructure for, and focuses on recovery with minor impact on environmental sustainability and waste reduction. It calls CDL ‘discriminatory’ saying that the beverage sector, “has a substantial record of achievement, both historically and currently, being at the forefront of efforts to take responsibility to minimise the environmental impacts of its

⁴³ “Bottle Bill” is the term frequently used in the USA to describe a container deposit legislation.

⁴⁴ Container Deposit Legislation for NSW. Bringing Back Returnables. Peter Hopper. Friends of the Earth, Sydney. 1992

packaging.”⁴⁵ This, despite the fact that in the USA, an estimated 118 billion bottles and cans were landfilled, littered or incinerated in 2002 – 83% more than in 1992, and more than twice the amount wasted in 1982.⁴⁶

A 1996 report by the US Public Interest Group revealed that:

- 34 political action committees (PACs) in the beverage, grocery, retail and container manufacturing industries spent over \$14 million in campaign contributions aimed at defeating national bottle bill proposals between 1989 and 1994.
- Between 1989 and 1994 when a national bottle bill was under consideration PACs gave an average of \$16,999 apiece to senators on the committee who voted against the bill: more than 40 times the average contribution they made to committee members who voted against the bill (\$416). The bill failed by a vote of 10-6.

Despite continued efforts by these lobby groups no state bottle bill has ever been repealed⁴⁷ Not all of the industry will fight container deposit refunds though. Andrew Swanander, Owner, Mountaintown Spring Water in support of New York’s expanded bottle bill said:

“I am embarrassed and appalled to see my bottled water products discarded on the side of the road. I feel a personal sense of responsibility about it. I hardly ever see discarded soda products as litter. The so-called ‘Bigger better Bottle Bill’ needs to be passed.”

When asked if packaging producers engaged in any tactics to try and stop implementation of CDL Vaughan Levitzke Chief Executive of Zero Waste South Australia replied simply, ***“Yes! Both on introduction and expansion”***.

The California Story

Mary Lou DeVenter, a nationally respected and renowned recycler in the USA recounted for this report the story of how bottlers and grocers conspired to stop the introduction of a bottle Bill in California.

“In California, beverage companies, bottlers, and grocers together completely stopped what we called “a real bottle bill” for at least seven years, maybe more, before recyclers caved in and accepted the complex system we now have.

The political process was that recyclers tried to get a real bottle bill passed, but bottlers and grocers stopped it in legislative committees. Recyclers tried again and again for years. No luck. Finally recyclers accepted "political realities" and caved in. They negotiated, and they got the best they thought they would ever get. I remember the night Californians Against Waste made its sales pitch to the Northern California Recycling Association. The explicit message was: ‘accept this system, because our experience shows no container recycling legislation will ever pass the way we want it’. The final legislation put a tiny deposit (I think its \$0.05 per container) on beverage containers. The deposit is collected at purchase in

⁴⁵ Container Deposit Legislation. The “Lazy” policy Option or the Policy Option for the 1970s. Submission for the Review of Container Legislation in NSW Packaging Council of Australia. November 2000.

⁴⁶ The 10 Cent Incentive to Recycle. The Container Recycling Institute. 2004. www.bottlebill.org

⁴⁷ The 10 Cent Incentive to Recycle. The Container Recycling Institute. 2004. www.bottlebill.org

the grocery. All deposits are forwarded to a State agency and are administered by a sub-department inside the Department of Conservation. Payments out are made to bottlers and Certified Recycling Centers (getting certified is a big deal), and there must be a Certified Recycling Center within a mile of every major grocery store ("major" is defined by sales). Some big grocers simply install a small portable building in the parking lot owned and operated a few hours a week by a separate company (big corporation) formed for the purpose. Other grocers have machines called "reverse vending machines" outside their buildings. Put in cans and bottles, get coins out. These machines may be unprofitable or have a high vandalism rate - I don't see them so much anymore. John Consumer gets a return of \$0.05 for 2 containers (may be old number). Even children don't think it's worthwhile to bend over to pick up a can.

