







Government of South Australia

Zero Waste SA

CDL Awareness & Support Research Report

Prepared for:

Project #:

Environment Protection Authority

8498

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Report Date: September 2012

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1. SETTING THE SCENE



1.1 Background

1.1.1 **Project background**

The Environment Protection Authority (EPA) is South Australia's primary environmental regulator, responsible for the protection of air and water quality, and the control of pollution, waste, noise and radiation. It administers, among other Acts, the Environment Protection Act 1993 and the Plastic Shopping Bags (Waste Avoidance) Act 2008, as well as developing environmental guidelines and codes of practice. The EPA administers South Australia's container deposit scheme through the Beverage Container provisions of the Act.

The EPA sought research to determine the level of community support, awareness of and participation in South Australia's Container Deposit Scheme and to compare, where appropriate, the current project against similar work undertaken in 2004.

The overall objective of the survey, therefore, was to;

- measure where possible the level of community support and awareness against the results of the 2004 survey
- utilise the outcomes from this general public research across South Australia to identify areas where improvements to the Container Deposit Scheme in South Australia could potentially be made
- provide input into the Standing Council on Environment and Water (SCEW) Packaging Impacts Decision Regulatory Impact Statement (DRIS) and associated documents. The DRIS will examine options for increasing recycling and decreasing litter from packaging on a national scale, including national Container Deposit Legislation (CDL).

1.1.2 Specific objectives

The key issues to be tested included the following broad topics:

- Level of awareness, participation and support for the scheme in SA (comparative with 2004).
- General disposal habits and an indication of support levels for recycling among the SA community with regard to:
 - ~ refundable drink containers under the scheme,
 - drink containers not covered by the scheme such as milk, wine and also larger containers (such as: 1 litre and above for fruit juice and flavoured milk),
 - ~ frequency of return of refundable containers,
 - non-participation in the scheme (i.e. disposal by some other method such as via kerbside recycling; normal waste collection; or free release of containers to charity/community groups or even other family.
- Level of satisfaction with the refund amount (value) or otherwise (i.e. should it be higher).
- Level of interest in the introduction of Reverse Vending Machines (RVMs) and whether or not there is support for an alternative method of payment - such as discount vouchers to the value of the refund or payment of a credit into a nominated credit/savings card.



- The survey also sought details about respondents demographic (i.e. age, gender, income bracket, persons in household, household category, life-stage etc.).
- Frequency and volume of container returns (so participation costs can be more accurately determined).
- The level of support for a national refund scheme.

1.2 The project

In September 2012, 800 interviews were conducted across South Australia with adults aged 18 years and older. The final sample represented the metropolitan and regional split of n=600 and n=200 respectively, in line with the research conducted in 2004 to provide comparable findings.

Interviews were undertaken via Computer Aided Telephone Interviewing (CATI) over a one week period from Monday 10th September to Sunday 16th September 2012.

Data was then weighted to be representative of the demographic profile of South Australia in terms of age and gender. Details of the raw and weighted samples are provided in Appendix 1 of this report.



2. EXECUTIVE ASSESSMENT



2.1 Key Outcomes

Awareness and Support

- Awareness of the drink container refund scheme is almost universal (98% aware, representing an upward trend since 2004, when 93% were aware).
- More importantly, the same proportion (98%) supports the scheme (93% of whom expressed strong support).
- The scheme is perceived by the overwhelming majority to have been effective in reducing recyclable containers going to landfill (92%), reducing litter in South Australia (97%) and encouraging recycling / re-use of drink containers (98%), all showing increases since the previous study.

Knowledge of Container Deposit Legislation (CDL)

- There was strong spontaneous awareness that soft drinks (92%) were included under the CDL scheme and moderate awareness that beer /stout / ale (55%) and flavoured milk of less than 1 litre (44%) attracted a deposit. Around one in five respondents nominated: water bottles, fruit boxes, fruit juice drinks in plastic, flavoured milk in 1 litre or more and spirit based beverages
- ✤ All other beverage types were nominated by less than 10%.
- There is still some confusion about which drink containers attract a deposit, although only 3% mentioned plain milk (versus 19% in 2004).
- There was strong support for the CDL scheme being expanded to include plain milk containers (9.0 mean), wine in glass bottles (9.2 mean), fruit juice containers of 1 litre or more (9.2 mean) and flavoured milk containers of 1 litre or more (9.1 mean).
- NOTE: A 0 to 10 scale has been used throughout the research project, in the above instance where 0 equals do not support at all and 10 equals strongly support. Therefore average scores of 9.0 and above indicate strong levels of support for expansion of the CDL scheme.

Current Participation in CDL

- The following points highlight current participation in taking refundables to the recycling depot or disposing of them in another way:
 - 69% of all respondents dispose of most or all of their refundable containers at the recycling depot and a further 14% take some but not all of their refundable containers to the recycling depot.
 - This equates to 83% of respondents returning at least some of their drink containers to the recycling depot, reflecting a significant improvement compared with 2004 when 60% said they returned all of their containers to the recycling depot.
 - 17% do not dispose of any refundable containers at the recycling depot.



- NOTE: At this point we had not asked if the respondent takes their refundable containers personally or through a third party such as a charity or neighbour, so the 83% refers to recyclable containers going to the recycling depot, regardless of who takes them.
- 13% of respondents said they place most or all of their household refundable containers in their kerbside recycling bin. In 2004, a third (32%) of respondents used their kerbside recycling bin to dispose of some or all of their refundable containers.
- 6% of the SA population dispose of at least some refundable containers in landfill, versus 4% of respondents stating they threw all of their containers away in garbage bins in 2004.
- In terms of who takes the refundable containers and who collects the refund:
 - The majority (68%) of all respondents collect the refund from the recycling depot themselves (or someone else in the household collects the refund).
 - A further 13% leave their containers out for a charity or community group to keep the refund.
 - Just over one in ten (12%) do not return any of their refundable containers to a recycling depot.
 - In addition, 6% of all respondents have someone else (such as a neighbour, friend or relative not living with them) take the refundable containers to a recycling depot and either keep the refund themselves or they share the refund.
- When away from home at specific locations, respondents reported the following regarding disposal of drink containers:
 - Shopping centre or mall nearly 6 out of 10 (58%) respondents said they usually or sometimes keep refundable containers to take home.
 - At a café / restaurant the majority (72%) said they do not take home refundable containers from a café or restaurant.
 - Travelling by car the overwhelming majority (82%) said they usually or sometimes keep / take home refundable containers when in the car.
 - At the beach more than half (58%) of respondents reported they usually or sometimes keep refundable containers for the refund when at the beach.
 - At a park or sporting ground the majority (62%) said they keep refundable containers so they can collect the refund.
- These findings demonstrate that significant proportions of drink consumers look for somewhere appropriate to dispose of containers while away from home. This highlights the value of clearly labelled recycling bins available in a wide range of public spaces. It also supports availability of alternative means of disposal while away from home where refunds could be paid (such as the Reverse Vending Machine discussed later in this report).



- The key influence on the decision to dispose of refundable containers while away from home is that there is a recycling bin nearby (regardless of whether they are at the beach or in a shopping centre) (mentioned by 31%).
- The main influence on the decision to take containers home is to collect the refund, suggesting that for many the deposit acts as a motivator to return the containers to a recycling depot for the refund (mentioned by 21%). Having said this, there were more reasons put forward for disposal of containers while out than there were influences to take the containers home.

Visitation Patterns to Recycling Depot

- Most respondents (who take containers to a depot, n=583) take containers every two to three months.
- The average number of containers taken in one trip was 210. However, 15% indicated they take 500 or more in one trip, increasing to 25% of regional respondents.
- Six out of ten of these respondents sort into material type prior to their visit. However, one in three counts containers prior to visiting the depot.
- Seven out of ten visit the same depot, within 5 kilometres from home.

Service Experience at Recycling Depot

- Respondents who return containers are evenly split between visits on weekdays and on weekends. Three in every four are satisfied with the trading hours of their usual recycling depot.
- Trading longer on the weekend, opening Saturday afternoon and opening on Sunday morning or Sunday afternoon were the most common suggestions put forward to improve trading hours.
- More than eight out of ten respondents who visit a recycling depot were satisfied with the service they received (84% satisfied versus 3% dissatisfied).
- Up to 15 minutes was the most common length of time taken at the depot from arrival to collection of refund (66%).

Other Recyclable Materials

- The majority (70%) of those who take refundable containers to a recycling depot do not take other, non-refundable materials with them to be recycled.
- Among the 30% of respondents who usually or sometimes take non-refundable materials with them, scrap metal (39%) and cardboard (34%) were the most common.
- The overwhelming majority (89%) of respondents place their non-refundable containers in either the kerbside recycling bin or a recycling bin if away from home. Just 8% use a waste bin, although in regional areas this increases dramatically to 21% disposing of recyclable containers in waste bins / landfill.



Alternative Collection of Refund

- Overwhelmingly (86%), respondents believe that the current refund is sufficient to encourage return of refundable containers.
- Just over one in three respondents said they were likely to use a reverse vending machine (RVM) if it was available locally (27% very likely and 10% likely). On the other hand, almost half (49%) said it was unlikely they would take refundable containers to an RVM.
- Having said this, there was a strong indicator that availability of RVM's in accessible places such as shopping centres will have an impact on the proportion returning refundable containers among those who currently do not return containers to the recycling depot.
- Six out of ten (61%) respondents who currently do not return refundable containers to a depot said they were likely to use an RVM if it was available at the local shopping centre. This compares to a third of those who currently take recyclable containers to the recycling depot or give them to someone else stating they would use an RVM.

National Refund Scheme

- About one in four respondents was aware that the Northern Territory had introduced a bottle and can refund scheme this year.
- Support for a national container deposit scheme was almost universal among South Australians (98% supported a national scheme), with reduction of litter generally across national highways, parks and streets and beaches being the primary benefit thought to accrue from a national CDL scheme.



2.2 Implications

The research revealed almost universal awareness of the drink container refund scheme as well as high levels of support for the scheme and commitment to returning refundable containers to a recycling depot.

There is also strong support for extending the scheme to cover containers such as plain milk, wine in bottles, and also fruit juice and flavoured milk containers of 1 litre or more.

However, approximately one in eight households dispose of their containers in kerbside recycling or other recycling bins. There is support among this group for reverse vending machines located in shopping centres or other accessible local places. If RVM's were introduced, this would encourage these people to dispose of their refundable containers at an RVM, rather than through their kerbside recycling bin. This may lead, in turn, to availability of more clean, uncontaminated recyclable materials.

