

**TRUSCOTT
RESEARCH**

197 Payneham Road
St Peters SA 5069
Phone (08) 8363 9399
Mobile 0416 020 555
Fax (08) 8363 1076
maggie@
truscottresearch.com.au

ZERO WASTE SA

FOOD WASTE PILOT SURVEY

MARKET RESEARCH REPORT

SEPTEMBER 2009

N&M T Pty Ltd
ACN 082 514 967 atf
N&M Truscott Trust t/a
TRUSCOTT RESEARCH

CONTENTS

INTRODUCTION.....	1
EXECUTIVE SUMMARY.....	3
SAMPLE CHARACTERISTICS (Qs 1, 31- 38).....	14
COMMENTARY	25
Awareness of food waste system (Q 2).....	25
Types of waste suitable for food waste system (Q 3).....	26
Placement of food waste (Q 5).....	29
Disposal of lawn clippings and garden prunings (Q 8)	31
Use of a compost bin/system (Q9)	33
Ownership and use of green organics bin (Qs 6, 7)	35
Increased level of awareness (Q 18).....	39
Use of food waste system (Q 10)	41
Reasons for not using the food waste system (Q 11).....	43
Continuing use of the food waste system (Q 12).....	45
Reasons for ceasing use of the food waste system (Q 13)	48
Number of times / week container emptied (Q 14)	50
Prompts for emptying container (Q 15)	53
Difficulty in using food waste system (Q 16).....	54
Extent of use of the food waste system (Q 17).....	56
Household use of the food waste system (Q 35).....	58
Problems or shortcomings with food waste trial (Q 19)	60
Incidence of capacity issues residual waste bin (Q 20)	62
Benchmark rating of three bin system (Q21)	64
Rating of food waste system (Q 22)	66
Rating of collection frequency - residual waste bin (Q23)	69
Rating of collection frequency - green organics bin (Q24).....	71
Predicted future use of food waste system (Q25).....	73
Cost perceptions (Qs 26, 27).....	76
Willingness to pay for refill bags cost \$15/150 (Q 28)	81
Willingness to pay for bags after first 150 (Q 29).....	82
Further comments (Q 30)	83
EXCEPTION REPORTING	85
QUESTIONNAIRE.....	90

INTRODUCTION

Truscott Research was commissioned by Zero Waste SA to undertake a study of residents in areas which had been included in a pilot of two systems – the **Bio Basket** and the **Kitchen Caddy** – which are designed to reduce the amount of waste going to landfill.

The trial involves householders separating food scraps out of the residual waste stream so that they are composted rather than contributing to landfill. The Cities of **Whyalla** and **Charles Sturt** opted to trial both systems.

All other councils trialled the Bio Basket system. These were:

- **Adelaide** (Adelaide CBD, North Adelaide)
- **Campbelltown** (Athelstone and Hectorville)
- **Light** (Roseworthy, Hewett)
- **Mallala** (Mallala, Two Wells, Dublin)
- **Mitcham** (Pasadena, Belair, Glenalta)
- **Norwood, Payneham & St Peters** (St Peters and Kensington)
- **Wattle Range** (Penola, Millicent etc.)
- **West Torrens** (Marleston, Mile End, Netley, Richmond, Thebarton).

In the **Bio Basket System**, food scraps are put into compostable bags fitted into the Bio Basket, which is designed to sit on a kitchen bench. When full, or every 2 – 3 days, the bags are placed in the green organics bin.

The **Kitchen Caddy** is a simple lidded bin with no bags or ventilation. The Caddy is emptied directly into the green organics bin.

Some areas included in the trial (both NPSP areas, Hectorville, Mallala and one of the Wattle Range areas) had fortnightly residual waste collection. In all areas, green organics bins were collected fortnightly.



The survey was carried out 4 to 6 months after the commencement of the pilot (individual councils introduced the systems from December 2008 to February 2009), with 4260 interviews taking place between May and July 2009. Most interviews were conducted by phone. Supplementary door to door interviewing was conducted in selected areas (all NPSP interviews and smaller numbers in Whyalla, Hectorville and Seaton).

Area specific reports have already been produced for each Council and this document reports on overall results, highlighting differences by area and other variants.

This document also has a section titled **exception reporting** which highlights, on a council by council basis, questions where a particular council area differed to a significant extent from the aggregate. This was not provided with the original individual council reports as many of these were analysed before interviewing in other areas was concluded.

In addition to this survey, a number of other methods are being used to evaluate the trial.

A questionnaire was developed which was designed to:

- gauge awareness and understanding of the food waste system;
- determine patterns of use;
- identify barriers to using the system and difficulties encountered by users;
- examine future use intentions;
- examine other aspects of behaviour relating to household waste – use of green organics bins, composting and disposal of green waste.

EXECUTIVE SUMMARY

AWARENESS AND UNDERSTANDING OF FOOD WASTE SYSTEMS

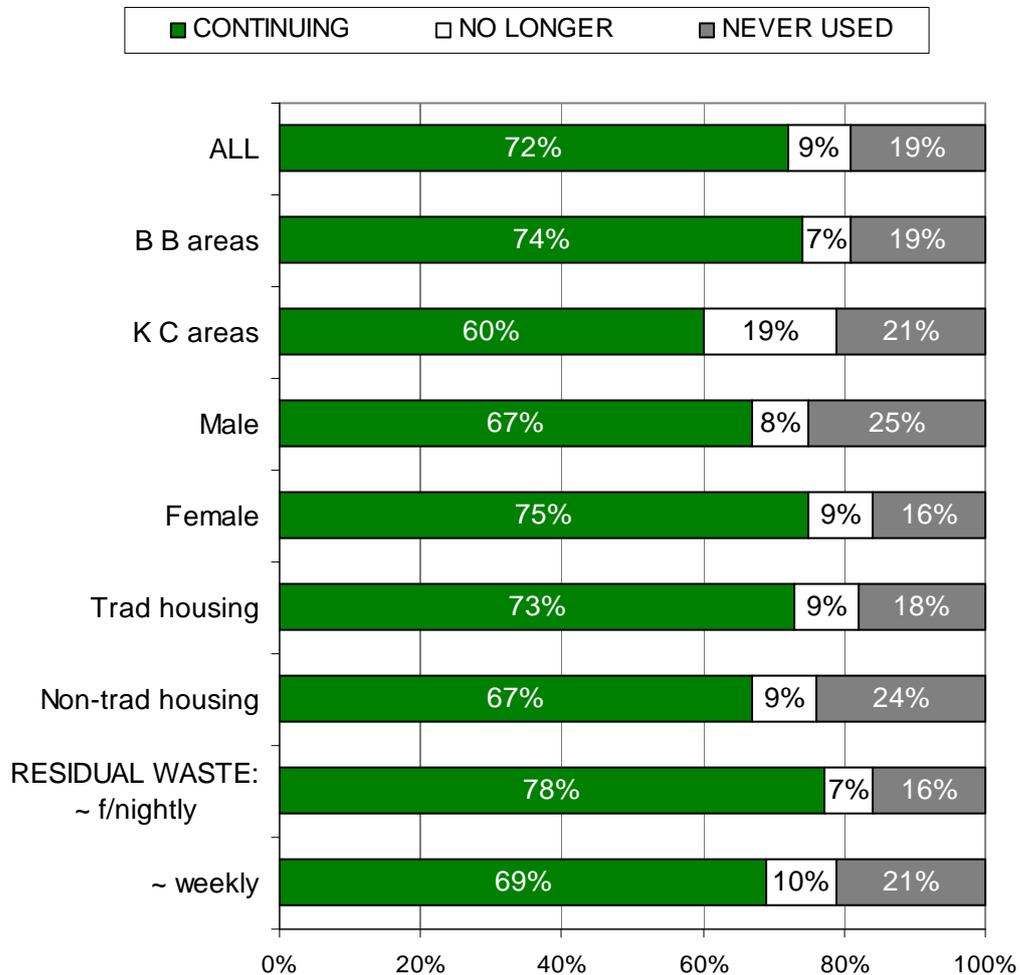
- 4260 residents of the 15 trial areas were interviewed four to six months after the commencement of the pilot. The 13 Bio Basket areas (3624 interviews) and the two Kitchen Caddy areas (636) were all represented in proportion to their respective sizes
- Awareness of the food waste systems was almost universal – 97%.
- Whereas there was widespread awareness that fruit and vegetable scraps can be placed in the food waste systems (77% of those aware of the system) and half were aware that mixed food scraps are allowable, awareness that other types of food waste can be included was lower:

■ Fruit, vegetable scraps	77%
■ Leftovers – mixed food scraps, processed food etc	50%
■ Tissues, paper towels	38%
■ Meat scraps	30%
■ Tea bags, coffee grounds	25%
■ Bones	24%
■ Egg shells	22%
■ Bread, cereals	14%
- The vast majority of respondents - 86% - were correct in saying that the food waste from either system should go in the **green organics bin**. A further 3% correctly identified **home composting** as another option. (These figures exclude the 3% not aware of the trial at all).
- Awareness levels were slightly lower in Kitchen Caddy areas.