The system has created a very large bureaucracy in lieu of grocers taking back bottles or cans. All bottle-washing equipment left the state entirely, so we have no more bottle reuse period. Meanwhile the law generates good revenues for bottlers; lots of paperwork, compliance issues, and revenue for recyclers; and negligible financial incentive for the public to recycle.

From the Global Zeri Network

Gunter Pauli, Professor of Industrial EcoDesign, Science University of Torino (Italy) and Founder of the Global ZERI Network works with industry and governments to establish Zero Emissions and Zero Waste initiatives and pilot projects. He provided the following comment for this report:

"Tetra Pak has cracked the technology to laminate paper, plastics and aluminum under vacuum, but never cracked how to separate the 3 into raw materials again. It has refused to consider taking responsibility for the waste that is ultimately generated by the packaging of juice, milk and lately also wine with the argument that they "sold" the product off to the customer."

Comment from South Africa

Muna Lakhani, a Cleaner Production and Zero Waste advocate from South Africa, wrote the following for this report.

Here in South Africa, various industries supported the setting up of Keep (city name) Beautiful programmes under the National "Keep South Africa Beautiful" banner. As these failed, as they were bound to do (they focused only on litter!) they each (glass - Glass Rec. Association; both paper companies, plastics federation and the canning industry - Collect-a-can and the Aluminum Can Recycling Association) set up recycling not-for-profit companies. The aluminum can had a separate company, as they were using the higher value of the aluminum as a means of promoting more aluminum use. All of these were in response to activists (and others) calls for a deposit system, which we still don't have!

13. CONCLUSIONS

On the basis of the past five years performance the first Packaging Accord is an abject failure.

The Version II Packaging Accord, initially called the 'Packaged Goods Accord' (an attempt to focus our minds on the contents rather than on the packaging itself) has many improved features and much of the right language. But the reality is that voluntary agreements for packaging reduction simply don't work and neither will the new Accord in its present form.

No discredit can be attached to those who have done their best to make this new Accord work. But it would be a pity to resign New Zealand to a failed system just because of a general feeling that Government will "never legislate- so we have to make do with what's on the table". The same "second best" approach in California resulted in a complicated and ineffective system as outlined in the story by Mary Lou Deventer in section 12.8.

But why give up? New Zealand is a democracy and if the will of the people is strong we can have what we want. All around the world people are standing up to the propaganda of the packaging and beverage container industries and are voting for effective use of the principle of Extended Producer Responsibility. People have shown their willingness to do the right thing – time and time again – if they are provided with the means to do it.

We don't need another 5 years of mass balance studies, education on the benefits of plastics to schoolchildren, or lobbying in Wellington and everywhere else. It's time for action!



14. APPENDICES

APPENDIX 1: ESSENTIAL ELEMENTS OF A BEVERAGE CONTAINER RECOVERY SYSTEM (The Grass Roots Recycling Network⁴⁸)

A new report on beverage container recycling suggests that we can more than double recovery of beverage containers - and save money at the same time. These are the unexpected findings of *Understanding Beverage Container Recycling: A Value Chain Assessment*, a study carried out under the watchful eyes of both beverage industry and environmental representatives.

This ground-breaking study is the first accomplishment of the Multi-Stakeholder Recovery Project (MSRP), a project of Businesses and Environmentalists Allied for Recycling (BEAR). BEAR works under Global Green USA to pursue a 'fact-based approach to public policy making' in order to break through the traditional impasse between supporters and opponents of so-called 'bottle bills.'

Based on the report, a group of NGO and government participants developed the following list of essential elements of a modified deposits system. For detailed presentations of systems that embody some of these elements, follow links to descriptions of deposit systems in Alberta and British Columbia, Canada, and California, USA.