Whilst improvement has occurred since 2004, in terms of identification of which drink containers attract a deposit, there is still room to provide information to the public about what materials they should take to the recycling depot and to reinforce which containers attract a deposit

This includes social marketing about disposal of non-refundable materials directly through the recycling depot rather than placing in the kerbside recycling bin, where contamination rates are still an issue. In particular there is a need to provide information in regional areas to reduce the volume of non-refundable recyclables going to landfill. Of course, availability of recycling depots within a reasonable distance, and also recycling bins as part of general waste management, should form part of the overall strategy.

In general, the recycling depots are providing quality service experiences, with mostly acceptable trading times, reasonable timeliness and within an acceptable distance from most of those who collect the refund from a recycling depot. There is some call for additional trading hours on the weekend afternoons, but mostly respondents fit within existing hours.

There is little interest within the community in increasing the refund amount to encourage greater participation in returning drink containers to the recycling depot to collect the refund.

South Australians strongly support extending the CDL scheme nationally, with a focus on the outcome of reducing litter generally.



3. PRINCIPAL FINDINGS

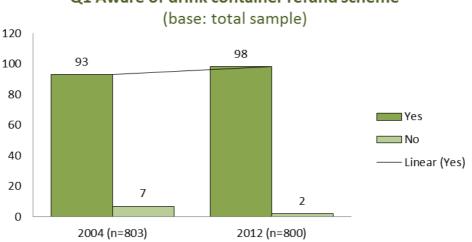


3.1 Awareness and support for CDL scheme

3.1.1 Awareness of CDL Scheme

Awareness of the scheme is exceptionally high, with almost all (98%) respondents indicating they are aware of CDL. This finding compares favourably with the 2004 results, when awareness was at 93% (although this level is also very high).

Awareness was uniform across all socio-demographic profiles.



Q1 Aware of drink container refund scheme

Fig.1: Awareness of drink container refund scheme

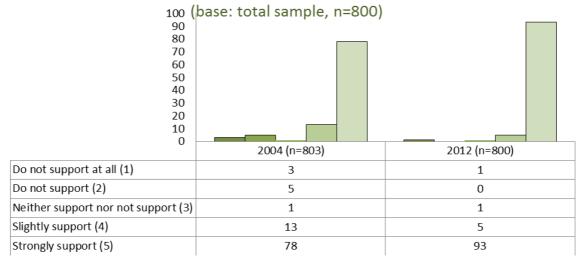
3.1.2 Support for CDL Scheme

Support for the CDL scheme has increased significantly since 2004, with 93% of respondents indicating they strongly support the drink container refund scheme and a further 5% indicating slight support. This finding represents a statistically significant increase in strong approval for the scheme, as noted in the graph below (up from 78% strongly supporting the scheme in 2004).

At that time (in 2004) 8% of respondents across SA did not support the scheme. In the current survey, just 1% do not support the scheme.

As with awareness, support was almost universal across all socio-demographic cohorts (as shown in the graph overleaf).





Q2 Support for drink container refund scheme

Fig.2: Support for drink container refund scheme

3.1.3 Effectiveness of CDL Scheme

Respondents perceive that the CDL scheme has been effective in achieving its aims of:

- Reducing the number of beverage containers that go to landfill (92% agree, up from 86% in 2004)
- Reducing litter in South Australia (97% agree, up from 88% in 2004)
- Encouraging and promoting the recycling and re-use of container materials (98%, up slightly from 92% in 2004).

As the graph below demonstrates, mean scores (using a 0 to 10 scale where 0 is not at all effective and 10 is highly effective) ranged from 8.5 to 8.3. Note that "agree" is based on those respondents who rated effectiveness at 5.0 / 10.0 or higher.

Variations in perceptions of effectiveness of the scheme were nominal, when analysed by sociodemographic sub-groups.

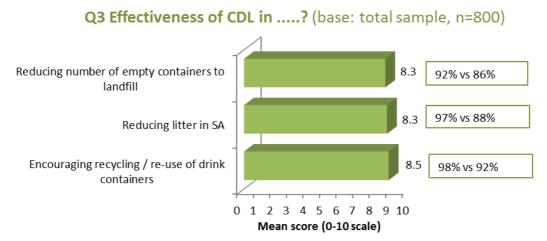


Fig.3: Effectiveness of CDL scheme



3.2 Knowledge of Container Deposit Legislation

3.2.1 Container types covered by CDL

Spontaneous awareness of specific container types covered by CDL was quite similar to the findings in the 2004 research.

Soft drinks (92%), beer / stout / ale (55%) and flavoured milk of less than one litre (44%) were again the most commonly mentioned container types correctly nominated.

Whilst the incidence of citing plain milk containers has declined significantly since 2004 (3% versus 19%), incorrectly naming flavoured milk in containers of 1 litre or more has remained on par with 2004 (18% versus 17% in 2004).

Q4 Unprompted awareness of container types covered by CDL (base: total sample)

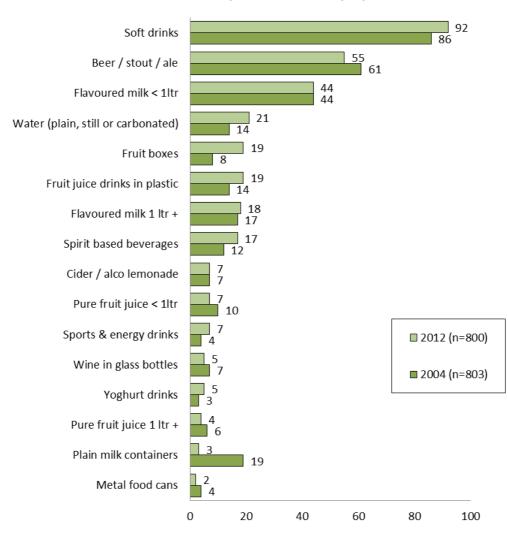


Fig.4: Knowledge of container types covered by CDL

Note that use of the term beverages rather than referring to a container type was to enable comparison with 2004, as this was the description used in the initial benchmark survey.



Note also that, in the current research, respondents were not prompted with a list of container types and asked to nominate which were covered under the CDL scheme, as they were in 2004. That is, they were first asked to spontaneously name container types which attract a refund and then were prompted with a list and asked if they were aware whether or not each container type attracted a refund.

3.2.2 Expansion of deposit scheme

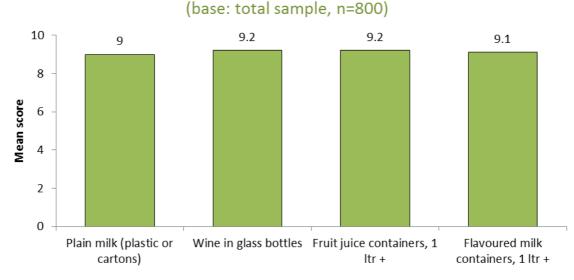
Respondents were asked to indicate the extent they would support expanding the refund scheme to include specific other drink containers in the scheme. A 0 to 10 scale was used, with 0 being do not support at all and 10 being strongly support.

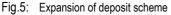
As the graph below clearly demonstrates, there was strong support for including a deposit on the following container types:

- plain milk in plastic or cartons (9.0 mean score),
- wine in glass bottles (9.2 mean score),
- fruit juice containers of 1 litre or more (9.2 mean score) and
- flavoured milk containers of 1 litre or more (9.1 mean score).

As has been noted earlier, support was fairly universal regardless of socio-demographic profile.









3.3 Current participation in CDL

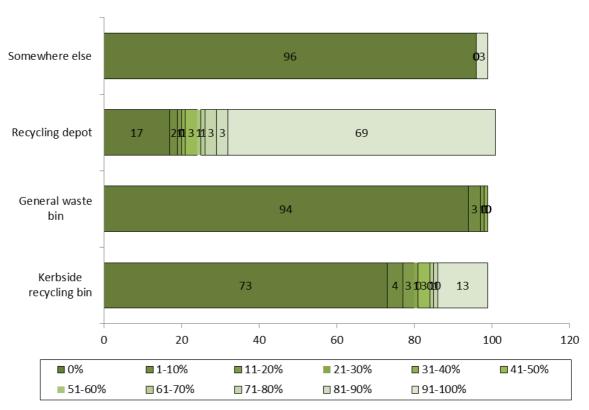
3.3.1 **Proportional disposal of refundable containers**

Respondents were asked to think about their refundable drink containers at home and, using 100 as the total number on hand, to indicate what proportion they dispose of in their kerbside recycling bin, general waste bin, at a recycling depot and by some other method of disposal.

The results were as follows:

- Recycling depot 2 in every 3 respondents (69%) dispose of 91-100% of their refundable containers at a depot. On the other hand, 17% do not dispose of any refundable containers at a depot and a further 14% take between 1% and 90% of their refundable containers to a depot. This equates to 83% of respondents returning at least some of their drink containers to a depot, reflecting a significant improvement compared with 2004 when 60% said they returned their containers to a recycling depot.
- **General waste bin** positively, 94% of respondents do not put any refundable containers in the general waste bin. However, this finding indicates that 6% of the SA population dispose of <u>at least some</u> refundable containers in landfill, versus 4% of respondents stating they threw <u>all of their containers</u> away in garbage bins in 2004.
- Kerbside recycling bin nearly 3 in every 4 respondents do not place any refundable containers in their recycling bin. Conversely, 13% said they place most or all (91-100%) of their household refundable containers in their kerbside recycling bin and a further 14% put some (between 1% and 90%) refundable containers in the recycling bin. In 2004, a third (32%) of respondents used their kerbside recycling bin to dispose of most or all refundable containers (versus a total of 13% stating most or all refundable containers were placed in the kerbside recycling bin in 2012).
- **Somewhere else** the overwhelming majority of respondents (96%) indicated they do not dispose of refundable containers somewhere else.





Q6 Proportion of CDL containers disposed of in? (base: total sample, n=800)

Fig.6: Disposal of refundable drink containers at home

Among respondents who indicated they place refundable containers somewhere else (n=33), most said they give them to someone else to collect the refund, such as a relative (24% of 4% of the sample), a charity (27%) or a neighbour (25%). Just 5% re-use refundable containers at home and a further 21% (n=7 people) do something else with them.