PATTERNS OF USE

- 81% of all respondents indicated that they have used the food waste systems provided as part of the pilot.
- Most of these (72% of all respondents) were still using it at the time of interview. The Bio Basket has significantly higher incidence of continued use – 74% compared with 60% for the Kitchen Caddy.

FOOD SYSTEM - USAGE SUMMARY

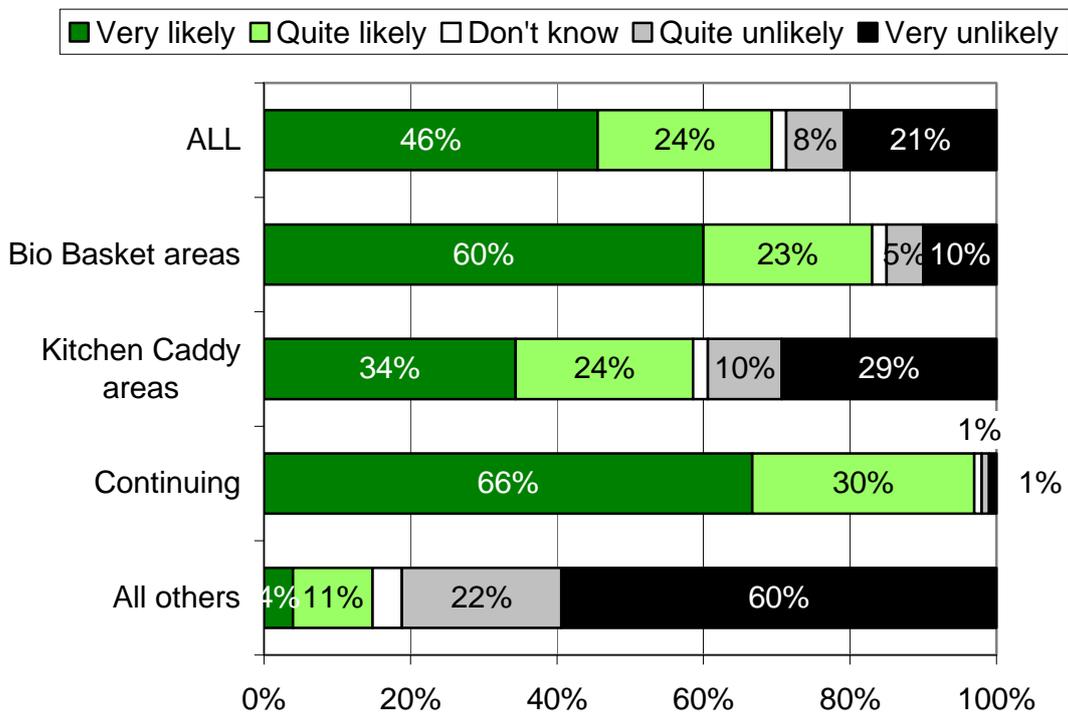


- 
- For respondents who were still using the system at the time of the survey, the number of times the container was emptied ranged from 1 to 28 per week, with a mean of 3.2 times per week – 3.6 times a week in the case of Kitchen Caddy users.
 - 45% of continuing users claimed to use the system for **everything possible**. A further 32% used it for **most things**.
 - In 60% of all households, the system was used by everyone. 24% of households had only one user, but most of these (15%) were single person households.

PREDICTED FUTURE USE

- The proportion of those using their food waste system who indicated they were likely to continue long term was very high (93%), with only 4% saying they would be unlikely to continue.
- Overall, 72% pronounced themselves likely to use the system if it is continued.
- The response from the Bio Basket areas was somewhat more favourable, with 73% likely to continue to use the system, including 56% who considered it very likely.
- The corresponding figures for the Kitchen Caddy area were not quite as positive. 63% said they were likely to continue to use the system, including 34% who considered it very likely.

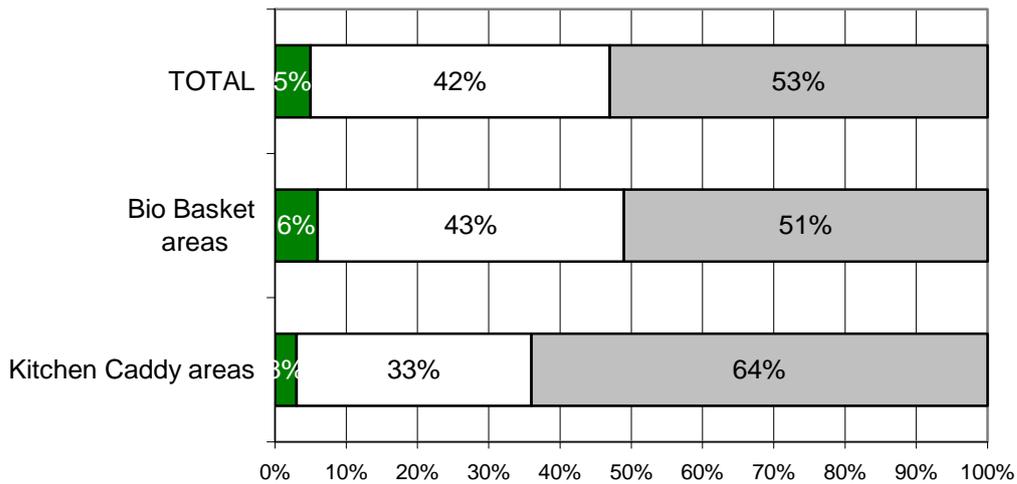
PREDICTED FUTURE USE



- If we isolate the responses of the people who were still using the food waste system at the time of interview, we find that 69% of people living in the Bio Basket areas were still using that system and intending to continue. The corresponding figure for the Kitchen Caddy system was 56%.
- However, 53% are not prepared to pay anything extra for this system through their council rates.

WILLINGNESS TO PAY

- Implement at any cost
- Willing to pay up to \$20
- Not willing to pay any extra



