

Container Deposit Legislation and kerbside recycling

CDL: the opportunity to save kerbside

The beverage industry and other CDL opponents frequently argue that CDL schemes undermine the viability of kerbside recycling services by removing valuable resources from the kerbside waste stream.

But, in the words of NSW Local Government Association past president Cr Peter Woods OAM, “How can you jeopardise the viability of something which is already not viable?”¹

Kerbside collection is not financially viable without heavy subsidies from ratepayers, who must contribute to the huge \$294.5 million nationwide annual cost to run kerbside recycling services. There is a large and widening gap between kerbside cost and the revenue received by local governments from the sale of recyclables – this represents approximately \$36 million per year² of ratepayer cost in Sydney alone.

According to the NSW Local Government and Shires Association, councils were initially persuaded to establish kerbside recycling services because they involved little cost, due to beverage and packaging industry subsidies on the payback price for recyclable materials. However, once kerbside services were established, industry quickly withdrew financial support, leaving ratepayers with the cost burden of recycling their products. Today, industry contributes just \$3 million a year Australia-wide for both kerbside and public place recycling, which represents less than 1% of the total cost.

Rather than competing against kerbside services, CDL provides councils with potential income from refunds when householders elect to use the kerbside collection system for deposit-bearing materials. Councils in South Australia, where CDL has been in place since 1975, have reported income of up to \$90,000 per year from this source³. Vaughan Levitzske, Chief Executive of Zero Waste South Australia, agrees: “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.”

A deposit/refund system can also improve the economic viability of kerbside by reducing volumes and the number of collection services and sorting operations which need to be provided, reducing landfill and associated levy costs by increasing return rates, and therefore reducing the residual waste stream⁴.

CDL also offsets significant environmental costs, representing sizeable funds that could be diverted to kerbside recycling. Factors such as the cost of litter collection, injuries from littered glass and the extra energy and water consumption associated with using virgin rather than recycled materials in container manufacturing are often ignored in industry estimates of the cost to implement CDL. However, Dr Stuart White from Australia’s Institute of Sustainable Futures estimates that implementation of a deposit and refund scheme could save NSW alone between \$70 and \$100 million in environmental costs⁵.

¹ Extract from speech *CDL: the NSW Experience* delivered at ‘Waste Conference 2002: Funding the Future’ by Cr Peter Woods OAM, President, Local Government Association of NSW. Available online at <http://www.sustainablesocialsolutions.com/Monthly%20Reports/Waste2002b.pdf>. Link checked February 2005.

² Institute for Sustainable Futures (2004). *Beyond Recycling: An Integrated Waste Management Framework for Local Government. Part B: Recycling in Context – the current situation*. Available online at <http://www.lgsa.org.au/docs/policy/environment/PartB.pdf>. Link checked February 2005.

³ Hudson, P., in association with Cole Solicitors (March 2000). *Container Deposit Legislation: Economic and environmental impacts*. Report prepared for the South Australian Environment Protection Authority. Available online at http://www.environment.sa.gov.au/epa/pdfs/cdl_report.pdf. Link checked February 2005.

⁴ ISF (2004): As above.

⁵ Dr Stuart White, interview on ‘Earthbeat’ with Alexandra de Blas, broadcast Monday 25/3/02, transcript available at <http://www.abc.net.au/rn/science/earth/stories/s512555.htm>. Link checked February 2005.

Impact of the away-from-home sector

CDL complements kerbside recycling perfectly by focusing on containers consumed away-from-home which kerbside systems are very poor at recovering.

The proportion of glass bottles, PET plastic bottles and aluminium cans being consumed 'away from home' and entering the non-residential waste stream has been estimated by industry to be 55%, 39% and 54% respectively⁶. These figures relate to non-alcoholic beverage containers and result in an average away-from-home consumption rate of 48%⁷.

This highlights that even if kerbside recycling is 100% effective, a significant proportion of packaging materials can only ever achieve a 50% recovery rate due to public place and commercial consumption (cafés, materials, pubs and clubs).

In comparison, South Australia's average 82% beverage container recovery rate⁸ and noticeable lack of litter in highways, parks and beaches shows that CDL is highly effective in addressing away-from-home consumption. The deposit refund incentive means that littered containers are likely to be picked up by other interested parties such as community groups for fundraising. It also saves local government millions in litter collection costs – for example, \$50 million is spent on litter collection every year in Victoria alone⁹.

While public place recycling can go some way towards addressing away-from-home consumption, there has been mixed success of programs and trials. Confusion about how and what to recycle in the community has occurred because of differences between what can be recycled at home and in public, and differences between the collection systems in neighbouring councils. This often results in low amounts of recyclable materials collected, or high levels of contamination in recycling bins¹⁰.