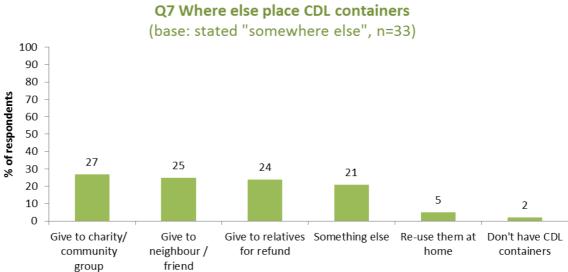
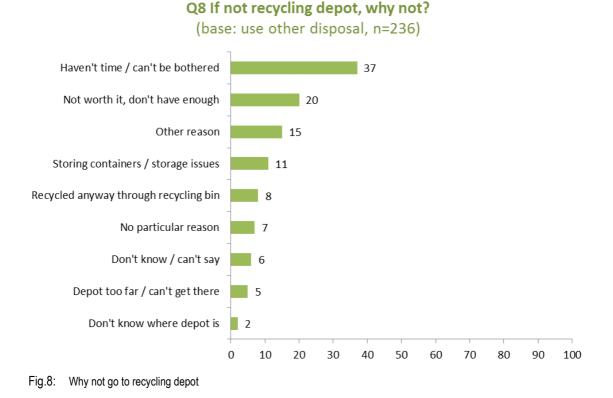


Fig.7: Where else dispose of CDL's



Among respondents who indicated they do not take refundable containers to the recycling depot (n=236), the most common reason put forward for not doing so was comments along the lines that they did not have the time / couldn't be bothered taking them to a depot (37%), followed by not financially worthwhile as do not have enough containers (20%).

Interestingly, 2% of current respondents said they did not know the location of the recycling depot compared with 20% indicating they did not know the location of their local recycling depot without having to refer to a resource like the telephone book in 2004. As the question was asked differently, this finding is indicative rather than representing a statistically significant increase in awareness of the location of a depot.



3.3.2 Disposal of CDL's away from home

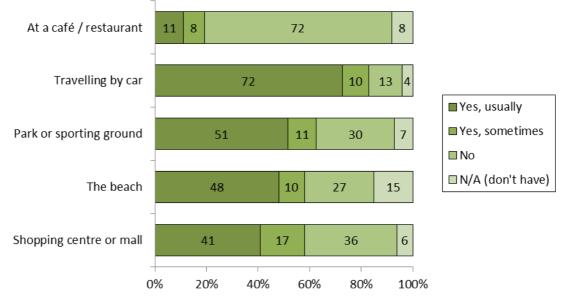
All respondents were asked to indicate whether they keep / take home refundable containers when away from home at specific locations. The findings, by location, were as follows:

- Shopping centre or mall nearly 6 out of 10 (58%) respondents said they usually or sometimes keep their refundable containers to take home when out shopping. However, this finding means that 36% of respondents look for a recycling bin (or a waste bin) to dispose of refundable containers while out shopping (6% said they don't have refundable containers whilst out shopping).
- At a café / restaurant the majority (72%) said they do not take home refundable containers when they are at a café or restaurant but leave them for staff to collect refund (where a refund has been paid by the end-consumer).
- Travelling by car the overwhelming majority (82%) said they usually or sometimes keep / take home refundable containers when in the car.



- At the beach more than half (58%) of respondents reported they usually or sometimes keep their refundable containers to take home for the refund when at the beach. However, the findings also show that one in four (27%) beach-goers do not keep containers to take home, which again indicates that they look for somewhere to dispose of refundable drink containers while at the beach.
- At a park or sporting ground again, whilst the majority (62%) said they keep their containers so they can collect the refund, a further 30% said they do not keep / take home refundable containers from a park or sporting ground.

These findings demonstrate the value of clearly labelled recycling bins available in a wide range of public spaces, but also seem to support the availability of alternative means of disposal while away from home where refunds could be paid (such as the Reverse Vending Machine, discussed later in this report).



Q9 When away from home, do they keep / take home CDL containers for refund (base: total sample, n=800)

Fig.9: Away from home disposal of CDL's

3.3.3 Who returns CDL's and receives refund

Respondents were asked to indicate if they physically take the refundable containers to a recycling depot themselves and, if not taken by them or someone in their household, who keeps the refund. The findings should not be confused with the proportion who dispose of their refundable containers at a recycling depot. The results are similar but the questions are not the same.

Two out of three respondents (68%) indicated they (or someone in the household) return their own containers and keep the refund from the recycling depot.

Just over one in ten (12%) indicated they do not return any refundable containers to the recycling depot.



A similar proportion (13%) give their refundable containers to someone else (such as a charity or community group, a relative or a neighbour) and that person keeps the refund.

In a relatively few instances, another person returns the refundable containers and the refund is either kept in full by the respondent (3%) or shared with the other person (3%).

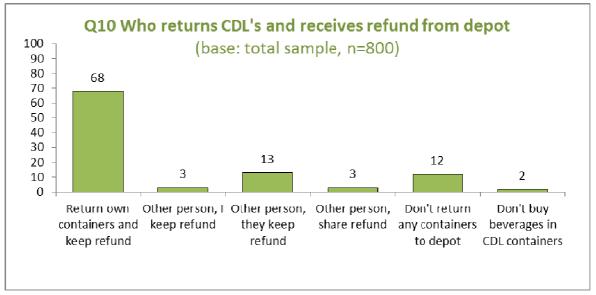


Fig.10: Return and collection of refunds

Of note was the finding that some socio-demographic and geographic sub-groups showed high incidences of stating they return their own refundable containers and keep the refund (statistically significant at 95% confidence level), as follows:

- Males (73% versus 65% of female respondents).
- People who are employed full-time (77%, particularly high compared with retired respondents at 54% who return their own containers).
- 18 to 24 year olds (73% versus 60% of 35 to 44 year olds returning their own containers to a depot and collecting the refund).
- Regional respondents were significantly more likely to state they return their own containers to a depot and keep the refund compared with metropolitan respondents (77% versus 65% respectively).

3.3.4 Influences on decision to dispose or take home refundable containers.

Respondents were asked what factors might influence their decision, when away from home, whether to dispose of refundable containers while out or take them home to collect the refund.

The main reason respondents gave for disposing of refundable containers away from home was that there was a recycling bin nearby (31%).

The main reason put forward as to why they take the containers home was to collect the refund on the container from the recycling depot (21% gave this response).



About one in ten respondents gave the next most commonly raised reasons for disposing of refundable containers while out:

- Already carrying packages / shopping, can't carry more (12%)
- There is a waste bin nearby (12%).

This latter point supports the earlier statement about the availability of clearly marked recycling bins readily available to avoid recyclable containers going to landfill.

A further one in seven (14%) could not offer any factors which might influence their decision to dispose of refundable containers or take them home.

Relatively minor issues were factors such as: the mess empty containers might make if carrying them home (5%), storage issues on a trip (4%), convenience / choosing the most convenient option (4%), leaving containers at a restaurant / café (4%), leaving for scavengers (2%) and a desire not to leave litter behind (2%).

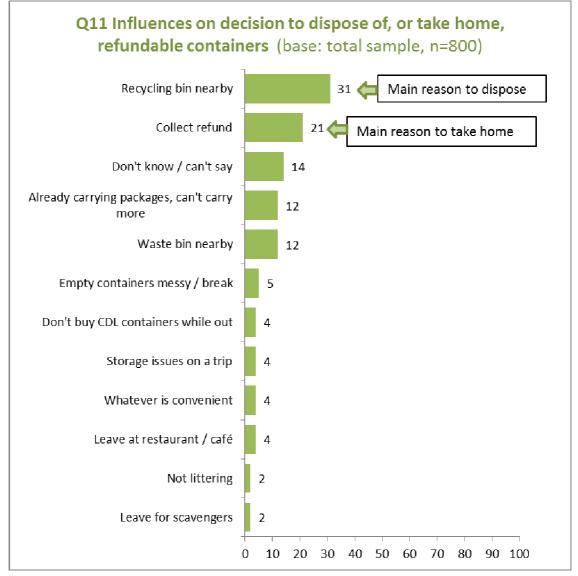


Fig.11: Influences on decision to dispose or take home



3.4 Patterns of visitation to recycling depot

The following questions were asked of:

- respondents who take their own refundable containers to the recycling depot and keep the refund, and
- respondents who give the containers to someone else (e.g. a relative / neighbour) and either keep the refund themselves or they share the refund (the latter on the assumption that some of them may be able to answer questions about the visitation patterns),

Respondents who dispose of all of their refundable containers in the kerbside recycling bin (or waste bin), or who do not have refundable containers to dispose of, were not included in the following set of questions about visitation patterns to the recycling depot and also those who put their containers out for a charity or community group.

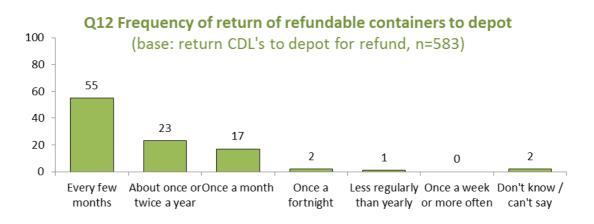
Note that a "don't know / not applicable" option was provided where respondents were unable to provide answers to specific questions. Whilst it was difficult for some respondents (particularly those who leave their containers out for a charity) to respond to some of these questions, we asked them about aspects they may be able to answer, such as volume and frequency of return, to ensure we obtained a complete understanding of the current patterns of usage of recycling depots.

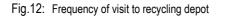
The maximum sample for the following questions about visiting a recycling depot was n=583 (73% of respondents). This proportion does not represent the percentage of participants in CDL in total, as it excludes those who leave refundable containers out for a charity or community group.

3.4.1 Frequency of return

Overwhelmingly, respondents visit the recycling depot monthly or less often (96%).

The most commonly mentioned frequency of visiting the recycling depot was every few (2 to 3) months (55%), followed by about once or twice per year (23%) and once per month (17%).





In 2004 it was reported that four in ten (41%) indicated they return their containers four times a year or more often, suggesting that frequency of returns has increased in the interim (now 55% stating every few months and a further 19% stating monthly or more frequently).



3.4.2 Typical volume of returns

The most common volume was about 100 to 149 containers (18% of respondents thought this was a typical volume), followed by 500 or more containers (15%). This finding suggests that many respondents deliberately store containers until there is sufficient volume to justify a trip to the recycling depot.

Just 15% of respondents typically take (or give to someone else to take) less than 100 containers per visit.

The median point for volume is about 210 containers per visit, with about half taking less than this volume and the other half taking more (not including 9% unable to estimate the volume).