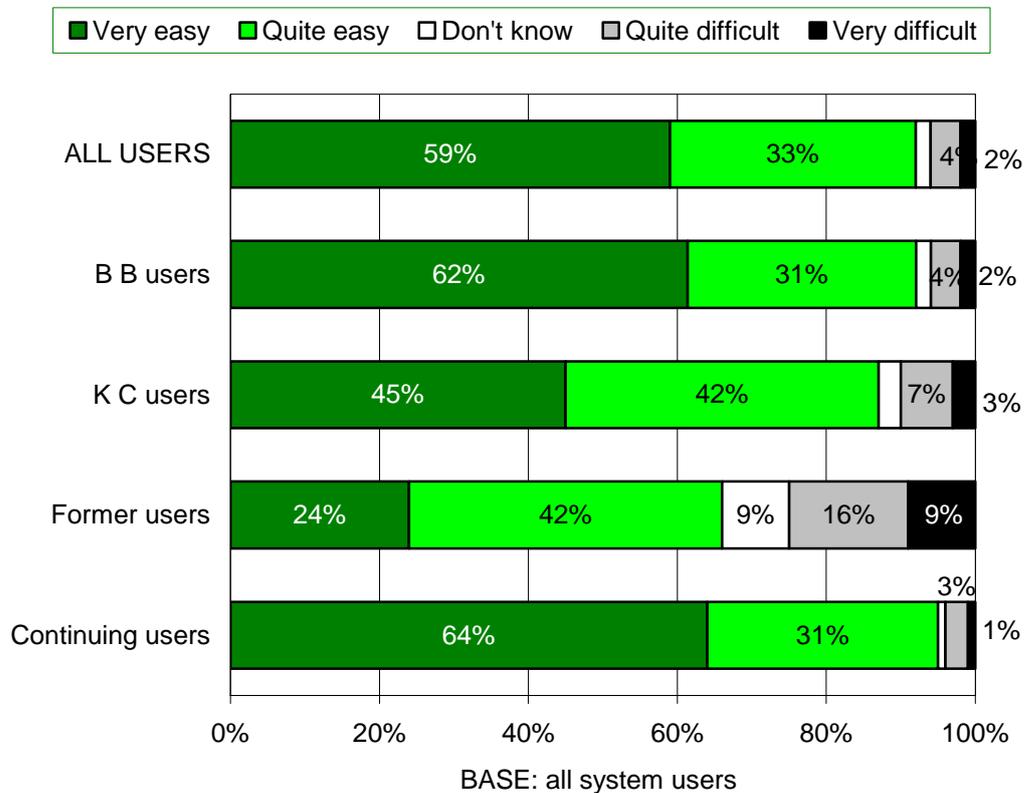
- Likely future users who are willing to pay at least \$5 a year for the food waste system constitute 39% of the total sample. Segmenting this by the particular waste system respondents were exposed to, the figures are 49% in the Bio Basket areas (excluding Campbelltown – these residents were not asked this question) and 30% in the Kitchen Caddy areas.

- 
- All respondents who had used the Bio Basket system or considered themselves likely to use the system in the future were asked if they would be prepared to pay for re-fill bags at a cost of \$15 for a roll of 150 bags on an on-going basis. 53% were prepared to pay this cost. The people responding positively represent 44% of the total sample.
 - 70% of respondents who used more than 3 bags/week in the Bio Basket trial felt it **likely** they would continue to use the system if council supplied only enough free bags for 3 bags to be used a week and they had to pay \$15 for a roll of 150 additional bags.

BARRIERS TO USING THE SYSTEM AND DIFFICULTIES ENCOUNTERED BY USERS

- Overall, 92% of those who have used either food waste system rated it as **easy** to use. Again, response for the Bio Basket was somewhat more positive than for the Kitchen Caddy.
- 64% of continuing users and 24% of former users found the system **very easy to use**. Most of the remainder indicated that it was **quite easy**.

EASE OF USING FOOD WASTE SYSTEM



-
- Home composting and feeding scraps to animals accounted for 27% of people who chose not to participate in the trial.
 - 19% of residents in the Kitchen Caddy areas had tried the system and stopped, compared with 7% in the Bio Basket areas. The former group overwhelmingly reported problems with flies, odours etc while 25% of those in Bio Basket areas had reverted to previous composting regimes.
 - 61% of system users felt there were no problems with the food waste systems. The issue most often mentioned was a **smelly green organics bin** problem (23% of Kitchen Caddy respondents), while 8% of Bio Basket respondents mentioned various problems with the **bags** or the **basket** itself.

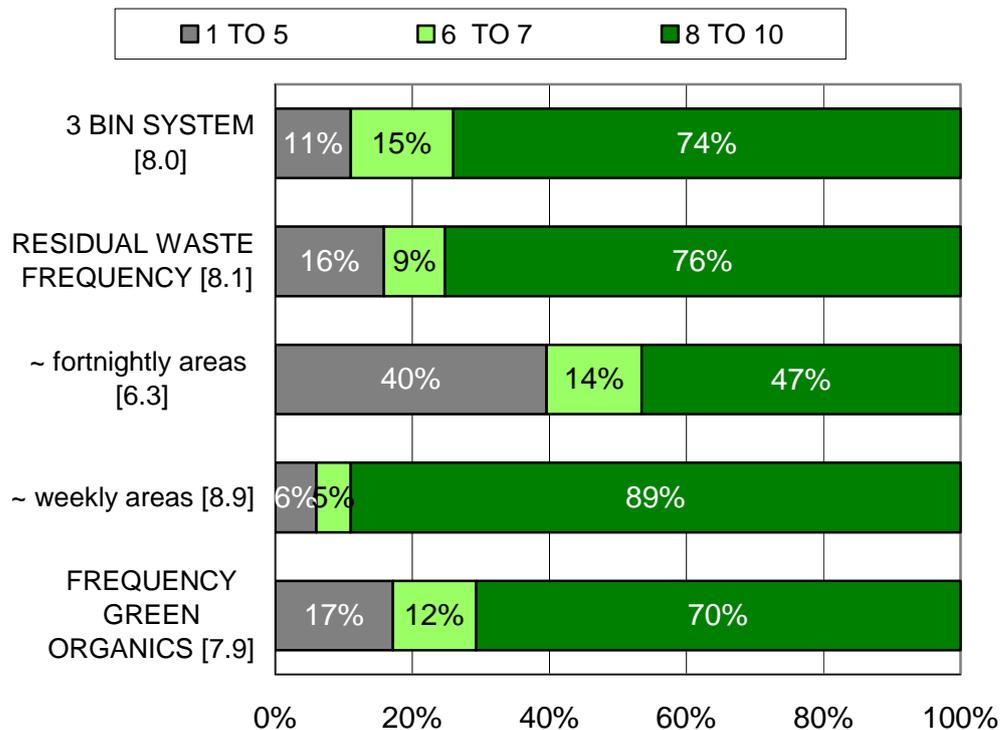
OTHER ASPECTS OF BEHAVIOUR RELATING TO HOUSEHOLD WASTE

- 98% of respondents have a green organics bin.
- 84% of respondents who have a green organics bin put this bin out every fortnight.
- 81% of those who had used either food waste system indicated that this experience had made them more aware of what can be put in the green organics bin.
- 85% of all respondents regularly dispose of lawn clippings or garden prunings in their **green organics bin**. The other relatively popular response was **spread on garden** or **compost bin** (25%).
- 33% of respondents own a compost bin or compost system and 30% claimed to use it on a regular basis.

PERFORMANCE RATINGS – WASTE COLLECTION

- Residents were generally happy with the three bin system, with three quarters giving a rating of 8/10 or better. They were also generally happy with the green organics collection frequency
- The residual waste bin collection frequency was very well regarded in areas with weekly collection (89% rated at 8/10 or better) – but in areas with fortnightly collection, high ratings (8+/10 – 47%) were almost balanced by low ratings (1-5/10 – 40%).

RATINGS

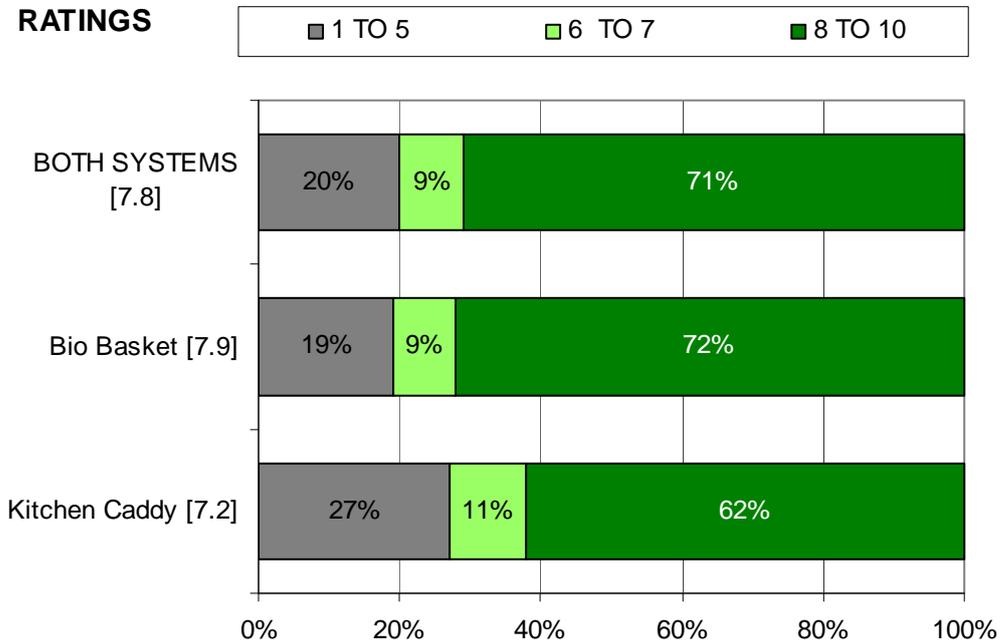


Please note that, due to rounding, percentages do not always sum to 100%

- Respondents living in areas where the residual waste bin was collected fortnightly were asked whether they experienced capacity issues during the trial ...
 - 24% claimed to have had a problem every fortnight.
 - 12% experienced problems less frequently.
 - 64% reported that there were no capacity problems.

