Inquiry - Improving Queensland's Container Refund Scheme

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"Parliamentary Inquiry into Improving Queensland's Container Refund Scheme"

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Queensland's Container Refund Scheme has been in operation since 2018. It collects eligible

containers made from a range of materials (PET, HDPE, aluminium, glass, steel, and liquid

paperboard), and has a legislated target return rate of 85% averaged over all materials. The

scheme aims to reduce littering of beverage containers and to collect materials for subsequent

recycling.

Container deposit (refund) schemes (CDS) for eligible beverage containers are now in

operation in all Australian States and Territories except Tasmania. The Tasmanian CDS is set

to start in the middle of 2025.[i] The aim of CDS is to prevent beverage container littering, to

lower the expenses associated with kerbside collection and sorting, and to ensure a continuous

supply of high quality and cleaner materials for reprocessing into new products.[ii] In all

Australian jurisdictions that operate CDS, consumers receive 10ct when they return eligible

beverage containers to a depot, bag drop, pop-up facility, or reverse vending machine, i.e.

Return-to-Depot System. Queensland's CDS also offers a free home collection service for

larger amounts of CDS containers from homes in selected suburbs. Additionally, eligible CDS

containers are collected via kerbside comingle recycling. Currently, there are 354 container

refund points available in Queensland, i.e. ~15,617 persons per collection point. In 1,009 suburbs, home collection service by the CDS is also available.[iii]

In 2022-23, overall return rates in Australian States and Territories, i.e. return rates averaged over all container materials, were between 63% and 78% (Table 1).

Table 1: CDS of Australian States and Territories, year established and overall return rate for 2022-23.

State / Territory	CDS established / Year	Overall Recovery Rate (2022-23) / %
Australian Capital Territory	2018	70
New South Wales	2017	66
Northern Territory	2012	78
Queensland	2018	64
South Australia	1977	76
Tasmania	2025 (planned)	-
Victoria	2023	N/A
Western Australia	2020	63

Recovery rates can differ significantly depending on the materials. In 2023-24, material recovery rates in Queensland were 69.1% for aluminium, 88.0% for glass, 57.1% for PET, 78.7% for HDPE, 25.7% for liquid paperboard, and 34% for steel. The overall recovery rate for 2023-24 was 67.4%, an increase of 3.4% from the year before, [iii] but still below the target of 85%.[iv]

Interestingly, no Australian CDS achieves the legislated target return rate of 85% as set by the Queensland Government. Even the South Australian CDS – the longest running CDS in all Australian States and Territories – has stagnated at 76%. Thus, it seems that a return rate of 85% is an ambitious target in the Australian context.

Additionally, as litter rates of beverage containers have decreased since the implementation of CDS, it can be assumed that up to 34% of all eligible beverage containers are disposed in landfill bins. Queensland also faces challenges due to the remoteness of some councils. The costs associated with the transport of collected beverage containers from remote areas to recycling facilities, as well as biosecurity demands when moving containers through biosecurity zones are high.

Container Deposit Schemes operate in many parts of the world as published in the 'Global Deposit Book 2024 – An Overview of Deposit Systems For One-Way Beverage Containers' by the Reloop Platform^[v] summarising over 57 deposit-return systems for one-way beverage containers. Based on the findings from the Reloop Platform, Australian CDS are the only schemes where consumers do not have to pay a deposit but receive a refund when returning the beverage container.

For example, contrary to CDS operating in Australia, in Germany consumers must pay the price for the beverage **plus a deposit**. For PET bottles, the deposit is €0.25 (approximately \$0.40). In addition, beverage containers are returned to retailers who pay out the deposit (regardless whether the beverage was purchased at the specific retailer or not), i.e. Return-to-Retail (R2R) System. In 2024, there were approximately 130,000 collection locations in Germany (~643 person per collection point). The total return rate is the highest globally at 98% (2024) [v], probably driven by easy access to deposit points and the financial incentive of being

reimbursed the deposit paid when purchasing the beverage. The high deposit fee can also be seen as a financial driver for the German CDS.

R. Basuhi et al. (2024) published an evaluation of strategies to increase the recycling of PET bottles in the United States of America (USA).[vi] They found a strong correlation between return rates and deposit fees when comparing 10 States of the USA and 10 countries in the European Union. They found that the higher the deposit fee is, the higher the return rate of PET beverage bottles is.

In summary, research and public reports show that – in general – easy access to return points at retailers, customers paying a deposit for beverage containers, and a higher deposit fee contribute to high return rates and lower littering of beverage containers.

There are a range of measures that could improve the return rate of beverage containers in Oueensland:

- A public campaign to encourage consumers to not dispose of CDS beverage containers in landfill bins and to use container refund points or comingle recycling instead.
- Switching from a Return-to-Depot to Return-to-Retail system.
- Switching from a refund to a deposit scheme (which would entail harmonisation across all Australian States and Territories), a deposit paid by the consumer would also help lowering littering rates further.
- Increase the fee, e.g. from 10ct to 40ct to increase the financial incentive (which would entail harmonisation across all Australian States and Territories) and to lower littering rates
- Especially for remote areas, establishing local multi-use systems of beverage containers which would contribute to a localised circular economy.

References:

[i] https://nre.tas.gov.au/environment/recycle-rewards

[ii] National waste and resource recovery report 2024, DCCEEW, page 66. https://www.dcceew.gov.au/sites/default/files/documents/national-waste-and-resource-

recovery-report-2024.pdf

[iii] https://containerexchange.com.au/wp-content/uploads/2024/10/3690_COEX_Annual-Report-2024_FA-Spreads.pdf

[iv] https://containerexchange.com.au/container-exchange-annual-report-2021-2022/

 $\begin{tabular}{l} \textbf{[v]} & \underline{https://www.reloopplatform.org/wp-content/uploads/2024/12/Reloop-Global-Deposit-Book-2024.pdf} \end{tabular}$

[vi] Basuhi, R., Bhuwalka, K., Roth, R., & Olivetti, E. A. (2024). Evaluating strategies to increase PET bottle recycling in the United States. Journal of Industrial Ecology, 28, 916–927. https://doi.org/10.1111/jiec.13496