80% recovery goal. The program should establish a mandatory goal of 80% material recovery, consistent with BEAR core principles (the report shows that while most bottle bill states recover at a level close to or greater than 80%, the overall average U.S. recovery rate for all containers is 41%):

- The recovery goal should cover all types of beverages (all carbonated and non-carbonated beverages such as soft drinks, beer, wine, liquor, juices, waters, and milk) and all types of beverage containers (all metal, glass, plastic, aseptic and composite containers), as well as associated packaging.
- The recovery goal should be based upon container units sold, excluding exported new containers and imported scrap containers.
- The recovery goal should focus on material recovery (reuse and recycling) and should not include burning (waste-to-energy, pyrolysis, etc.) or other treatments to produce fuel.
- The recovery goal should be achieved on an aggregate basis over a 2-year period from program implementation, but should ultimately apply as a minimum for each material type.
- The recovery goal should increase over time to ensure that the recovery rate continually improves.

Consumer redemption incentive. The program should establish a redemption incentive (deposit refund or other financial mechanism) paid to consumers when the container is recycled to encourage recycling.

Beverage container returns. Returns of beverage containers should be allowed through a variety of options, ensuring consumer convenience while minimizing costs.

⁴⁸ Grass Roots Recycling Network. www.grrn.org/beverage/deposits/essential_elements.html

- **Internalization of costs.** The cost of beverage container recovery should be internalized, with producers and consumers paying the full cost of recovering their containers, and no part of the cost being borne by the public.
- **Refillables incentive.** A redemption system should include incentives for the use of refillable bottles, such as economic incentives and market share set-asides. A return to the refillable packaging systems developed by the beverage industry in the early 20th Century and later dismantled in response to subsidies that made mass-production and long-distance distribution more economical will create opportunities for local business and reduce environmental costs that are now being borne by the public.
- **Closed-loop recycling.** A deposit system should encourage bottle-into-bottle recycling in order to reduce environmentally damaging emissions from virgin material extraction and production and minimize market disruptions during periods of rapid increase in container recovery.
- **Centralized fund.** Since the program would involve all beverage brands, it may be more cost-efficient to be managed through a centralized fund similar to the industry-managed fund in British Columbia or the state-managed fund in California, so brand sorting is not necessary.
- **Responsibility for compliance.** As the party in the value chain with control over packaging design and product marketing, the brand-owner should be ultimately responsible for meeting the 80% recovery goal and ensuring that the members of the supply chain and consumers share responsibility for the cost of recycling. Government would impose corrective measures should the system fail to perform.
- **System design flexibility.** The overall program design would depend upon whether it was managed by government or beverage producers (see key issues discussion below); however, producers should be given flexibility to design the system in a manner which minimizes costs. Producers may choose to operate their own programs or to contract with other private or public entities on their behalf, so long as the full costs of recovering the resources and managing products at the end of life are internalized into the costs of producing and selling products and are not borne by taxpayers.
- **Market development.** Producers should be encouraged to actively participate in development of value-added markets for recovered containers.

BENEFITS OF A MODIFIED REDEMPTION SYSTEM

The report findings clearly demonstrate the benefits of a modified redemption system:

- **Provides universal coverage.** A deposit program is universally available to all consumers. Based on the data in Table 2-6 of the report, curbside and drop-off programs are only available to 59% and 63% of the U.S. public respectively. Considering the 80% recycling goal, it would appear that any strategy focusing on kerbside or drop-off program programs would require a massive investment to provide equivalent recycling opportunities to the public.
- **Utilizes the local recycling infrastructure.** By utilizing local recyclers as well as retailers, a modified redemption system supports the recycling infrastructure in the local community.
- **Promotes low program costs.** According to Table ES-2 of the report, a modified redemption system similar to California has costs significantly lower than a traditional deposit program or a kerbside recycling program, due to efficient use of the local recycling infrastructure. Program costs may be substantially reduced or even eliminated by the use of scrap revenues and unredeemed deposits to finance the system.