PERFORMANCE RATINGS – FOOD WASTE SYSTEMS

- 72% of people in the Bio Basket area gave that food waste system a rating of 8/10 or better. Ratings for the Kitchen Caddy system were somewhat lower, with 62% giving a rating of 8/10 or better.



SAMPLE CHARACTERISTICS (Qs 1, 31- 38)

A total of 4260 residents were interviewed across the 15 trial areas. The survey was carried out 4 to 6 months after the commencement of the pilot (individual councils introduced the systems from December 2008 to February 2009), with 4260 interviews taking place between May and July 2009. Households were selected at random from listing supplied by individual councils. Sample sizes were calculated to give results that are accurate to $\pm 5\%$ at the 95% confidence level.

Sample size	required	achieved
Light	282	282
Mallala **	282	282
Wattle Range – fortnightly *	254	254
Wattle Range - weekly	343	345
Whyalla - Bio Basket	269	274
Whyalla - Kitchen Caddy	322	323
C Sturt - Kitchen Caddy	311	313
C Sturt - Bio Basket	295	308
Adelaide	260	280
Campbelltown – Hectorville *	204	211
Campbelltown - Athelstone	216	216
Mitcham	272	279
NPSP – Kensington *	218	258
NPSP - St Peters *	217	308
West Torrens	322	327
TOTAL	4067	4260



Areas marked (*) in the preceding table were characterised by fortnightly residual waste collection. In Mallala (**), the size of the bin was effectively halved at the start of the trial.

In all areas, green organics bins were collected fortnightly.

Campbelltown terminated the trial towards the end of the interviewing period (19 May 2009) which may have affected responses to questions about future use of the Bio Basket system.

Most interviews (3561) were conducted by phone.

The City of Norwood Payneham and St Peters requested that all households in the trial area should be approached for interview. For practical reasons, all of this interviewing was done face to face.

Supplementary door to door interviewing was conducted in selected areas - Whyalla (54), Hectorville (54) and Seaton (25) - to improve response rates in localities with a higher transient population).

The questionnaire included a number of questions about the dwelling and its occupants. These are discussed in the following pages.

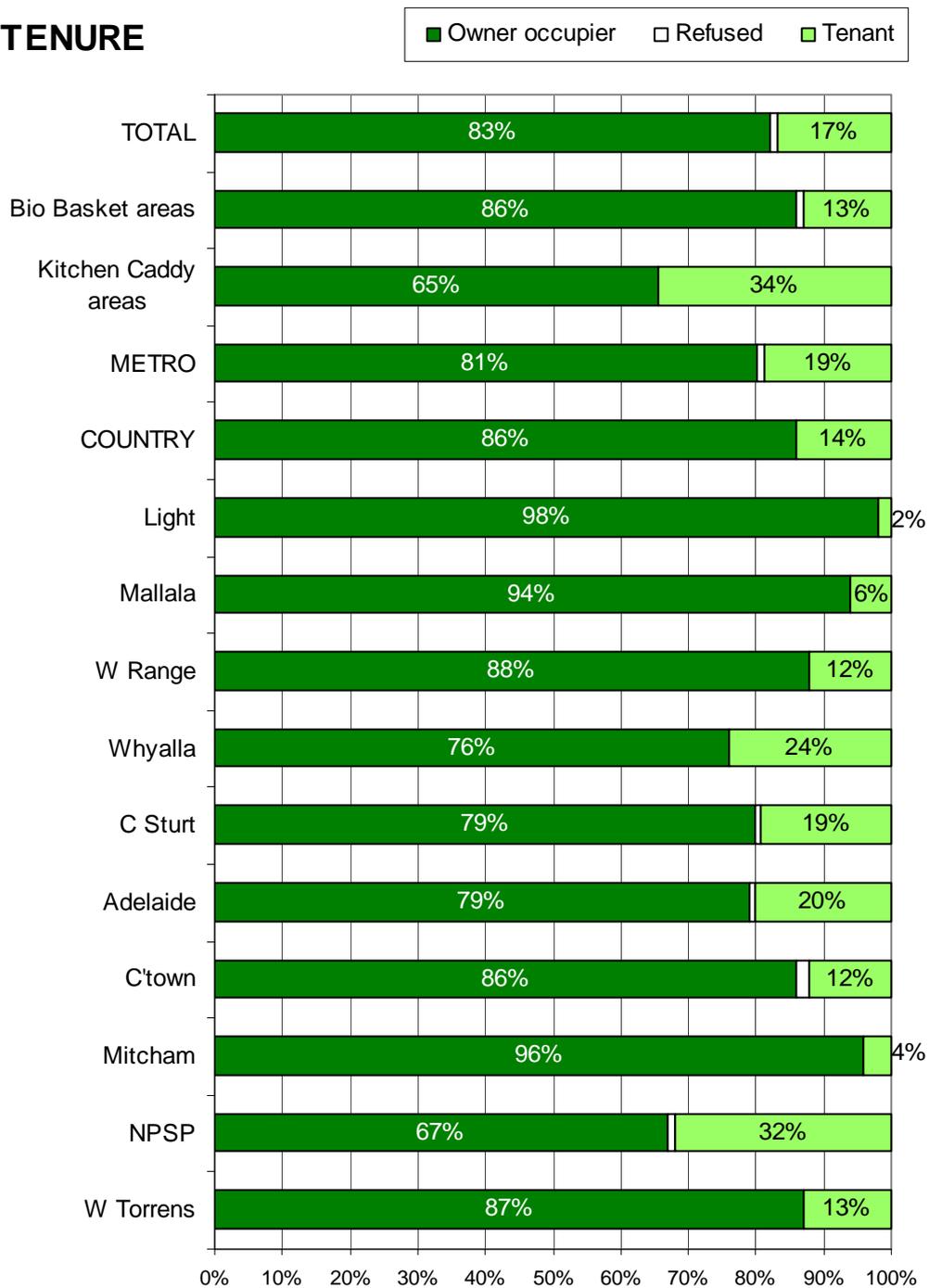
Overall, 83% of respondents owned their home, while 17% were renting. However, as shown in the chart on the next page, this varied considerably by area.

Light and Mitcham were characterised by very high owner occupancy (98% and 96% respectively).

In contrast, 32% of those interviewed in Norwood Payneham & St Peters were tenants. A high concentration of tenants was also recorded in the Whyalla sample (24%)

Kitchen Caddy areas collectively had 34% who were renting their homes, while the corresponding proportion in Bio Basket areas was 13%.

TENURE



Please note that, due to rounding, percentages do not always sum to 100%

Overall, 76% of respondents live in a traditional detached house, while 8% live in an older style maisonette (such as those typically constructed by the SA Housing Trust) – that is, a home with a reasonably large block. Together, these comprise 84% of the sample.

The remainder were in homes with small blocks - units, flats or courtyard homes. There were also some rural living allotments in the country areas.