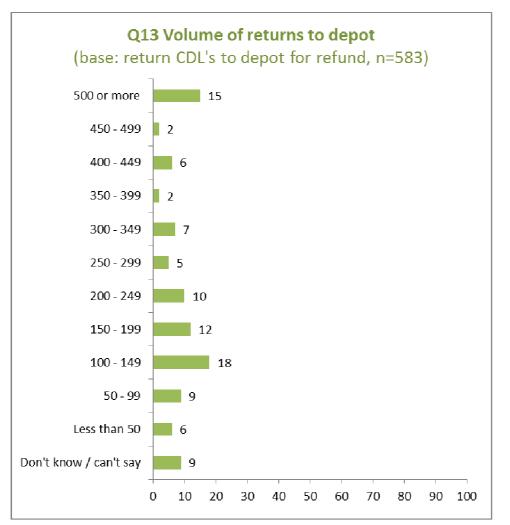


Fig.13: Volume of returns to depot

Of note was the finding that, among group households of related or unrelated adults (excluding older couples no children at home), almost a quarter (23%) said they return 500 or more refundable containers per visit to the recycling depot. A similar finding was noted among 45 to 54 year old respondents (23% return 500 or more containers per visit versus 15% overall).

At the other extreme, lone person households, retired / pensioners and also 35 to 44 year olds showed relatively high incidences of stating they return less than 50 per visit to the depot (11%, 15% and 11% respectively versus 6% overall).



Also of note was the finding that one in four (25%) regional respondents typically take 500 or more refundable containers in one trip, compared with 10% of metropolitan respondents.

3.4.3 Sorting and counting containers prior to visit to depot

When asked if they usually sort their containers by material type prior to taking them to the depot, six out of ten respondents who visit the depot or give their containers to someone else to take to the depot (n=583) said they either always sort (53%) or sometimes sort (8%) their refundable containers into material type such as glass, plastic and aluminium prior to taking them to the recycling depot.

Of note was the finding that older couples, retired respondents and 65-74 year olds (likely to be the same people) were significantly more likely to state they always sort the containers into material types before taking them to the recycling depot (67%, 69% and 68% respectively).

Respondents were also asked if they count their refundable containers beforehand. Interestingly, they were less likely to indicate they count the containers than they were to sort them by material type. Just over one in four (27%) always count the containers and a further 9% sometimes count them. The majority, however, do not count their refundable containers at all prior to going to the recycling depot.

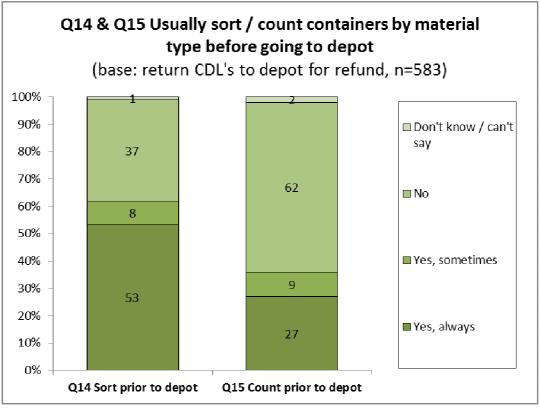


Fig.14: Sorting and counting containers for delivery

As with the finding about sorting prior to taking to the depot, older couples, retired respondents and 65-74 year olds were significantly more likely to state they always count the containers before taking them to the recycling depot (34%, 40% and 43% respectively).

Also noted was the finding that regional respondents were less likely to state they do not sort containers by material type compared with metropolitan respondents (29% versus 41% respectively).



3.4.4 Regular depot and distance from home

Respondents were asked if they usually return their containers to the same depot and, if so, approximately how far away their usual depot is from home. The majority (70%) use the same depot and it is located within 5 kilometres from home. A further 15% use the same recycling depot within 10 kilometres from home and 8% use a depot further away than 10 kilometres.

When this question was analysed by region (that is, Greater Metropolitan Adelaide versus respondents living in Regional South Australia), not surprisingly those living in regional areas were more likely to travel further to their usual recycling depot. Statistically significant variations were:

- Depot within 5 kilometres 73% metro versus 63% of regional respondents.
- Depot within 15 kilometres 1% metro versus 11% regional
- Depot over 20 kilometres 0% metro versus 9% regional.

Also notable was the finding that nearly a third (30%) of 18 to 24 year olds will travel up to 10 kilometres to the recycling depot (versus 15% overall).



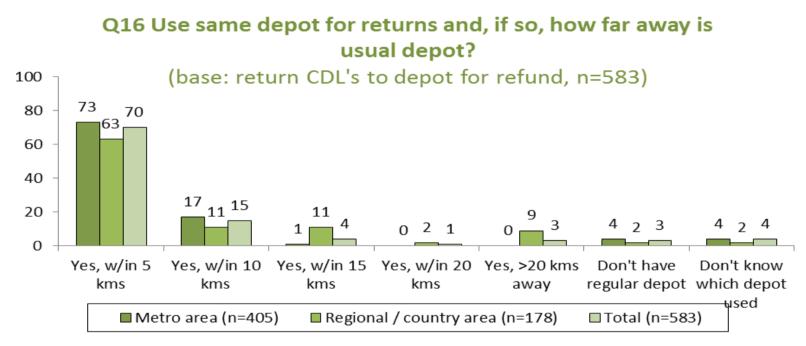


Fig.15: Distance to regular depot



3.5 Service experience at recycling depot

As with the previous set of questions, those to follow were asked only of respondents who actually take their own refundable containers to the recycling depot for the refund, or those who give the containers to someone else (e.g. a relative or neighbour) and either keep the refund themselves or they share the refund (the latter on the assumption that some of them may be able to answer questions about the visitation patterns).

The maximum sample for the following questions was n=583 or 73% of respondents. The selection was based on their response to Q10 (that is, who takes refundables to the depot and collects the refund) rather than on the total number who participate in any way to returning refundable containers to a recycling depot.

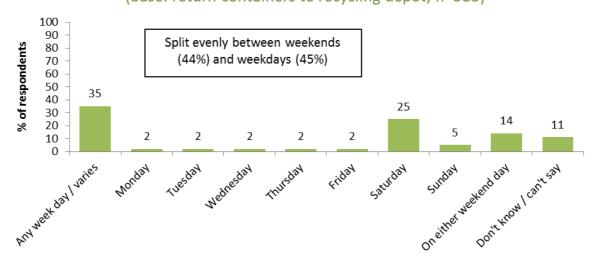
Respondents who don't have any refundable containers (or believe they don't), those who dispose of all of their refundable containers in the kerbside recycling bin or waste bin as well as those who leave them out for a charity or community group were not included in the questions about visitation patterns at the recycling depot.

It should be noted that, despite exclusions as noted above, some respondents were unable to respond, so a "not applicable / don't know" option was included for these cases. The don't know responses are excluded from any average scores.

3.5.1 Weekday or weekend return of containers

Respondents were evenly distributed between visiting the recycling depot during the week (45%) and on weekends (44%), with 11% unsure of whether returns are undertaken weekdays or weekends.

Saturday is the most popular individual day (25% visit a depot on Saturdays), particularly compared with the proportion stating they usually return containers on a Sunday (5%)



Q17 Return containers during the week or on weekends? (base: return containers to recycling depot, n=583)

Fig.16: : Weekday or weekend returns



Not surprisingly, respondents who are employed (full-time) were more likely to indicate they visit on "Saturdays" (33%). Conversely, retired respondents showed a high incidence of stating they visit "any weekday / varies" (68%).

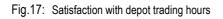
When analysed by geographic region, metropolitan respondents were significantly more likely to state they visit a depot on weekends than regional respondents (52% and 42% respectively, at 95% confidence level).

3.5.2 Depot trading hours

Respondents were asked how satisfied or dissatisfied they are with the trading hours at their usual recycling depot. A 1 to 5 scale was used, where 1 is not at all satisfied and 5 is very satisfied.

Three in every four respondents were either very satisfied (57%) or quite satisfied (20%) with the trading hours, whilst only 5% were dissatisfied (mean score of 4.4 out of 5.0).



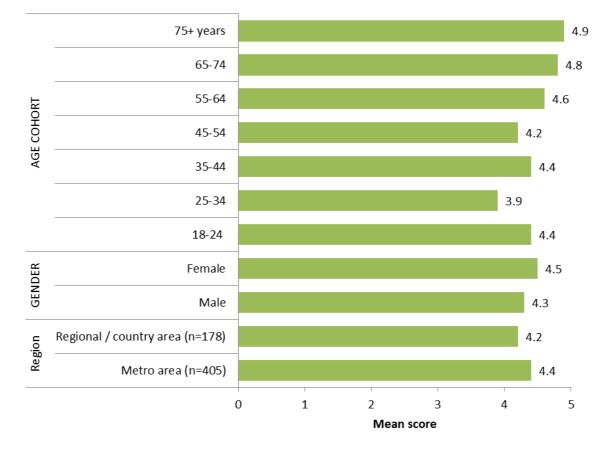


When analysed by age and region sub-groups, both respondents in the peak family life-stage (25 to 54 years) and also those from regional / country areas, showed lower scores for satisfaction with the depot trading hours than older respondents and metropolitan dwellers (as per graph overleaf).

To further clarify the pattern, those in full-time employment were significantly less satisfied with depot trading hours than those who are retired (4.1 mean score versus 4.8 respectively).

The most common reasons put forward among those who were dissatisfied with trading hours (n=30) were comments along the lines that "the depot is only open during work hours and should be open longer" (37% of comments) and "the depot should be open longer on weekends" (63%).





Q18 Satisfied with depot trading hours, by sociodemographic and geographic sub-groups

Fig.18: Satisfaction with depot trading hours, by socio-demographics and region

Respondents who visit a depot and said they were not satisfied with the opening hours (n=48) were asked what additional hours they would like their recycling depot to be open. Saturday afternoon was the most popular suggestion (44%, although this represents only 21 people), followed by Sunday afternoon (26%). Both Saturday morning and Sunday morning were suggested by similar proportions (20% and 21% respectively).

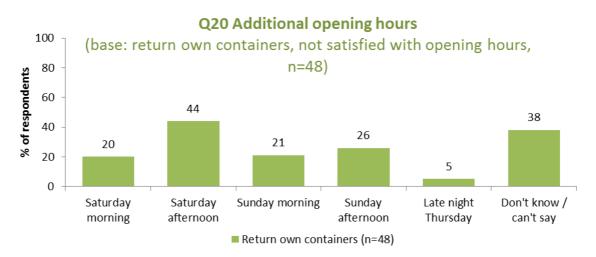


Fig.19: Additional opening hours



3.5.3 Recycling depot service

Respondents who collect their refund from the recycling depot (either in person or through someone else, n=583) were asked how satisfied they were with the service they receive at the depot. A 1 to 5 scale was used, with 1 being not at all satisfied and 5 being very satisfied.

