

THE INCENTIVE TO RECYCLE

The Case for a Container Deposit
System for New Zealand

Summary Report
September 2015

INTRODUCTION

In 2007 Envision NZ developed a model for a container deposit system (CDS) suitable to the New Zealand context. Eight years on, this new report revisits and updates that model based on national and international developments. This summary outlines some of the key findings and issues raised in the report.

Background

After 20 years of voluntary measures, New Zealand's beverage container recycling rates remain persistently low (estimated at less than 40%), compared to states with CDSs that routinely achieve rates of between 85 and 95%.

At least 45,865 tonnes (over 830,000 cubic metres by loose volume) of beverage containers are discarded into the litter stream, waterways and landfills each year. That is equivalent to at least 700 Boeing 747 airplanes filled with containers every year!

Under a CDS, these containers would be recovered from the waste stream and recycled, creating potentially hundreds of new businesses, up to 2,400 new jobs and large cost savings for ratepayers of local authorities.

Proposed CDS Model for New Zealand

The report recommends introducing a mandatory Container Deposit System for New Zealand and, with input from 12 international experts from North America, Europe and Australia, proposes a suitable model for doing this.

Advantages of CDS

CDSs outperform voluntary schemes such as public place recycling bins because they:

- Provide a strong financial incentive for consumers to return containers for

recycling with estimates suggesting this would double the recycling rates of New Zealand's voluntary schemes

- Capture beverage containers consumed away from home which kerbside recycling or public space recycling bins struggle to do effectively
- Transfer the cost of recycling beverage containers from local authorities to producers and consumers
- Provide additional social benefits of increased employment, reduced litter and reduction of plastic in the marine environment.

Key Steps for establishing the CDS model in New Zealand

- Government declares beverage containers a priority product requiring a mandatory product stewardship scheme to be put in place and sets a target rate of 85%
- A minimum refundable 10 cent deposit applies to all beverage containers
- A Managing Agency is set up by the beverage industry and other stakeholders to coordinate and manage the flow of materials and funds through the system
- Private and social entrepreneurs set up a collection system of 200 or more convenient drop-off points where the public can receive refunds for their containers.

CONTAINER DEPOSIT SYSTEMS – HOW THEY WORK



Benefits

- At least 79% of all beverage containers recovered (with a target of 85%)
- At least 45,865 additional tonnes of containers diverted from landfill (an increase of 43%)
- At least 700 million additional containers recycled (an increase of 74%)
- Potential savings to NZ ratepayers of between \$26 million and \$40 million per annum from refuse collection savings (based on bag rates of between \$2 and \$3 per bag)
- Reduced litter and litter control costs
- Reduced costs to councils and ratepayers through higher kerbside recycling revenues and better prices due to the high quality of collected materials
- Increased business opportunities for recyclers as a result of the increased volumes of clean recycled materials
- Up to 2,400 new, entry-level to medium and high skilled jobs spread throughout the country
- New business opportunities for entrepreneurs to set up the more than 200 collection depots
- New income streams for social service groups who can collect containers for refunds and also to set up social enterprises to operate collection depots
- Income for people on marginal incomes

Costs

The majority of costs incurred would be covered by revenue from unredeemed deposits, interest on deposits held by the Managing Agency and income from the sale of materials.

The net cost (or system cost) to operate the CDS would be an estimated \$10 million annually. This equates to half a cent (0.5 cents) per container. This cost would be absorbed by beverage producers or passed on to consumers in beverage prices.

Collection points would receive a handling fee of around 3 cents per container from the Managing Agency to collect and sort containers.

The cost to establish collection point infrastructure would largely be borne by businesses seeking to maximise the commercial opportunities offered by the CDS. Funds from the landfill levy and system surpluses could also be used to help establish infrastructure.

Why Voluntary Product Stewardship schemes underperform

The report explains key reasons why voluntary measures for beverage container recycling tend to falter when recovery rates reach around 30 to 40%. These include:

- The limits of goodwill
- Freeloading leading to ineffective participation
- Transfer of costs to local government and ratepayers

Efforts by Industry to maintain the status quo

The report describes an 'eco-system' of initiatives, programmes, research, lobbying and PR by the beverage and packaging industries designed to influence Government policy to ensure that product stewardship measures for packaging remain voluntary.

Public Funding for Industry – for very low returns

The report also outlines how Packaging and Beverage Industry groups have been able to obtain significant amounts of public funding which has helped them to exert influence throughout the waste and recycling industry and among councils and not-for-profits in their efforts to maintain the status quo.

For example, in 2008 Government allocated \$4.6 million to install and service 600 public-place recycling bins throughout New Zealand. This amounted to a cost of \$7,666 per bin.

Additionally, between 2010 and 2012, the New Zealand Government allocated grants for beverage container recycling, mainly to industry groups totalling \$2,444,000. The public of New Zealand have received very low returns for such investments when compared to the potential impact of perhaps a smaller one-off investment to establish a national CDS, which would thereafter be self-funding.

Poor results and low accountability

In spite of large amounts of public funding, extensive promotion and a significant budget provided by its members, only 7,403 tonnes of the 165,178 tonnes of glass recycled between 2011 and 2012 was due to projects or funding from the Glass Packaging Forum's scheme¹.