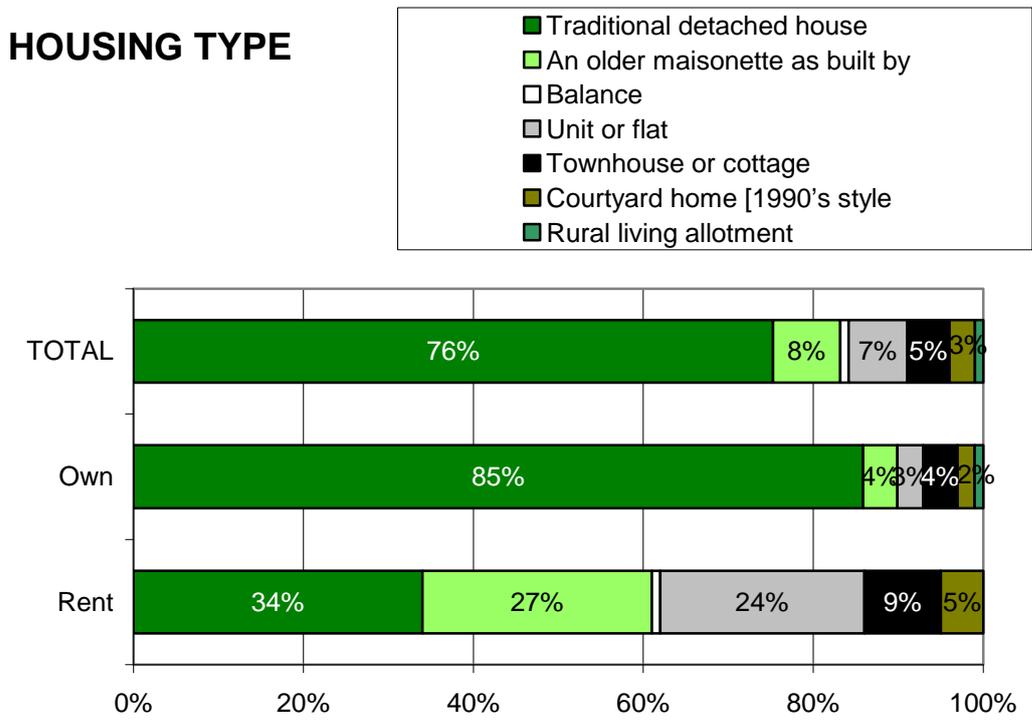
In the Bio Basket areas, traditional detached housing was pre-eminent – accounting for 80% of this sample.

However, in the Kitchen Caddy areas, there was more diversity, with SAHT style housing making up 37% of the total.

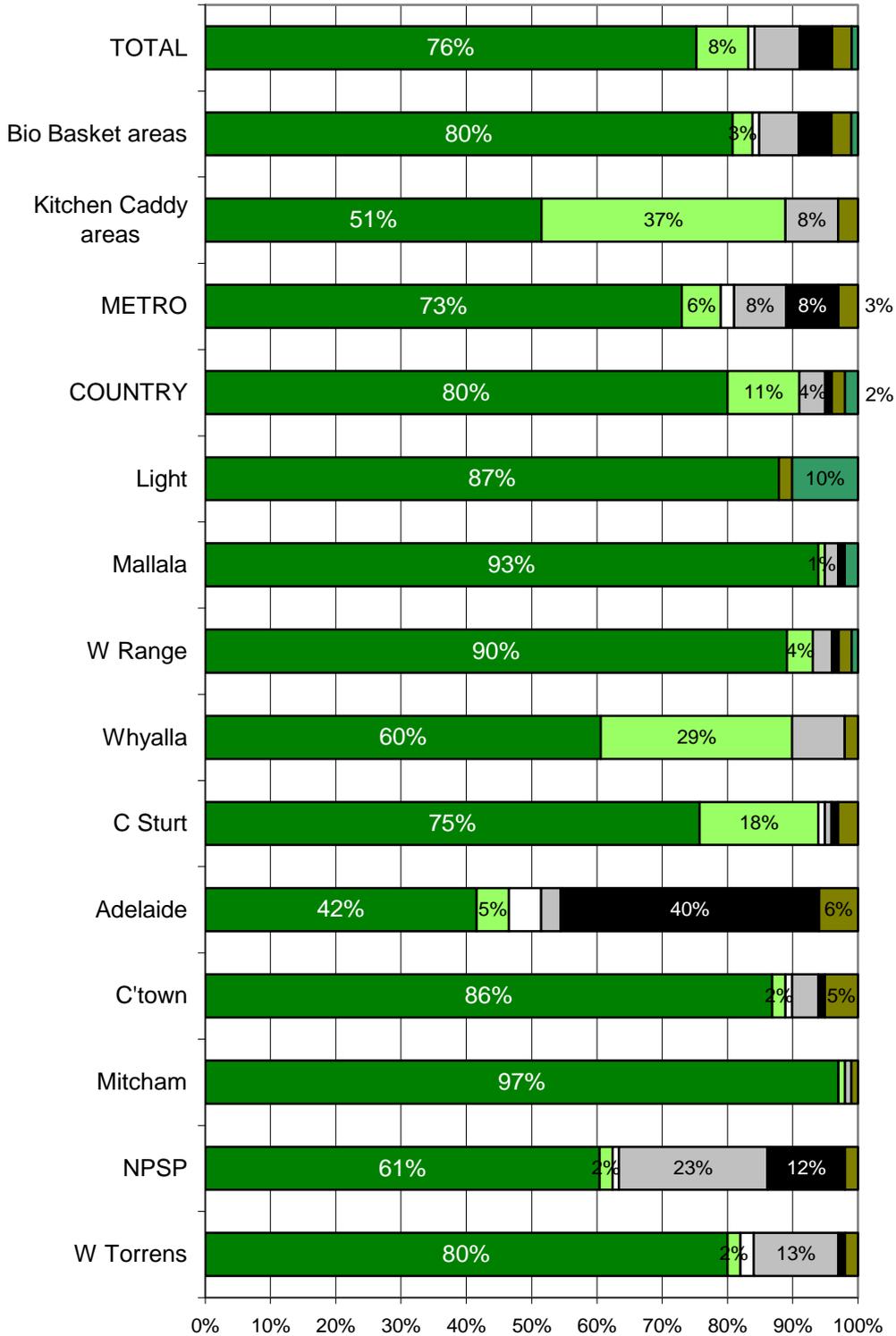
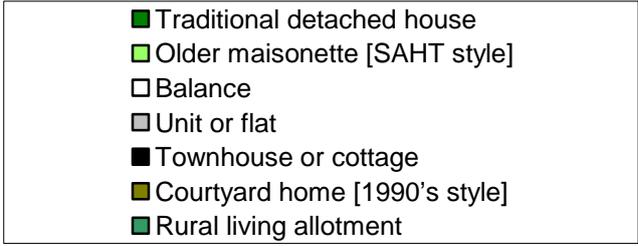
In all areas except Kensington (where units, flats and townhouses constituted 58% of the sample), large blocks were the norm.

The chart on the following page gives the area breakdown.

It is also worth noting that owner occupiers were predominantly in traditional detached dwellings with tenants in a more diverse mix of housing types.



HOUSING TYPE



Further questioning revealed that respondents had lived at their current address for up to 88 years, with a mean period of residence of 17 years.

One third of respondents (30%) have been living at their current address for more than 20 years. A further 23% have been there for between 11 and 20 years, while 46% have been there for less than 10.

Years at current address	(n=4225)
0-5 years	25%
6-10 years	21%
11-20 years	23%
21-30 years	14%
31-40 years	9%
More than 40 years	8%

Both Bio Basket and Kitchen Caddy areas had length of residence profiles very similar to the aggregate, with mean figures of 17 and 18 years respectively.

47% of tenants had periods of residence of no more than 5 years.