With an overall mean score of 4.5, service across recycling depots used was in the 'satisfied' category (between quite satisfied and very satisfied). More than 8 out of 10 users of the recycling depots indicated they were either very satisfied (61%) or quite satisfied (23%).

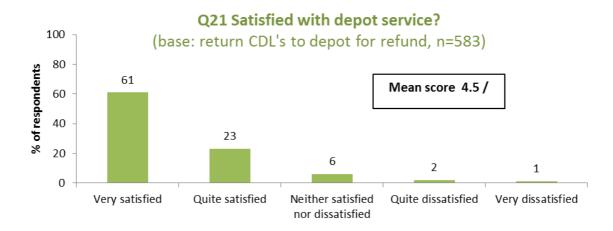


Fig.20: Satisfaction with depot service

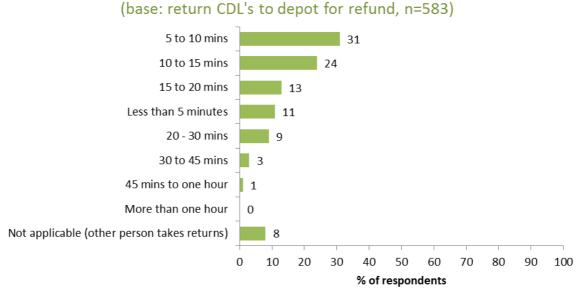
There were relatively minor variations across socio-demographic profile, in particular older respondents showed a high incidence of stating they were very satisfied (4.8 mean score among 65 plus year olds).

Among those who were dissatisfied (n=18), the most common complaint was that depot staff do not count the containers properly (56% of reasons for dissatisfaction), followed by poor attitude of staff (22%) and too busy / not enough staff (22%).

Respondents were asked how long it takes to collect the refund, from the time they arrive at the depot and including waiting time.

Two out of three (66%) respondents indicated it took 15 minutes or less to deposit their containers and collect the refund. A further one in five (22%) said it usually takes between 15 and 30 minutes. Just 5% of those who return containers to the recycling depot indicated it takes longer than 30 minutes.





Q23 Time taken to collect refund (base: return CDL's to depot for refund, n=583)

Fig.21: Time taken to collect refund

3.5.4 Other materials to depot for recycling

Respondents who visit the recycling depot (n=583) were asked if they take other materials to the depot for recycling while they are taking refundable containers.

The majority (70%) do not take other materials to the depot for recycling.

Just over one in four of these respondents usually or always (7%) takes other materials or sometimes (21%) takes other materials whilst returning their refundable containers.



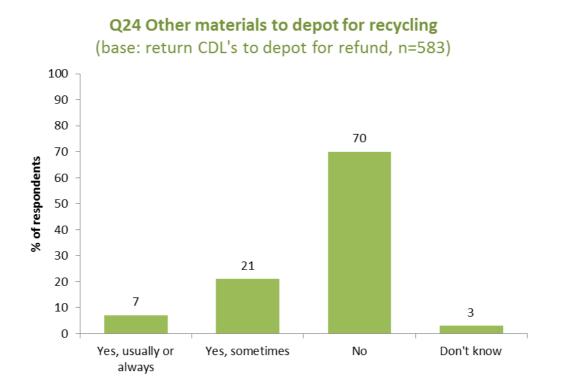


Fig.22: Other materials to depot

Among respondents who said they do return other materials to the recycling depot with their refundable containers (n=159), scrap metal (39%) and cardboard (34%) were the most commonly returned.

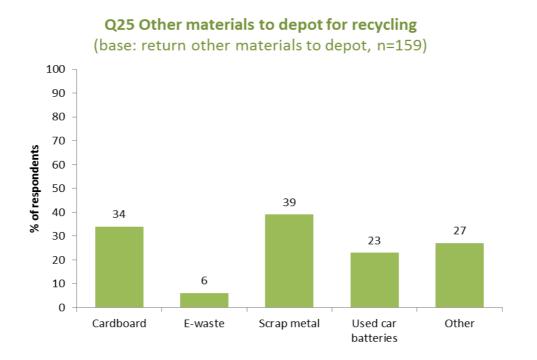


Fig.23: Which other materials to depot



3.6 Collection of CDL Refund

3.6.1 CDL Deposit Sufficient

All respondents were asked if they thought the current refund of 10 cents was sufficient to encourage the return of empty drink containers and, if not, what amount would be better.

Overwhelming (86%), respondents perceived that 10 cents was sufficient to encourage return. This increased to 90% among regional respondents (vs 84% of metropolitan, but this proportion still represents strong agreement in maintaining the current deposit).

There were no other significant variations.

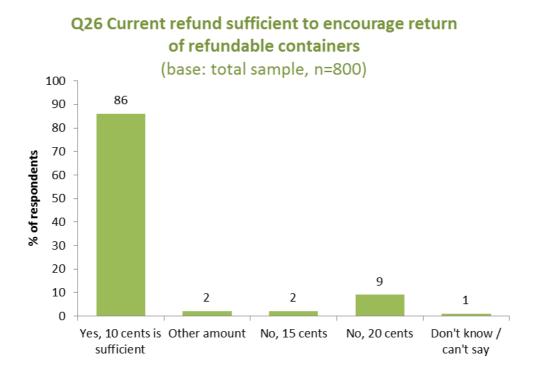


Fig.24: Current refund sufficient

3.6.2 Reverse Vending Machines

Respondents were read a brief statement describing reverse vending machines as "self-automated machines where containers are deposited one at a time and the 10 cents per container payment is paid".

All respondents were asked how likely or unlikely they would be to use a reverse vending machine (RVM) for container refunds, if one was available at, say, their local shopping centre. A 1 to 5 scale was used, where 1 was not at all likely and 5 was very likely.

Just over a third of respondents indicated they were likely to use an RVM, 27% stating very likely and a further 10% said they would be quite likely to use it.



On the other hand, nearly half said they were unlikely to use an RVM, 40% stating they would be very unlikely and a further 9% stating quite unlikely. Just over one in ten (12%) were neutral on the matter of likelihood of using an RVM. The mean score reflects this balance between likely and unlikely, at 2.7 / 5.0.

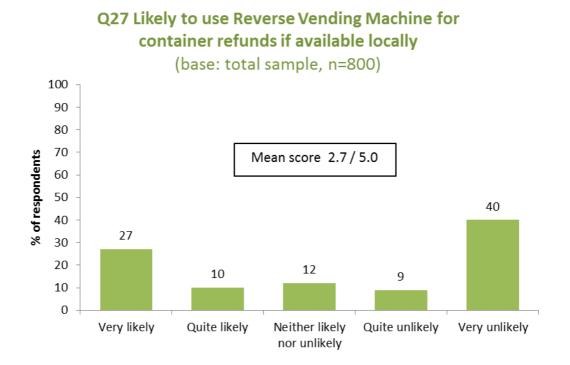


Fig.25: Reverse vending machines

Having said this, there is a strong indicator that availability of RVM's in accessible places such as shopping centres will have an impact on the proportions who return refundable containers among those who currently <u>do not return</u> their containers to the recycling depot.

Six out of ten of those who currently do not return their refundable containers to a depot or give them to someone else to collect the refund (most of whom currently put their refundable containers in either the kerbside recycling bin or any recycling bin if away from home) said they were likely to use a reverse vending machine if it was available at their local shopping centre. This compares to around a third for those who either currently take their recyclables to a depot themselves or give them to someone else to take to the recycling depot (as shown in the graph overleaf).

Also of note was a correlation between increasing age and declining likelihood of using an RVM. As an example, 55% of 18 to 24 year olds (3.4 mean score) said they would be likely to use RVM's compared with 27% of 65 to 74 year olds (2.3 mean score).

And also noted was a slightly lower likelihood among regional respondents stating they would use an RVM compared with those living in metropolitan Adelaide (35% versus 38% respectively or 2.6 mean score versus 2.8 mean score).



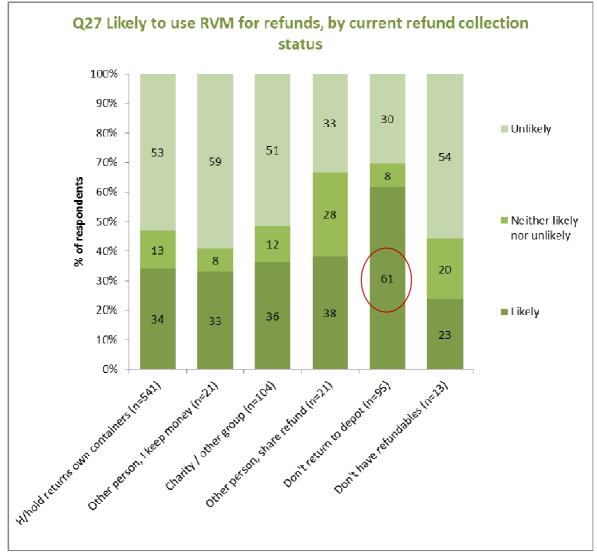


Fig.26: Likely to use RVM by current refund status



When asked if they had any other suggestions for automated collection of their drink container refund, the majority (86%) could not offer any other suggestions for automated refund.

There was low support for either:

- shopping vouchers equal to the refund amount (3%) or
- credit the amount to credit, debit or savings account (2%).

Whilst 10% of respondents suggested "something else", their specific suggestions were not captured as the two options above were the most likely to be offered beside RVM's.

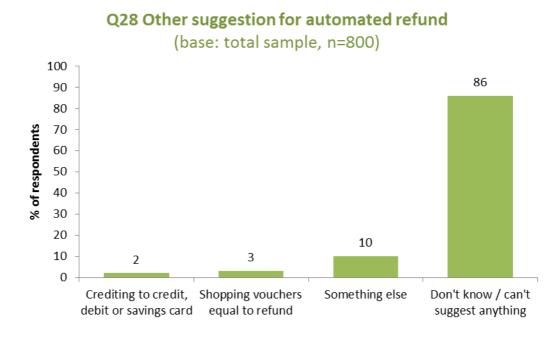


Fig.27: Automated refund suggestions



3.7 Disposal of non-refundable containers

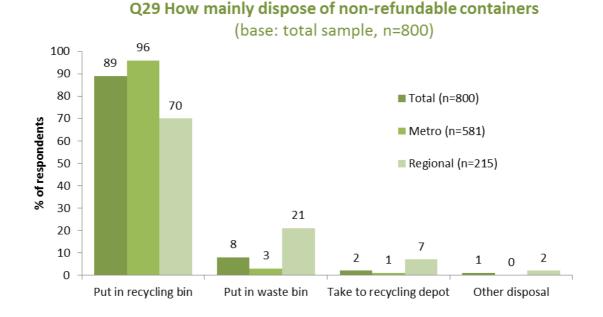
All respondents were asked how they mainly dispose of non-refundable containers, such as plain milk cartons, wine in bottles, fruit juice and flavoured milk over 1 litre.