- **Internalizes fiscal responsibility.** Unlike kerbside and drop-off recycling programs, the costs of a modified redemption system are entirely internalized through fees paid by producers. Costs are distributed equitably among producers based upon the actual net costs of recycling (gross costs less scrap values).
- **Demonstrates proven experience.** The first North American deposit program was established in British Columbia in 1970; the most recent in the United States was established in California in 1986. Deposit programs have 15-30 years of experience and have proven themselves to be reliable and well supported by the public.

KEY ISSUES TO RESOLVE IN MSRP PHASE II

As the MSRP moves into Phase II, including refining the adopted recovery programs, preparing a detailed implementation plan and securing needed support and other commitments, a variety of issues will need to be resolved.

Producer responsibility As the party in the value chain with the greatest control over package design and product marketing, the brand-owner (party whose brand appears on the beverage container) should be ultimately responsible for meeting the 80% recovery goal.

Program management A key element that must be addressed is whether the program would be managed by government or industry. The California [link to California model page] deposit program is government-managed; however, other countries and jurisdictions have implemented industry-managed systems for recycling. An industry-managed system can be designed to provide producers with the responsibility for meeting the 80% recovery goal, but provide them with the flexibility to design and implement the system. The most relevant examples are the deposit system in Alberta and British Columbia, Canada, which is managed by an industry-funded, non-governmental organization.

If an industry-managed approach is developed, it should be established through legislation which would establish the goal of 80% recovery across all beverage types and all container types, in order to level the playing field for all beverage producers. The legislation should also establish certain design requirements for the beverage container recovery system to achieve the objectives in the BEAR pledge and MSRP principles. Brand-owners would be responsible for reporting on progress towards meeting the material recovery goal. Government would review and approve beverage container recovery business plans, through monitoring reports of system performance and progress toward interim benchmarks and the 80% goal.

Incentives for refillables. The report did not analyse the value chain of a well-developed refillable bottle system. Refillables are an important zero waste strategy because they are far more energy and resource efficient than traditional one-way containers and they stimulate local economic growth and enable local manufacturers to more effectively compete for beverage market share.

Deposit level (2½ - 10 cents). Clearly, a higher deposit provides a greater incentive to recycle and leads to higher recycling rates. Amongst the ten deposit programs, the recycling rates were reached in 1999:

- 2½ cents (CA) = 73%
- 5 cents (CT, IO, ME, MA, NY, OR, VT) = 72%-80%
- 10 cents (MI) = 95%

Based on the existing states, it appears that a 5 cent deposit should be the minimum level to ensure achievement of an 80% recovery rate.

Developing opportunities to recycle. A modified redemption system takes advantage of substantially reduced costs through the use of recycling centres in the private sector. Many areas of the country currently do not have an extensive recycling infrastructure and would require additional efforts to develop opportunities for the public to recycle the development of private sector beverage container recycling centres will create economic opportunities in local communities.

Type of recycling cost reimbursement. A critical element of a modified redemption system is providing a financial incentive to recycling centres. While handling fees in traditional deposit programs (typically 1-3 cents/container) are simple to calculate, they typically do not reflect the true cost of recycling between material types. As a result, aluminium containers typically subsidize the higher costs of recycling glass and plastic containers. A variable fee system could be based upon the net cost of recycling for each material type. Such a fee structure would internalize the costs of recycling each container type and would reflect the actual changes in recycling costs and scrap values, encouraging a reduction in recycling program costs and an increase in the use of high-value end-use markets.

Use of unredeemed deposits. Depending upon the recycling rate, deposit programs can generate tremendous revenue from unredeemed deposits. Amongst the ten programs, two programs have an escheat provision whereby deposits revert to the state. The remaining traditional deposit programs allow unredeemed deposits to remain within the recovery system to help cover the costs of managing the program. The California program is managed by the state which holds all unredeemed deposits and uses those funds to support a variety of recycling programs and program administration. Likewise, the British Columbia, program allows producers to use beverage container funds to manage the beverage container system, and does not require the beverage industry to subsidize other environmental programs.

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