CDL and kerbside around the world

There are many examples of states and countries around the globe in which CDL schemes and kerbside recycling services run effectively side-by-side.

UNITED STATES

California¹¹

In California, a network of 1,100 grocery store recycling centres covers the deposit redemption obligations of all retailers in the state. This substantially reduces the amount of handling fees, enabling the system to be entirely self-sustaining. A 1991 study of California's Bottle Bill by accounting firm Ernst & Young concluded that the system "is significantly more cost-effective than traditional deposit legislation, saving California consumers and business between \$245 and \$390 million annually".

⁶ BIEC (1997). *Away from Home Recycling*. Prepared by BGI Waste Consultants for Beverage Industry Environment Council, Sydney. Executive Summary available online at <http://www.biec.com.au/esum06.html>. Link checked February 2005.

⁷ As above.

⁸ SA Department of Environment and Heritage. *Beverage Container Return Rates SA*. Available online at: <http://www.environment.sa.gov.au/reporting/human/waste/recycled.html#beverage>. Link checked February 2005.

⁹ EcoRecycle website: <http://www.ecorecycle.vic.gov.au/www/default.asp?casid=2805>. Link checked February 2005.

¹⁰ NSW Department of Environment and Conservation (2003). *Better Practice Guide for Public Place Recycling*. Available online at <http://www.resource.nsw.gov.au/data/PPR%20guidelines.pdf>. Link checked February 2005.

¹¹ Source: <http://www.crra.com/legislation/botbil/BOTBILL.html>. Link checked February 2005.

The Bottle Bill doubled California's beverage container recycling rate from around 37% prior to its inception in 1987 to 80% in 1997.

Kerbside programs are one of the biggest beneficiaries of California's Bottle Bill program. They receive up to \$23 million each year in retained redemption values, and \$9 million in processing fees, administrative fees and grants. None of this \$32 million for kerbside would have been available without the Bottle Bill.

Massachusetts¹²

In 1995, 69% of Massachusetts' residents were served by 143 kerbside recycling programs, and of the 456,259 tonnes of residential waste diverted during this year, 71,199 tonnes (16%) were diverted through the state's Bottle Bill. The proportion of redeemed containers averages approximately 80%.

Massachusetts' kerbside recycling programs receive a boost from unclaimed deposits. The state's administering agency for unclaimed deposits reports that between 1990 and 1996, a total of \$62.5 million from abandoned deposits was used to fund environmental programs including municipal recycling.

Maine¹³

The Maine Municipal Association, an association of municipal governments, actively opposed repeal of Maine's deposit laws in 1996, arguing that approximately 48,000 tonnes of materials currently being recovered through the Bottle Bill would enter the waste stream and increase kerbside recycling and disposal costs.

Oregon¹⁴

Savings of \$656,832 in trash pick-up, hauling and landfilling were reported in the first year after enactment of Oregon's Bottle Bill. The deposit system provides a steady supply of clean, sorted recyclables that boost recycling markets. Oregon's bottle bill has also positively affected the recycling of other materials through increased public awareness and education.

A 1989 Glass Packaging Institute (GPI) press release prompted a letter from Fred Hansen, then the Director of Oregon's Department of Environmental Quality, stating: "The Department believes that curbside [sic] recycling and deposit legislation are fully compatible, and that the two together complement the many other recycling opportunities in Oregon."

¹² Source: http://www.bottlebill.org/impacts/solid_waste.htm#mass. Link checked February 2005.

¹³ Source: http://www.bottlebill.org/impacts/solid_waste.htm#maine. Link checked February 2005.

¹⁴ Source: http://www.bottlebill.org/impacts/solid_waste.htm#or. Link checked February 2005.

CANADA

Nova Scotia¹⁵

Under Nova Scotia's half-back system, deposits are paid on all containers and while deposits are refunded in full for refillable containers, only half is refunded for non-refillable containers. 50% of net revenues from the scheme are paid from the coordinating body – the Resource Recovery Fund Board (RRFB) – to municipalities for their recycling efforts, including kerbside collections. The entire province has access to kerbside recycling and the programs frequently pick up deposit bearing containers, thereby receiving an extra funding source. Kerbside has grown since the deposit system was set up, partly because of RRFB funding, and partly because some people leave deposit containers in kerbside pickups as a 'donation' to kerbside programs.

Quebec¹⁶

Unlike most areas in Canada, Quebec retailers (both large supermarkets and corner grocery/convenience stores) are satisfied with handling refunds on beer and soft drink containers. They see it as a convenience service to their customers and a way of generating return traffic to their locations.

Juice, water, iced tea and 'new age' beverages do not bear a deposit. However, producers of these beverages and other industries are required to contribute significantly towards the cost of picking up their packaging via kerbside recycling. Industry pays approximately \$22 million of the \$30 million cost of kerbside recycling. The \$8 million municipal share of costs recognises that municipalities would have to pay to landfill materials if there was no kerbside recycling.