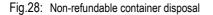
Overwhelmingly (89%), respondents reported they dispose of non-refundable containers through their kerbside recycling bin or a recycling bin if away from home. However, 8% of the total sample (62 respondents) indicated they dispose of non-refundable containers in a waste bin.

Just 2% (19 respondents) take non-refundable containers such as those described to the recycling depot with their refundable containers.

However, significant differences were revealed when analysed by geographic region. Almost all (96%) of metropolitan residents put non-refundable containers in a recycling bin, whereas only 70% of regional respondents said they use a recycling bin for these containers.

A further one in five (21%) regional respondents use a waste bin for non-refundables compared with just 3% of metropolitan respondents. There was also a statistically significant difference in the proportion of regional respondents who take these containers to the recycling depot (7% versus 1% of metropolitan respondents). This finding suggests that coverage of social marketing to inform the public about how to dispose of non-refundable containers has less cut-through or relevance to regional respondents (but distance from recycling depots and availability of kerbside recycling bins are likely to also be factors which influence recycling participation rates in country and regional areas).







3.8 National refund scheme

3.8.1 Awareness of NT refund scheme

Respondents were asked if they were aware that the Northern Territory had introduced a bottle and can refund scheme this year.

Just under one in four (24%) indicated they were aware of this scheme. Some sub-groups showed statistically significant high incidences of being aware of the NT scheme, as follows and shown in the graph below:

- males (30% versus 17% of female respondents) and
- older respondents (55 years and older, 32%, 38% and 34% respectively)

There were no statistical variations when analysed by region, nor among those who currently take their refundable containers to the recycling depot compared with those who put them in the recycling bin or give them to others to collect the refund.

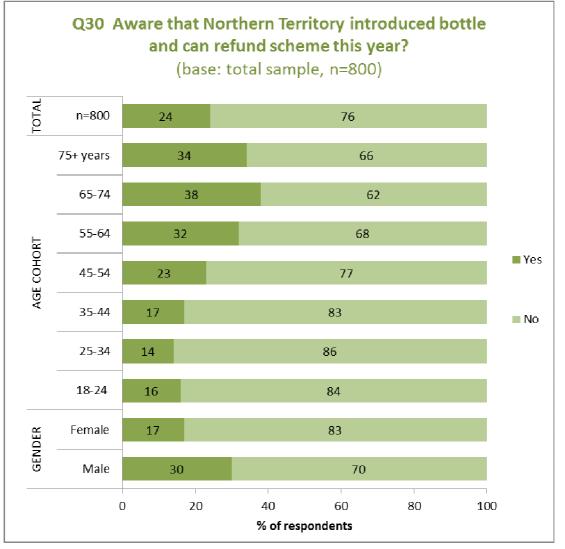
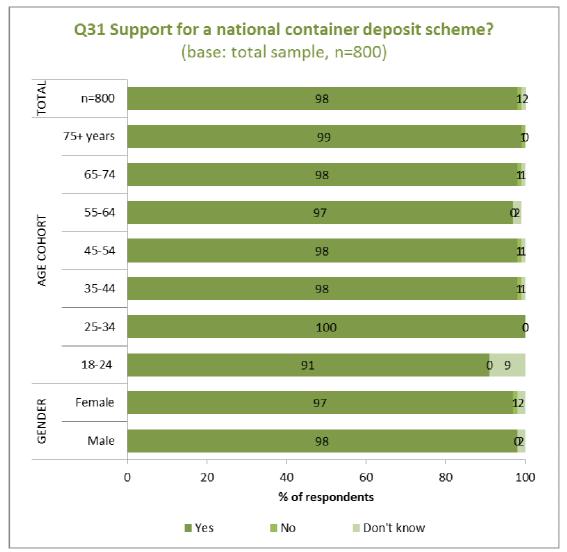


Fig.29: : Northern Territory refund scheme



3.8.2 Support for national container deposit scheme

All respondents were asked if they would support a national container deposit scheme. Support for a national scheme was almost universal (98%).



Only one minor variation was noted, among 18 to 24 year olds (91% support, 9% did not know).

Fig.30: Support for national container deposit scheme

Respondents were also asked what benefits, if any, they thought a national container deposit scheme would bring. They were not prompted with pre-responses.

The most common response was that a national scheme would reduce litter generally across the nation on beaches, national highways and parks / streets (76%).

A further 26% said there would be less recyclable items going to landfill. An increase in recyclable material available across Australia was nominated by 20% of respondents.

All other benefits were mentioned by relatively small proportions of respondents.



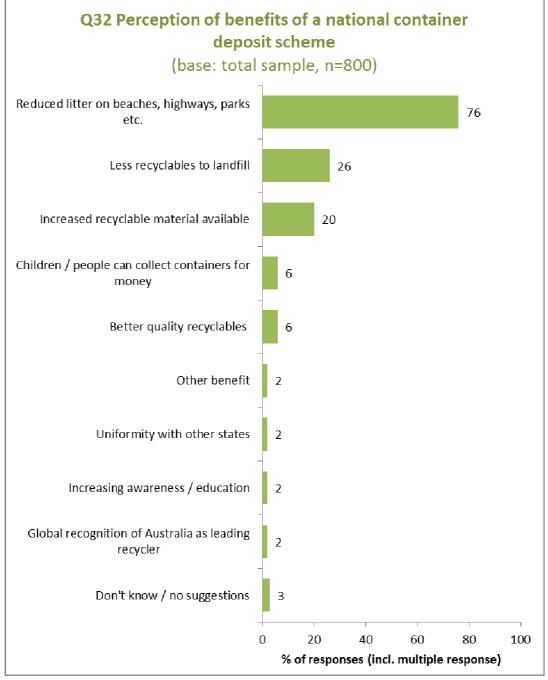


Fig.31: Benefits of national scheme

When the same information was analysed by household type and gender, several significant differences in knowledge about the benefits of the national container deposit scheme were noted. These are shown in the graph overleaf and included:

- Some sub-groups (males, empty nest households and lone person households) showed high incidences of citing the benefit of reduced litter with a national scheme.
- However, females and also families with dependent children, teens or young adults at home showed significantly high incidences of being aware that a national scheme would reduce recyclable materials going to landfill.



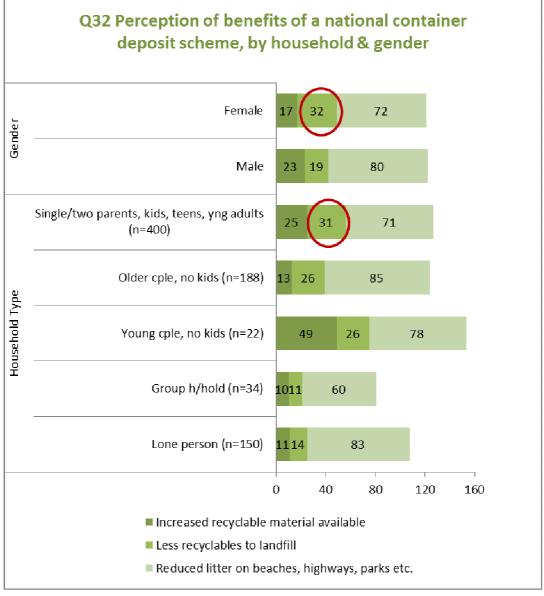


Fig.32: Benefits of national scheme by household type

And when analysed by age cohort, younger respondents (18 to 34 years) were significantly more likely to be aware and nominate that a national scheme would increase the volume of recyclable materials available across Australia.

Whilst these findings do not prove there is greater awareness and understanding among those showing higher proportions of mentioning some issues, there may be a case for suggesting that, in a general sense, younger people, females and families with children may have a broader understanding of the issues and benefits of recycling compared with older generations (who were more likely to focus on litter alone and less likely to raise issues of material going to landfill and also to mention availability of recyclable material across the nation).



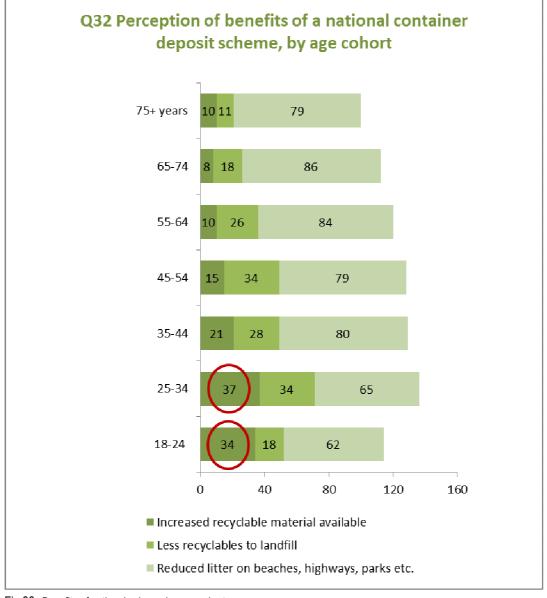


Fig.33: Benefits of national scheme by age cohort



APPENDIX A1: METHODOLOGY



A1.1 The interviewing

This telephone survey was conducted with a random sample of 800 respondents. All interviews were conducted by Harrison Research, using CATI technology (Computer Aided Telephone Interviewing), by IQCA accredited interviewers, in accordance with the Market & Social Research Privacy Principles (M&SRPPs).



The interview duration averaged 10.30 minutes, depending on the answers given by respondents. Prior to the fieldwork, a draft questionnaire (survey instrument) was constructed by Harrison Research with input from the EPA, with some revisions made to the final version. The actual instrument used can be found in *Appendix A2: Questionnaire*.

A1.2 **Resultant sample**

Fieldwork began on Monday 10th September 2012 and finished on Sunday 16th September 2012.

The regional area was over-sampled in relation to actual population in order to ensure a minimum sample size to facilitate statistical analysis as well as ensure that comparison with 2004 was viable (the same over-sampling was undertaken in 2004). The regional split was n=600 metropolitan sample and n=200 regional / country sample.