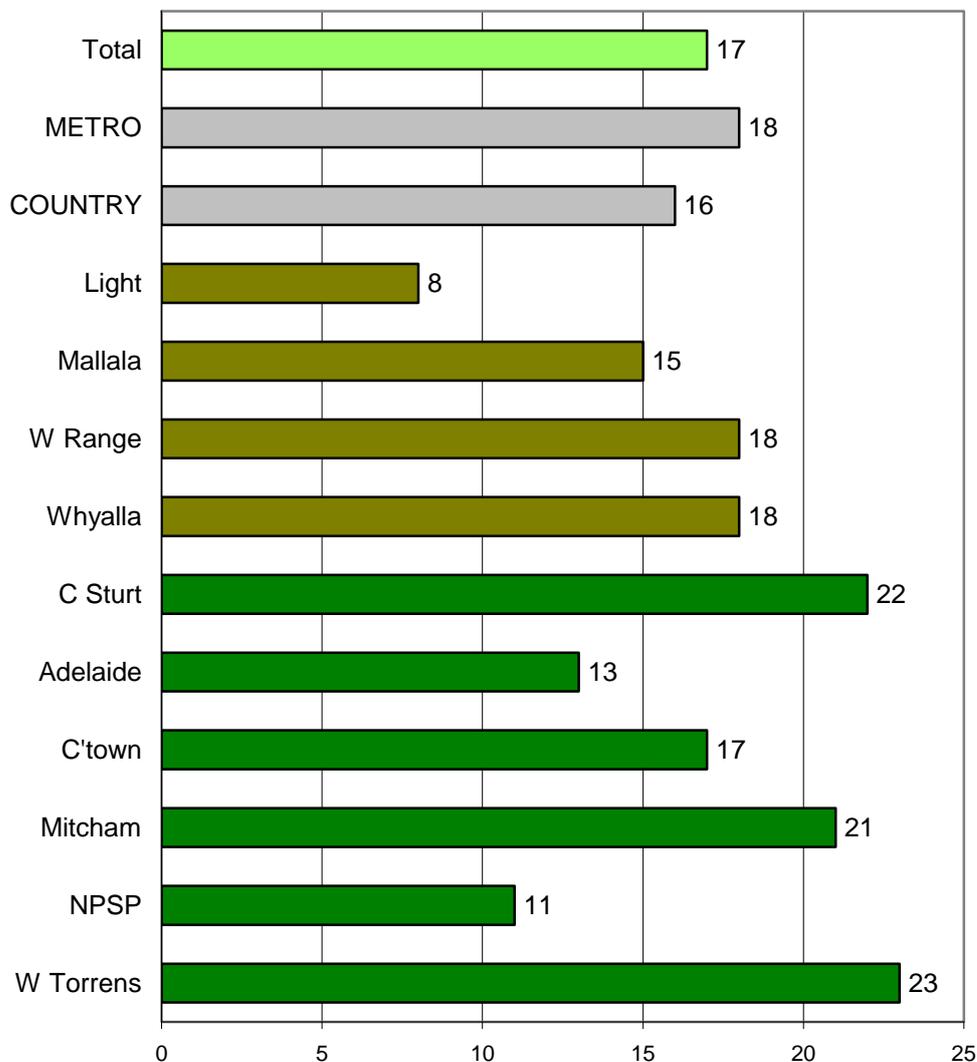
Average length of residence increased with age, from 7 years among the under 40s to 26 years for those aged 60 and over.

The chart below shows that, in terms of average length of residence, country and metro areas were quite similar overall.

Looking at individual council areas, the District Council of Light was unlike other country areas surveyed, with an average period of residence of 8 years.

In the metro area, the cities of Norwood Payneham & St Peters and Adelaide had relatively low average periods of residence (11 and 13 years respectively), while the average figure exceeded 20 years in Charles Sturt and West Torrens.

AVERAGE LENGTH OF RESIDENCE [years]



In each of the households in the sample, the person selected for interview was the person identified as the one who is most involved with dealing with the household's waste and recycling.

It should be noted that because of this, the sample is not intended to be representative of the entire population of the trial area.

The following table details the gender and age profile of respondents. Overall, 67% were female. The male/female balance was similar across most council areas, with the male component dipping below 30% in Mallala and Wattle Range (28% and 29% respectively). Norwood Payneham & St Peters was unusual in that males constituted 42% of the sample.

58% of respondents were at least 50 years of age and the age profile was similar across most subgroups. Exceptions were Light and Kensington (NPSP) where 39% and 34% respectively were aged 50 plus and Mitcham at the other end of the scale (72% aged 50+).

Gender and age profile: (n=4260)

GENDER	
Males	33%
Females	67%
AGE GROUP	
Up to 29	7%
30 to 39	14%
40 to 49	21%
50 to 59	21%
60 to 69	18%
70 and over	19%

Survey participants were also asked to indicate their household type. Couples (38%) and families (35%) were more numerous than singles (27%).

Household type

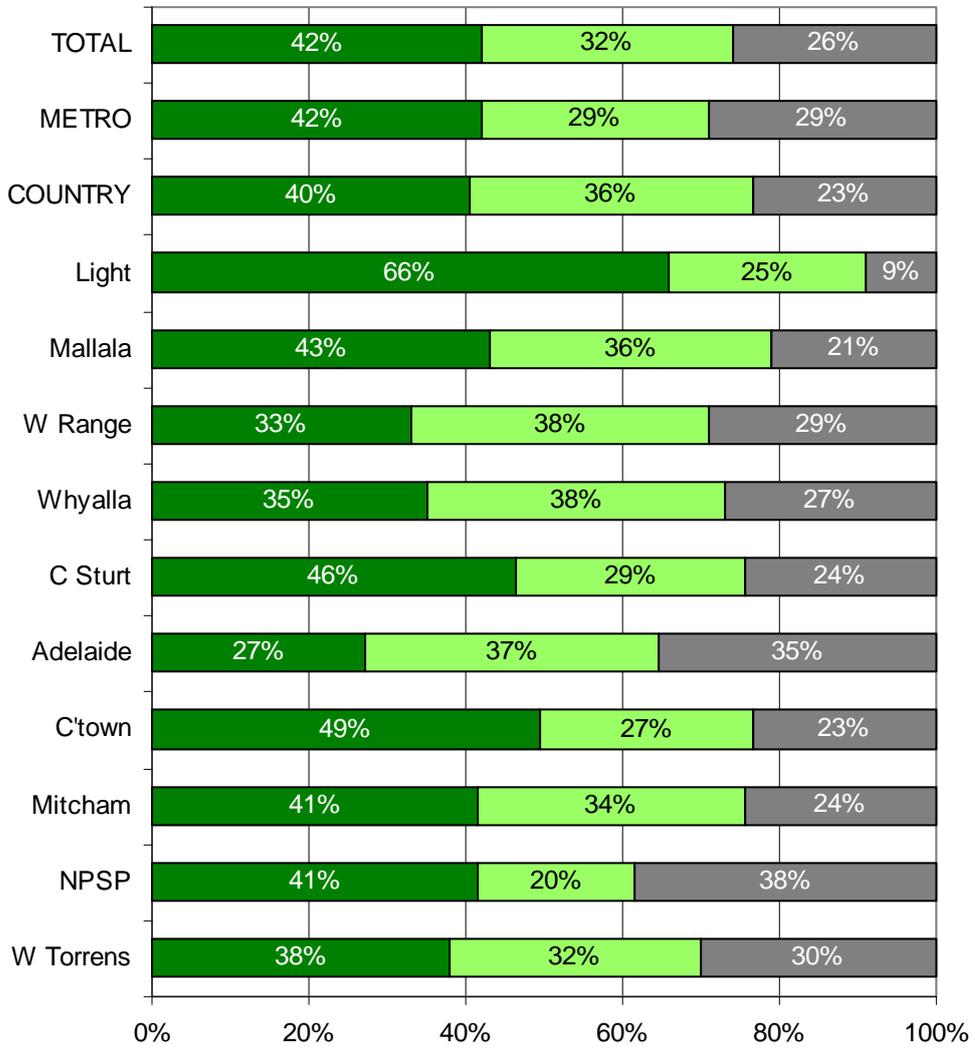
Families	
Couple with children	36%
Single parent with children	6%
Couples	
Young couple, no children	4%
Older couple, no children at home	28%
Singles	
Lone person household	21%
Group household of unrelated adults	5%

As shown in the chart overleaf, Light stood out as having the highest proportion of families (66%).