Where beverages are concerned, this means that the 20% of beverage containers not previously covered by full producer responsibility (i.e. beer and soft drinks) are now covered by a system where producers pay 75% of the costs of kerbside recycling.

EUROPE

Austria¹⁷

In Austria, container deposits operate alongside kerbside services that are funded by license fees paid by companies for the right to use a "green dot" on their packaging, showing that they dispose of packaging in compliance with the Austrian Packaging Ordinance. The revenues are passed on by ARA to the collection and/or recycling companies and further to operative partners, disposal companies, and communal waste cooperatives. This model ensures Extended Producer Responsibility is incorporated throughout the waste management system.

¹⁵ Source: http://www.bottlebill.org/geography/canada_nova.htm. Link checked February 2005.

¹⁶ Source: http://www.bottlebill.org/geography/canada_que.htm. Link checked February 2005.

¹⁷ Sources: http://www.raymond.com/promo_raymond-international/austria02.pdf; http://www.petcore.org/euro_naleg_01.html; <http://www.pro-e.org>. Links checked February 2005.

Denmark¹⁸

Since 1981, beers and soft drinks may only be marketed in Denmark in refillable packaging approved by the Danish Environmental Protection Agency (DEPA). Imported drinks may be sold provided a system of return and deposit has been set up for their packaging. Since Denmark's bottle return system began in 1904, Danish brewers have employed 30 types of refillable glass or PET bottles, ensuring that beverage containers are reused.

Kerbside recycling services in Denmark offer separate collection of paper, glass and hazardous waste. However, Danish people have clearly embraced the concept of take-back schemes and the majority of household recycling involves individuals taking their waste to bottle and paper banks or 'bring sites' for other materials rather than doorstop collection. Together, the two systems ensure that 60-70% of Denmark's waste is recycled.

AUSTRALIA

The South Australian Government introduced CDL in 1975, and remains the only Australian state or territory with this type of legislation.

All beverage containers subject to CDL in South Australia display approved markings that show where the refund is available:

- '10c refund at points of sale when sold in SA' means that the container must be returned to a retailer who sells the beverage in that container; and
- '5c at collection depots when sold in SA' means that the container must be returned to a collection depot. Collection depots are the most common points of return¹⁹.

A 2001 study by the Institute for Sustainable Futures found that unit costs (¢/container, or \$/tonne) of the South Australian deposit/refund system were lower than kerbside systems alone and could help to reduce the net costs of kerbside collection²⁰. CDL frees up much needed funds to deal with other waste materials²¹.

South Australian Councils also receive income from refunds when householders elect to use the kerbside collection system for deposit-bearing materials – Councils have reported income of up to \$90,000 per year from this source²².

The dual system of CDL and kerbside recycling provides South Australian householders with the opportunity to separate recyclables from their domestic waste, resulting in the diversion of a greater share of material from the waste stream than either system alone is able to achieve²³.

¹⁸ Sources: <http://www.publications.parliament.uk/pa/cm200203/cmselect/cmenvfru/385/38513.htm>;
http://www.green-alliance.org.uk/CPWDenmark_pdf_media_public.aspx. Links checked February 2005.

¹⁹ Zero Waste South Australia. *Container Deposit Legislation (CDL) fact sheet*. Available online at http://www.zerowaste.sa.gov.au/pdf/ZWSA_406015_CONTAINER.pdf. Link checked Feb 2005.

²⁰ Institute for Sustainable Futures (2001). *Independent Review of Container Deposit Legislation in NSW*. Prepared for the Hon Bob Debus, NSW Minister for the Environment. Available online at http://www.isf.uts.edu.au/CDL_Report. Link checked Feb 2005.

²¹ Hopper, P. (1992). *Container Deposit Legislation for New South Wales - Bringing Back Returnables*. Prepared by Waste Minimisation Campaign, Friends of the Earth (Sydney). Available online at <http://www.hotkey.net.au/~gargoyle/CDL/Reports/BringingBackReturnables/index.html>. Link checked Feb 2005.

²² Hudson, P., in association with Cole Solicitors (March 2000). *Container Deposit Legislation: Economic and environmental impacts*. Report prepared for the South Australian Environment Protection Authority. Available online at http://www.environment.sa.gov.au/epa/pdfs/cdl_report.pdf. Link checked Feb 2005.

²³ Hopper, P. (1992). *Container Deposit Legislation for New South Wales - Bringing Back Returnables*. Prepared by Waste Minimisation Campaign, Friends of the Earth (Sydney). Available online at <http://www.hotkey.net.au/~gargoyle/CDL/Reports/BringingBackReturnables/index.html>. Link checked Feb 2005.