The raw sample was stratified by gender and age and subsequently weighted to correspond with the population socio-demographic distributions recorded by the Australia Bureau of Statistics in the 2011 Census. The following table shows the raw sample achieved by age and gender, together with the weighted sample distributions:

Sampling Gender	# of respondents (n)		% of respondents	
	Unweighted	Weighted	Unweighted	Weighted
Male	333	389	42	49
Female	467	406	58	51
TOTAL	800	795	100	100
Sampling Age				
18 to 24 years	45	99	6	12
25 to 34 years	33	132	4	17
35 to 44 years	95	138	12	17
45 to 54 years	126	143	16	18
55 to 64 years	182	125	23	16
65 to 74 years	192	81	24	10
75 + years	122	77	15	10
TOTAL	800	795	100	100

Fig.34: Weighted and unweighted sample distribution by age and gender.

Apart from this appendix, all figures throughout the report refer to weighted data.



APPENDIX A2: QUESTIONNAIRE



8498 EPA - CONTAINER DEPOSIT LEGISLATION AWARENESS SURVEY - SEPTEMBER 2012

"Good afternoon/evening, my name is _[Q0IV]_ from Harrison Research. We are conducting a survey about drink container refunds on behalf of the Environment Protection Authority (known as the EPA). In the process, we are seeking the views of a wide range of South Australians and would appreciate your opinions.

_ IF NECESSARY, SAY:_ This is genuine research and I guarantee we are not trying to sell you anything.

SCREEN 1: Does anyone in this household work in market research, in or involved with the recycling industry or the Environment Protection Authority? _IF YES, THANK AND TERMINATE_

Is there anyone living in this household aged 18-24? _IF YES, ASK TO SPEAK WITH THEM OR ARRANGE CALLBACK - IF MORE THAN ONE, ASK FOR ONE WITH LAST BIRTHDAY - RE-INTRODUCE AS REQUIRED - USE UNTIL THIS AGE QUOTA IS FULL_

IF NO, OR IF 18-24 QUOTA FULL: Please may I speak to the person in the household, aged 18 and over, who was the last to have a birthday? _REINTRODUCE OR CALLBACK AS NECESSARY_"

PAUSE

"The survey will take about 15 minutes to go through, depending on your answers. _IF THEY'RE HESITATING BECAUSE OF TIME_ We do need to get opinions from as wide a cross-section as possible; I could call back later if it would be more convenient. _ARRANGE CALLBACK IF REQUIRED OR CONTINUE_

IF CONCERNED ABOUT PRIVACY I assure you that any information you give will remain confidential. Any identifying information, such as this phone number, is removed before we analyse the results. No one's individual answers can be passed on to our clients or anyone else.

And before we start, I just need to let you know that this call may be monitored by my supervisor for training and coaching purposes. May we begin? Thank you."

Q1. AWARE OF CDL

"Q1 Are you aware of South Australia's drink container refund scheme?"

1. Yes

2. No

IF 1 IN Q1 GO Q2

Q1A EXPLANATION OF SCHEME

"Q1A In South Australia, many beverage containers have a refundable deposit, which is used to discourage litter and encourage people to recycle these containers through recycling depots."

Q2. SUPPORT FOR CDL

"Q2 To what extent do you support, or not support, this type of scheme?"

- 1. Do not support at all
- 2. Do not really support
- 3. Neither support nor not support
- 4. Slightly support
- 5. Strongly support



6. Don't know / not sure

Q3G. EFFECTIVENESS OF CDL

"Q3G Using a scale of 0 to 10, 0 being not at all effective and 10 being extremely effective, how effective or not do you think the drink container refund scheme has been in..._READ OUT_" RND

- 1. Encouraging and promoting the recycling and reuse of empty drink containers
- 2. Reducing litter in South Australia
- 3. Reducing the number of empty drink containers that go to landfill

FOR EACH

NUM 0-10, D

Q4. CONTAINER TYPES COVERED BY CDL

"Q4 Which types of containers or drinks do you think are covered by the drink container refund scheme? _UNPROMPTED_" MR

- 1. Beer/Stout/Ale
- 2. Cider and alcoholic lemonade style drinks
- 3. Flavoured milk less than 1 litre
- 4. Flavoured milk one litre or more
- 5. Food jars
- 6. Fruit boxes
- 7. Fruit juice drinks in plastic
- 8. Metal food cans (eg, dog food, soup cans)
- 9. Plain milk
- 10. Pure fruit juice less than 1 litre
- 11. Pure fruit juice one litre or more
- 12. Ready to drink cordials
- 13. Shampoo and conditioner bottles
- 14. Soft drinks
- 15. Spirit based beverages (Scotch and Cola, Gin and Tonic, RTDs such as 'breezers etc)
- 16. Sports and energy drinks
- 17. Water (plain, still or carbonated-spring water, mineral water)
- 18. Wine in glass bottles
- 19. Wine in aluminium or plastic
- 20. Yoghurt drinks
- 21. Other (SPECIFY Q401)
- ---
- 22. Don't know / can't say

GO Q5G

Q401 OTHER CONTAINER TYPES COVERED BY CDL

Q5G. EXPANSION OF DEPOSIT SCHEME

"Q5G To what extent would you support expanding the refund scheme to include other drink containers / beverages? Use a 0 to 10 scale, where 0 is do not support at all and 10 is strongly support. Would you support refunds for...?"

- 1. Plain milk (plastic or cartons)
- 2. Wine in glass bottles
- 3. Fruit juice in containers of 1 litre or more

4. Flavoured milk in containers of 1 litre or more

FOR EACH



Q6 PARTICIPATION IN CDL

EDIT

"Q6 Thinking about your refundable drink containers, using 100 as the total amount of CDL containers, emptied at home, what proportion do you dispose of in...??

Kerbside recycling bin: [Q601...] General waste bin: [Q602...] Recycling depot: [Q603...] Somewhere else: [Q604...] TOTAL: [Q6TOT...T100]" NUM 0-100

GO Q6JP

IF 0 IN Q604 SKIP Q7JP *IF 1-2 IN Q6 GO Q8 *IF 3 IN Q6 GO Q9

Q7. WHERE ELSE PLACE CDL

"Q7 You mentioned that you dispose of refundable drink containers some other way. Where is that? _UNPROMPTED_"

MR

- 1. Give to relative(s) to collect refund
- 2. Give to a charity or community group (e.g. scouts etc.)
- 3. Give to neighbour or friend
- 4. Reuse them at home or work
- 5. Something else
- 6. Don't have CDL containers
- 7. Don't know / can't say

GO Q8JP IF 100 IN Q603 GO Q8JP

Q8. IF NOT RECYCLING DEPOT

"Q8 Why do you choose to dispose of some (or all) of your refundable drink containers in the kerbside recycling or kerbside waste bins rather than taking them to a recycling depot for collection?_UNPROMPTED_" MR

- 1. Not worth it, don't have enough refundable containers
- 2. Depot is too far
- 3. Haven't time / can't be bothered taking to depot
- 4. Nearest depot is not open Saturday afternoons
- 5. Nearest depot is not open Sundays
- 6. Depot not open when I want to use it at another time
- 7. Is recycled anyway through kerbside recycling bin
- 8. Other (SPECIFY Q801)
- 9. No particular reason
- 10. Don't know / can't say

GO Q8JP Q801 OTHER REASON FOR NOT DEPOT



Q9G. AWAY FROM HOME DISPOSAL

"Q9G When you are away from home, do you keep your containers in order to refund them if you are out at.."

- 1. A shopping centre or mall
- 2. The beach
- 3. A park or sporting ground
- 4. Travelling by car
- 5. At a café or restaurant
- FOR EACH

Q9 SCALE

"Q9 _[Q9G]_"

- 1. Yes usually
- 2. Yes sometimes
- 3. No
- 4. Not applicable
- 5. Don't know

Q10. WHO RECEIVES REFUND

"Q10 Does another person return your containers on your behalf? If so, do they keep the money or do you?_UNPROMPTED_"

- 1. I / we return our own containers (member of household)
- 2. Other person I keep money
- 3. Other person they keep money (e.g. charity or community group, relative etc.)
- 4. Other person we share the money
- 5. Don't return containers to recycling depot
- 6. Don't buy beverages in refundable containers

Q11. INFLUENCE ON DECISION

"Q11 What factors might influence your decision to dispose of, or not, your refundable containers while away from home?_UNPROMPTED_" MR

- 1. Collect refund
- 2. Recycling bin nearby
- 3. Waste bin nearby
- 4. Already carrying packages, cannot carry more
- 5. Empty containers might make a mess or break
- 6. Leave at restaurant / café for them to dispose of / obtain refund
- 7. Leave for scavengers
- 8. Use the recycling bin at work
- 9. Other (SPECIFY Q1101)
- ----
- 10. Don't know / can't say
- 11. Don't buy refundable containers while away from home

GO Q11JP

Q1101 OTHER INFLUENCE ON DECISION

IF 5-6 IN Q10 GO Q26



Q12. FREQUENCY OF RETURN TO DEPOT

"Q12 How often do you, or someone else on your behalf, return your empty drink containers to a collection depot?_UNPROMPTED_"

- 1. Once a week or more often
- 2. Once a fortnight
- 3. Once a month
- 4. Every few months
- 5. About once or twice a year
- 6. Less regularly than yearly
- 7. Don't know / can't say

Q13. VOLUME OF RETURNS

"Q13 Approximately how many empty drink containers would you, or they, typically return in one trip?_UNPROMPTED_"

1. Less than 50 2. 50 to 99 3. 100 to 149

- 4. 150 to 199
- 4. 150 to 199 5. 200 to 249
- 6. 250 to 249
- 7. 300 to 349
- 8. 350 to 399
- 9. 400 to 449
- 10. 450 to 499
- 11. 500 or more
- 12. Don't know / can't say

Q14. SORTING BY MATERIAL

"Q14 Do you usually sort your containers by material type, for example glass, plastic, aluminium, before taking them to a depot?"

- 1. Yes always
- 2. Yes sometimes
- 3. No
- 4. Don't know / can't say

Q15. CALCULATE NUMBER

"Q15 Do you usually count your containers before taking them to a depot?"

- 1. Yes always
- 2. Yes sometimes
- 3. No
- 4. Don't know / can't say

Q16. WHICH DEPOT

"Q16 Do you usually return your containers to the same depot? If so, approximately how far away is that depot from your home?"

