

Non-Residential Beverage Container Recovery Feasibility Study



Beverage
Industry
Environment
Council
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In Association with
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Executive Summary

The Beverage Industry Environment Council (BIEC) commissioned this report to investigate opportunities for maximising non-residential beverage container recycling in Australia.

To achieve this aim, BIEC's consultants C4ES Pty Ltd and Community Change Pty Ltd instituted the following approaches:

- Explore the feasibility of increasing the recovery of beverage containers from non-residential sources such as parks, beaches, recreational facilities, hotels and restaurants.
- Build on the foundation established by previous waste audits and reports such as *What Works: NSW Littering Behaviour Interventions (CC, 1999a)* (a report that describes successful recycling interventions in public places) by expanding knowledge of attitudinal and behavioural drivers and influences in public place recycling.
- Determine potential recovery rates by material types – aluminium, glass and PET.
- Determine environmental, economic and social cost/benefit by material type.
- Develop a decision-making framework that helps to determine how to optimise recovery of beverage containers from the non-residential waste stream and establish feasible boundaries for enterprises to determine if non-residential recycling is environmentally, socially and commercially viable.
- Recommend appropriate response strategies for implementing and funding a range of recovery programs pursuant to the NSW Beer and Soft Drink Industry Waste Reduction Plan (IWRP).
- Use the Disposal Behaviour Index (DBI) to predict likely success of implementing public place recycling facilities in some major locations in Bronte, Bondi Beach and the Blue Mountains. Expectations are assessed against the minimum disposal behaviour, social and economic criteria for public place recycling to be viable in those locations.

PROJECT PLAN

This project explores some of the significant issues faced by stakeholders when considering the feasibility of non-residential recycling of beverage containers. These were included in an initial decision-making framework.

The *What Works: NSW Littering Behaviour Interventions* report (BIEC, 1999) suggested that data gathering should comprise a combination of methods, including ways to link community intentions, views, awareness and attitudes with observations of disposal behaviour. Understanding and developing strategies to influence these factors is vital for sustainable recovery programs.

A comprehensive and systematic approach to assessing attitudes and disposal behaviour as it occurs in 'natural settings' is more likely to produce outcomes applicable to a wide range of environments.

FINDINGS

Specifically, this report finds that the key components of viable non-residential recycling schemes are:

- Ease of use
- Recovery of the broadest range of recycled materials
- System design that matches local disposal behaviour levels as measured by the DBI
- Consideration of location and the activities that occur in precincts
- Support from local businesses
- Stewardship and support by Local Council
- Support by community and local media
- Installation of appropriate infrastructure
- Support infrastructure with innovative signage and educational initiatives

Approximately half of the beer and soft drink containers in NSW are sold through non-residential sources such as pubs, takeaway restaurants and hotels.

While existing recovery programs have tended to focus on kerbside recycling schemes, this research shows that non-residential sources can provide enough materials to significantly increase the rate of recovery of beverage containers.

This project assessed the social, economic and environmental costs and benefits of meeting the IWRP's non-residential recovery targets in 2003 and determined that:

- Non-residential recovery is feasible and provides net community and environmental benefits for each of the three target materials.
- Net community benefits are in the order of \$10.2 million to \$26.3 million if IWRP non-residential recovery targets are met.
- The most significant economic and environmental benefits for each target material result from avoided energy use and reduced greenhouse emissions, compared to virgin material production, and through sale of recovered materials.
- Over 80% of members of the public in each precinct felt it was important for the area to be an environmentally friendly place with a strong sense of community.
- Despite collection being available for free or at low cost in the precincts examined, non-residential recycling of all three-target materials lags behind system capacity and recovery potential.
- In each precinct there were feelings that more could be done to improve the recovery of containers from non-residential sources, and disposal behaviour in some locations showed a strong foundation for successful increased recovery.

- Cost and complexity were not viewed as barriers to non-residential recycling. Similarly, making money from recycling was not viewed as a reason to become involved.
- No single motivator was shown to be central to “driving” participation. Before rolling-out a program, relative local priorities, motivating factors and disposal behaviours will need to be determined.
- Distribution of accurate information about beverage container recovery is critical. Few businesses, and less than half of all respondents, knew what happened to beverage containers after collection.
- Support exists across all precincts for Local Government to be more committed to and prominent in the promotion and support of recovery, particularly by facilitating an effective service.
- Non-residential beverage container recycling adds value to commercial operations in the precinct and by working collaboratively, enterprises can manage many of the barriers to effective recovery programs.

CONCLUSIONS

The three areas studied for this report demonstrated very strong support – over 90% in each precinct – for a precinct approach to non-residential beverage container recycling. A coordinated program will get support from a broad range of enterprises. Those enterprises will be willing to do their part in a precinct that is contributing to a greener environment, particularly if that program:

- Addresses local precinct issues;
- Has a clear coordinator who helps participants develop cooperative actions; and
- Provides a practical, easy to use and convenient service.