Although industry groups have received large amounts of public funding, there is little evidence of independent verification of industry-generated statistics for which there seems to be widespread scepticism.

A request for more accurate verification of information for this report resulted in vague information citing 'commercial sensitivity' as the reason for its non-availability.

Additionally requests for verifiable statistics on the Public Space Recycling Scheme were sent to the manager of the scheme on 25th August and again on the 2nd September. At the time of writing no answers have been provided.

¹ Source: Ministry for the Environment website (2015)

In all jurisdictions with CDS, accurate information is required of beverage producers, which enables precise data on recycling rates to be collected. These companies still compete in the market with no issues.

Local Government bears the costs of voluntary schemes

In spite of the funding given to industry groups to develop voluntary schemes, it is local government ratepayers that currently pay the costs of cleaning up, recycling or landfilling products that industry puts into the market but without providing the appropriate financial resources to recover them. This is not how effective product stewardship schemes work.

Calls for change

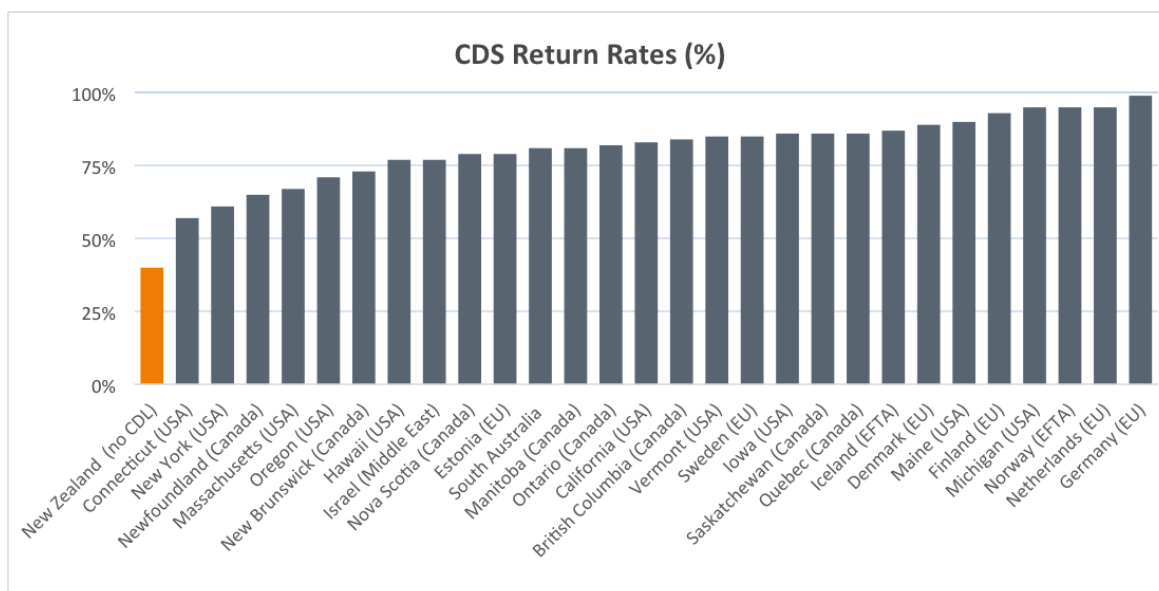
Territorial authorities, recyclers, environmental groups and charities have been calling for government to lead on this issue right from when the first voluntary Packaging Accord was signed in 1994.

Impacts on Marine Environment

Since the 2007 report, plastic bottles have come under increasing scrutiny because of their ability to float through stormwater systems into waterways and because they break down into micro particles which are ingested by small fish that mistake them for plankton and where fish and birds can mistake plastic bottle tops for food.

The impact of plastic bottles on the environment is a challenging issue for the beverage industry as the alarming long-term impacts of their products on marine life including sea birds grow.

Because of the financial incentive to recycle that results in much higher return rates than voluntary schemes, a CDS is by far the most effective means of dramatically reducing the quantities of beverage container waste entering the marine environment.



New Zealand (assuming 40% recovery) recycling rates compared to countries with CDS
Source: Deposit Systems for One-Way Beverage Containers – Global Overview, Tomra Systems

CONCLUSION

The report concludes that after 20 years of poor outcomes New Zealand should stop supporting voluntary measures for the recovery and recycling of beverage containers and introduce a mandatory container deposit system instead.

It challenges stakeholders to come together to create a world class recycling system for beverage containers in order to reap the high recycling rates and multiple other benefits that countries and states with CDS achieve. Additionally it proposes a plan of action to achieve this.

Recommendations

The key recommendations of the report are that:

1. Government declare beverage containers a priority product under the Waste Minimisation Act 2008 with a national recovery target of 85%.

The legal structure is in place whereby the Minister for the Environment could make the declaration under Part 2 of the Waste Minimisation Act 1998.

To achieve the 85% target, Government would require the establishment of a national Container Deposit Scheme (CDS) requiring producers to put a minimum refundable deposit on beverage containers to help ensure they are recycled at rates consistent with other OECD countries.

2. Concerned stakeholders interested in better beverage recycling and improved social and environmental outcomes work together to design a cost effective CDS for New Zealand with a view to implementation by 2017.