Singles were generally more numerous in the metropolitan areas, particularly Adelaide (35%) and Norwood Payneham & St Peters (38% collectively, 51% in Kensington).

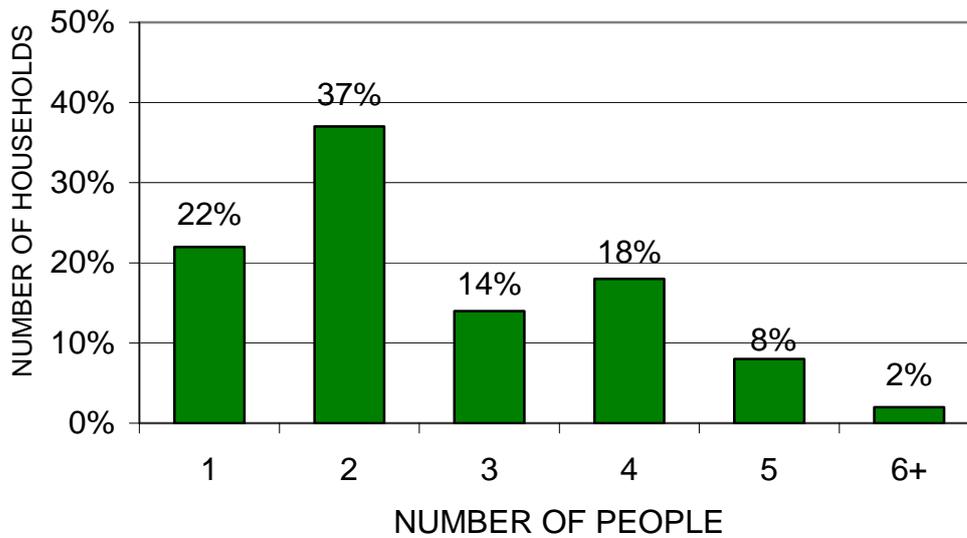
HOUSEHOLD TYPE - SUMAMRY

■ Families ■ Couples ■ Singles



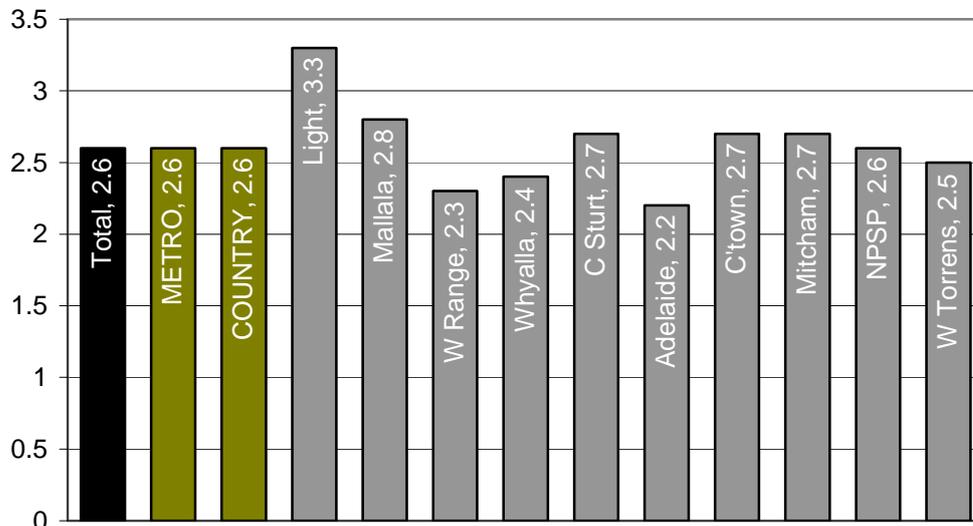
The number of people living in each household ranged from 1 to 8, with a mean of 2.6. The vast majority of households (90%) contained fewer than five people. As would be expected, older people and those living in smaller types of dwelling tended to have fewer people in the household.

NUMBER OF PEOPLE IN HOUSEHOLD



The following chart compares average household sizes across the ten council areas. This ranged from 3.3 in Light to 2.2 in Adelaide and tends to reflect household type.

AVERAGE HOUSEHOLD SIZE



COMMENTARY

Awareness of food waste system (Q 2)

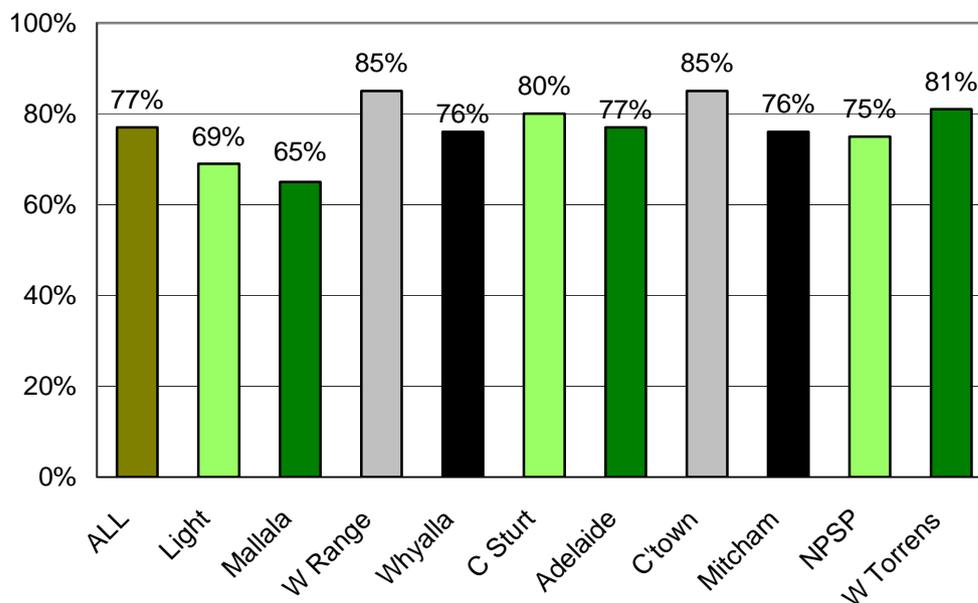
Almost all (97%) of the 4260 people interviewed were aware that a food waste system was being trialled in their area.

Awareness was almost universal among most council areas, ranging between 95% and 98%.

Adelaide was the exception, with an awareness level of 87%. Adelaide was unlike other areas in that it did not consist of a single area where every residence was targeted for the trial.

Even among the subgroup of people who were not using either system, 83% were aware of it.

AWARENESS OF FOOD WASTE SYSTEM IS FOR



Types of waste suitable for food waste system (Q 3)

Those respondents who were aware of the trial in their area (4114 of the original sample of 4260) were asked to name the types of waste the system was designed for.

The top response was **fruit and vegetable scraps** at 77%.

Half (50%) indicated that they knew **mixed food scraps** can be put in the food waste system, while 38% mentioned **tissues and paper towels** and 30% cited **meat scraps**.

One quarter indicated that they knew **bones** (24%), **tea bags and coffee grounds** (25%) and **egg shells** (22%) can be put in the container.

The other double digit response was **bread and cereals** (14%).

3% of those responding did not know what waste should go in the system and a further 17% were not able to nominate anything more specific than 'food scraps'.

A full list of responses is given in the table overleaf.

As would be expected, there were higher levels of awareness amongst users of the food waste systems.

However, even among non-users, 70% were able to name one or more specific type of food waste that the system can take.

The table also shows that people in the Bio Basket area had higher awareness levels than their counterparts in the Kitchen Caddy area for general leftovers, paper products and bones.

Can you tell me what types of waste it is designed for?

