

ACHIEVING THE BEST CONTAINER DEPOSIT SYSTEM IN THE WORLD

The Premier and Minister for Environment announced on 21 February 2015 at Coogee Beach that the government's container deposit system (CDS) would be a 'world's best system'.

We have proposed the following key elements after investigating existing CDS in over 40 countries and states:

- Maximum impact on the volume of drink container and overall litter
- Convenient for consumers
- Cost effective with minimal or zero net costs per container
- A focus on automation via reverse vending machine (RVM) and optical reading technology
- A sustainable business model not dependent on government funding
- Eliminate problematic materials from kerbside recycling and reduce the overall costs of kerbside
- Can work in harmony with other established recycling systems and preferably provide a net financial boost
- Increase recycling in the commercial and industrial waste stream
- Improve the quality of beverage container material recovered and reduce contamination of other MSW recycle to grow the recycling sector
- Offers major opportunities for the charity sector to raise funds
- Transparent information regarding performance and independent, non-profit governance to ensure community confidence and equity between stakeholders
- Clear targets by material type and strong penalties to ensure beverage industry performance

THE MAIN FEATURES AND BENEFITS ARE:

- **A 10cent refundable deposit** as the proven incentive which after a ramp up period leads to about 80% recovery. The amount also harmonises with South Australia and the Northern Territory. However unlike their less efficient systems, return of the cash is via a voucher redeemable at a linked retail outlet or EFT (thus improving fraud detection, eliminating cash flow impacts at redemption centres and avoiding security issues).
- Consumers can obtain their refund from a reverse vending machine (EFT or voucher presented to a linked retailer); physically donate the container or the deposit via a RVM - to a charity; or give the deposit to their council via kerbside. In regional and rural areas it may be more economic to use drop-off centres.
Charities could earn up to \$65m a year.
- **It is proposed the scheme scope** cover all containers above 100ml and below 3L **except:**
 - pure fruit juice and wine/spirits greater than 1L
 - any plain milk and milk substitutes (condensed, evaporated, soy milk etc)
 - Cordials, syrups and concentrated fruit juices

This container scope attacks more of the most littered products by volume - beer, water, soft drinks. Additionally the scope (with an 83% container recovery rate) ensures a 40% reduction in the volume of all litter, including less caps, straws, broken pieces, etc from containers no longer littered - **thus achieving the Premier's goal of a 40% reduction in the volume of litter by 2020.**

Disruption to industry is minimised because it is very similar to the SA and NT schemes - meaning minor changes to labelling and distribution arrangements.

25% of the total kerbside bin would be covered by the proposed scope and we calculate that the **net financial gain** to kerbside taking account of lost material sales and remnant left in kerbside that attracts a deposit - would be about \$18.5mpa. Other non-beverage containers also remain.

Around 80% of container glass (much of it lightweight) is removed from kerbside recycling - significantly reducing contamination of cardboard materials from glass fines, allowing increased compaction rates in collection trucks and removing the least economic (and most heaviest) material from kerbside.



- In order to deliver **the most convenience for households** the collection points are best located where they make regular trips so they can avoid extra transport costs. In metro areas this will be near supermarkets or other frequently visited retail outlets or transport nodes. The most efficient technology is reverse vending machines which automate redemption, separate and crush the materials ready for transport. They read barcodes, material type and shape which automates data collection for financial flow management and reporting. Modern RVMs can process a container in 1 or 2 seconds. RVMs would have a limit on throughput per person to avoid long queues.

It is likely that areas with expected major container returns will invest in reverse vending machines; while rural and remote areas may choose to adopt a manual system connected to a local shop, petrol station, charity or transport carrier.

There will also be bulk deliveries of containers to Hubs, emanating from RVMs, kerbside, litter clean-ups, events and the commercial sector. Bulk containers will be delivered to Hubs where they could be sorted with assembly line, automated technology also reading barcodes; or redeemed by weight. The location of this technology would be at community drop-off centres, existing transfer centres or material recycling facilities.

About 1,500 jobs would be created.

- The scheme is broadly **coordinated and overseen by a single independent, non-profit group** established by statute and comprised of a variety of stakeholders committed to transparency and integrity. This will provide community confidence in the scheme and avoid a conflict of interest between maximising redemption and industry retaining a large pool of unredeemed deposits. It will have a target for container recovery which can be translated into sectoral or bottler targets.
- **Funding** is via 'cost recovery' fee on the bottler to recover scheme costs such as handling fees. This fee is net of the sales of the material returned (CDS material receives a premium price as it is clean and uncontaminated) and the bottler will also use the unredeemed deposits they will hold. We estimate minimal to zero impact on consumer prices.
- The **state government** legislates the scheme including regulations; appoints the oversight body; decides the deposit level; and approves the criteria for beverages/containers covered by the CDS. The EPA uses its compliance powers to act on any breaches.

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