- 1. Yes within 5km
- 2. Yes within 10km
- 3. Yes within 15km
- 4. Yes within 20km
- 5. Yes over 20km away
- 6. No I do not have a regular depot
- 7. Don't know which depot is used



Q17. WHICH DAYS

"Q17 Do you usually return them during the week OR at weekends? _INTERVIEWER NOTE: IF THEY SOMETIMES RETURN CONTAINERS DURING WEEKDAYS WHEN ON HOLIDAYS FROM WORK, FIND OUT IF THEY USUALLY RETURN THEM ON WEEKENDS AND RECORD THAT_"

1. Weekdays (SPECIFY Q1701)

2. Weekends (SPECIFY Q1702)

3. Don't know / can't say

Q18. SATISFIED WITH DEPOT TRADING HOURS

"Q18 To what extent are you satisfied with the trading hours of your depot? Use a 1 to 5 scale, where 1 is not at all satisfied and 5 is very satisfied_N FOR NOT APPLICABLE, D FOR DON'T KNOW_" NUM 1-5, D, N

IF 3-5 IN Q18 GO Q21

Q19. WHY NOT SATISFIED

"Q19 Why aren't you satisfied with the hours your nearest depot is open? _OPEN-ENDED. WRITE NA IS NOT APPLICABLE_"

Q20. ADDITIONAL OPENING HOURS

"Q20 What additional hours do you think your local depot should be open?" MR

- 1. Saturday Morning
- 2. Saturday Afternoon
- 3. Sunday Morning
- 4. Sunday Afternoon
- 5. Late night Thursday
- 6. Later in evening each weeknight
- 7. Something else (SPECIFY Q2001)
- 8. Don't know / can't say

GO Q21 Q2001 OTHER ADDITIONAL OPENING HOURS

Q21. SATISFACTION WITH DEPOT SERVICE

"Q21 To what extent are you satisfied with the level of service at your depot? Use a 1 to 5 scale, where 1 is not at all satisfied and 5 is very satisfied_USE N FOR NOT APPLICABLE_" NUM 1-5, D, N

IF 3-5 IN Q21 GO Q23

Q22. WHY NOT SATISFIED "Q22 Why aren't you satisfied with the level of service at your depot? _OPEN-ENDED, WRITE NA FOR NOT APPLICABLE_"

Q23. TIME TAKEN TO COLLECT REFUND

"Q23 How much time, on average, does it usually take to collect the refund on your cans and bottles, from the time you arrive at the depot and including waiting time?_"

1. Less than 5 minutes

- 2. 5-10 minutes
- 3. 10-15 minutes
- 4. 15-20 minutes



- 5. 20-30 minutes
- 6. 30-45 minutes
- 7. 45 minutes to an hour
- 8. Over an hour
- 9. Not applicable

Q24. OTHER MATERIALS TO DEPOT

"Q24 Do you, or someone else on your behalf, take any OTHER materials for recycling at the depot, when you are refunding your containers?"

- 1. Yes, usually or always
- 2. Yes, sometimes
- 3. No
- 4. Don't know
- IF 3-4 IN Q24 GO Q26

Q25. WHICH OTHER MATERIALS TO DEPOT

"Q25 Which OTHER materials do you take to a depot for recycling?_UNPROMPTED_" MR

- 1. Cardboard
- 2. E-waste
- 3. Scrap metal
- 4. Used car batteries
- 5. Other

Q26. CURRENT REFUND SUFFICIENT

"Q26 Do you think the current refund amount of 10 cents is sufficient to encourage the return of empty drink containers? If no, what refund amount do you think would be better?"

- 1. Yes, 10 cents is sufficient
- 2. No (SPECIFY Q2601)
- 3. Don't know/not sure

GO Q27A

Q2601 OTHER CURRENT REFUND SUFFICIENT

Q27A RVM

"Q27A We would like to talk about Reverse Vending Machines, that is self-automated machines where containers are deposited one at a time and the 10 cents per container payment is paid." BLANK

Q27. LIKELY TO USE RVM FOR CASH

"Q27 To what extent would you be likely to use a reverse vending machine for container refunds, if one was available at say, your local shopping centre? Use a 1 to 5 scale, where 1 is not at all likely and 5 is very likely."

NUM 1-5, D

Q28. OTHER SUGGESTIONS FOR AUTOMATED REFUND

"Q28 Do you have any other suggestions for obtaining your refund from recyclable containers through reverse vending machines? _UNPROMPTED_" MR

1. Crediting amount to credit, debit or savings card

2. Shopping vouchers equal to the refund amount



3. Something else

4. Don't know / can't say

Q29. HOW DISPOSE OF NON-REFUNDABLE CONTAINERS

"Q29 How do you MAINLY dispose of your non-refundable drink containers, for example plain milk, wine, fruit juice and flavoured milk over 1 litre?_UNPROMPTED_"

- 1. Put in waste bin
- 2. Put in recycling bin
- 3. Take to recycling depot
- 4. Other (SPECIFY Q2901)
- 5. Don't know / can't recall

GO Q30

Q2901 OTHER DISPOSAL OF NON-REFUNDABLE CONTAINERS

Q30. NORTHERN TERRITORY

"Q30 Are you aware that the Northern Territory introduced a bottle and can refund scheme this year?"

1. Yes

2. No

Q31. SUPPORT FOR NATIONAL DEPOSIT SCHEME

"Q31 Would you support a national container deposit scheme?"

1. Yes

2. No

3. Don't know

Q32. BENEFITS OF NATIONAL SCHEME

"Q32 What benefits, if any, do you think this would bring?_UNPROMPTED_" MR

- 1. Reduced litter on beaches, national highways and parks
- 2. Less recyclable items going to landfill
- 3. Increased recyclable material available across Australia
- 4. Better quality recyclables for Australia generally
- 5. Global recognition that Australia is a leading world recycler
- 6. Other (SPECIFY Q3201)
- 7. No benefits / none
- 8. Don't know / can't think of any

GO Q33

Q3201 OTHER BENEFITS OF NATIONAL SCHEME

*DEMOGRAPHICS

Q33. GENDER.

"Q33 Record gender (do not ask unless can't tell)"

- 1. Male
- 2. Female

Q34. YOB "Q34 What year were you born? _RECORD NUMBER, D IF REFUSED_" NUM 1900-1994, D



Q35. HOUSEHOLD

"Q35 Which of the following best describes your household? _READ OUT 1-8_"

- 1. Lone person household
- 2. Group household of related or unrelated adults
- 3. Young couple, no children
- 4. Older couple, no children at home
- 5. Couple or single parent with mainly pre-school children
- 6. Couple or single parent with mainly primary-school children
- 7. Couple or single parent with mainly teenage children
- 8. Couple or single parent with mainly adult children still living at home

9. Refused

Q36. EMPLOYMENT

"Q36 What is your current employment status?"

- 1. Part-time employment
- 2. Full-time employment
- 3. Unemployed
- 4. Home duties
- 5. Pensioner (non-age pension)
- 6. Retired / age pensioner
- 7. Student
- 8. Refused

Q37. POSTCODE "Q37 WHAT IS YOUR POSTCODE? _ENTER NUMBER, 5999 IF DON'T KNOW_" NUM 5000-5800, 5999

Q38. CLOSE

"Q38 That concludes the survey. On behalf of the EPA and Harrison Research, thank you for your time and valuable contribution to our research." BLANK

1. 800 Total 2. 600 Metro 3. 200 Regional

USE 1 IF 1 OR 2 IN Q0LOC USE 2 IF 1 IN Q0LOC USE 3 IF 2 IN Q0LOC



APPENDIX A3: MARGIN FOR ERROR



A1.3 Margin for error:

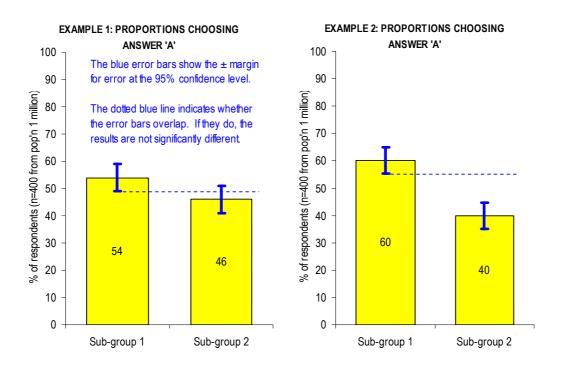
Because nearly all market and social research evaluates results based on population *samples*, rather than a census where everyone is consulted, there is an inherent degree of error in the results. However, if the sample obtained is a properly randomised section of the target population, there are statistical tests that will calculate the degree of accuracy for those results - known as the margin for error or confidence interval.

Unfortunately for the layperson, there is no single figure that says, 'this is a statistically significant difference'. The factors that go into the calculation of statistical differences include:

- **population size** the total number of people in the target audience, not in the whole population. For example, if an organisation were researching its casual staff's views on weekend work, the 'population' would be the total number of casual staff.
- **sample size** the number of respondents, or people taking part in a survey.
- the **desired level of confidence** in the result for example, a 95% confidence level simply means that, if we ran the identical survey and sampling methodology 100 times, you would expect to get a result within the calculated margin for error 95 times out of 100.
- the proximity of the result to the midpoint.

This latter element (proximity to the midpoint) means that, regardless of sample or population size, a figure close to 50% is inherently less reliable than a figure close to 100%. As an example, if you wish to be 95% confident in the results for a population (N) of 1 million and a sample (n) of 400, a result of 50% would be subject to a $\pm 4.9\%$ margin for error. In other words, you could be 95% confident that the real result would be somewhere between 45.1% and 54.9%. However, with the same population, sample and 95% confidence level, a result of 90% saying yes or no would be subject to a margin for error of only $\pm 2.94\%$, i.e. the real result would be between 87.06% and 92.94%.

The following graphs may illustrate more clearly the way margin for error works. In each case, we have calculated the confidence interval for the results. If the intervals overlap, then the differences are not statistically significant; if there is no overlap, they are reliably different.





A1.4 Interpreting results:

Fortunately, researchers no longer have to check every result manually; our statistical analysis software packages tell us when figures are statistically different from one another and at what confidence level. However, the skill of the trained researcher is in *interpreting* the results and considering context, not just checking the numbers.

For example, suppose that significantly more people aged 65-74 were aware of advertising for a sports store than people aged 75-84. It is significant, but is it relevant - in the context of the product and its major target audience of, say; active people aged 15-54? It is critical to good analysis that we judge relevance and highlight the key issues, not waste clients' time by just regurgitating numbers that the computer says are statistically different.