(Inc. multiple responses, unprompted)

	ALL (N=4114)	BB AREA (N=3494)	KC AREA (N=620)	BB/KC USERS (N=3437)
BASE: respondents aware of trial				
Fruit, vegetable scraps	77%	76%	83%	80%
Leftovers – mixed food scraps, processed food etc	50%	51%	41%	51%
Tissues, paper towels	38%	39%	31%	43%
Meat scraps	30%	30%	28%	32%
Tea bags, coffee grounds	25%	25%	27%	28%
Bones	24%	26%	17%	27%
Egg shells	22%	21%	24%	24%
Bread, cereals	14%	13%	17%	15%
Hair	6%	6%	6%	7%
Dairy - yoghurt, cheese	5%	5%	8%	6%
Other	6%	7%	4%	7%
TOTAL – AWARE OF ANY	80%	81%	75%	82%
All sorts of food scraps	17%	16%	22%	17%
Don't know	3%	3%	3%	1%

Overall, 80% of those aware of the food waste system in their area were able to nominate one or more type of waste that could be put in it. These people represent 77% of the total sample.

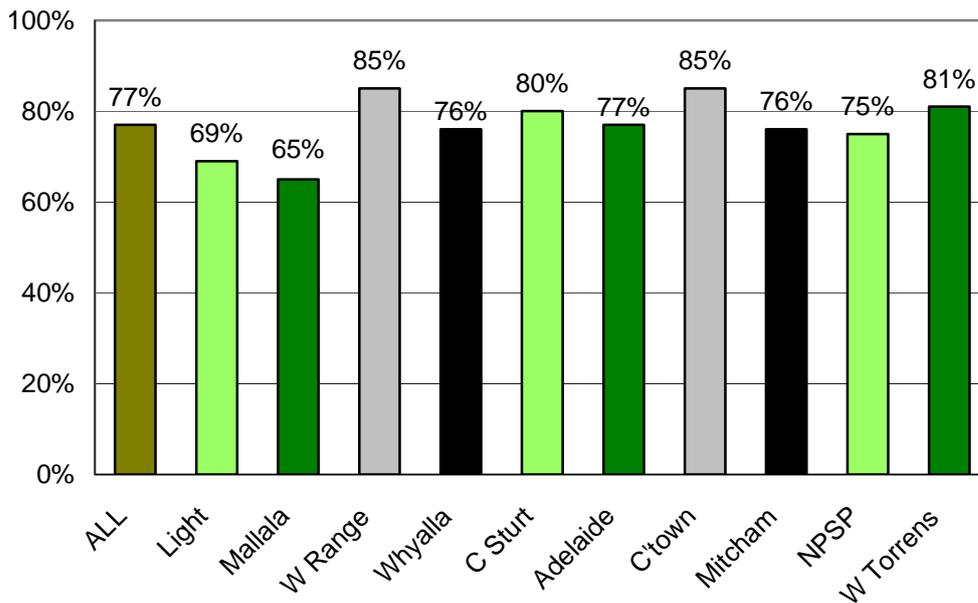
The chart below shows the corresponding awareness levels for the ten council areas.

Wattle Range and Campbelltown had awareness levels significantly higher than the aggregate (both 85%).

Below average awareness was recorded in Light and Mallala (69% and 65% respectively).

All other areas were in line with the aggregate – including Adelaide (77%).

AWARENESS OF FOOD WASTE SYSTEM IS FOR



Placement of food waste (Q 5)

The 4114 respondents who were aware of the trial were asked to say where the food waste is supposed to be placed when the containers are full.

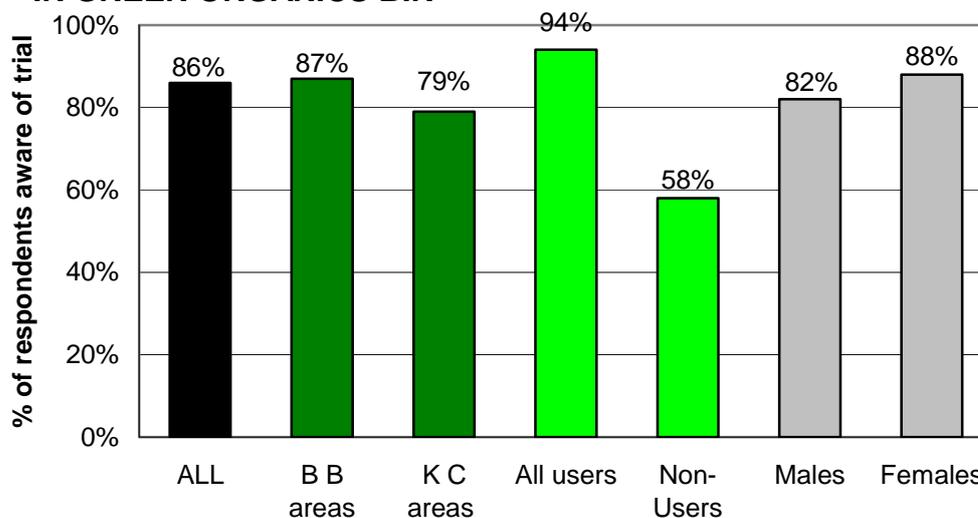
The vast majority of these respondents - 86% - were correct in saying that the food waste should go in the **green organics bin**.

- 3% thought it should go in a home **compost bin** – which is also correct.
- 3% thought it should go in the **garbage bin**,
- 1% thought **recycling bin**,
- 7% of respondents **did not know** where the food waste should go.

People who have used either system were particularly likely to answer this question correctly – although awareness was significantly short of universal - 94%. Awareness of the correct place for the food waste was markedly lower amongst non-users (58%).

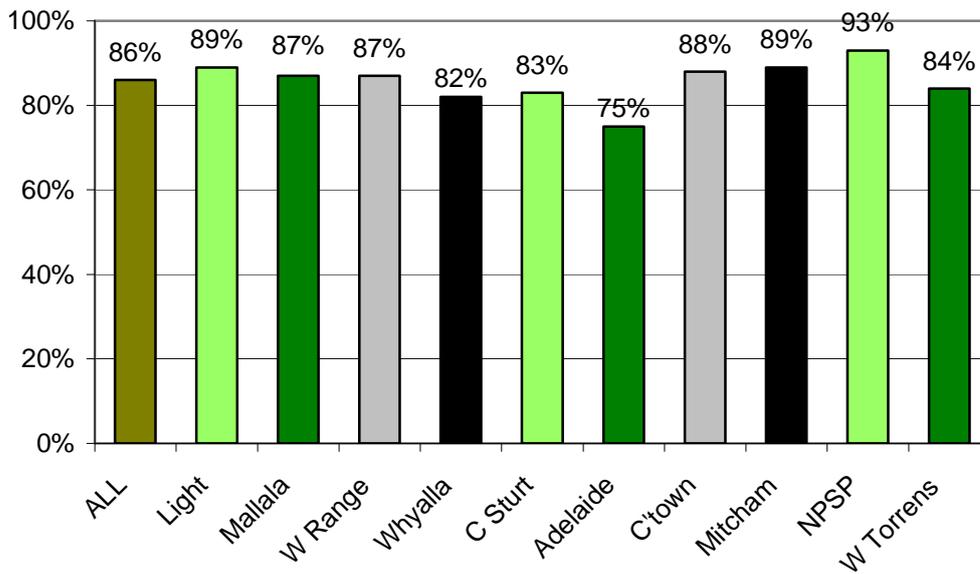
As shown below, awareness was slightly lower in the Kitchen Caddy areas (79%, compared with 87% in the Bio Basket areas).

PLACE WASTE FROM SYSTEM IN GREEN ORGANICS BIN



The chart below shows above average awareness of the fact that the waste from the systems should go in the green organics bin among Norwood Payneham & St Peters residents (93%), with Adelaide residents below par (75%). All other areas were very close to the aggregate figure.

PLACE WASTE FROM SYSTEM IN GREEN ORGANICS BIN



Disposal of lawn clippings and garden prunings (Q 8)

All respondents were asked what they use to regularly dispose of lawn clippings or garden prunings, from the following list:

- **Green organics bin**
- **Garbage bin**
- **Garden contractor takes it away**
- **Hessian bag/bale**
- **Compost bin/spread on garden/mulch.**

The predominant response was **green organics bin** at 85%.

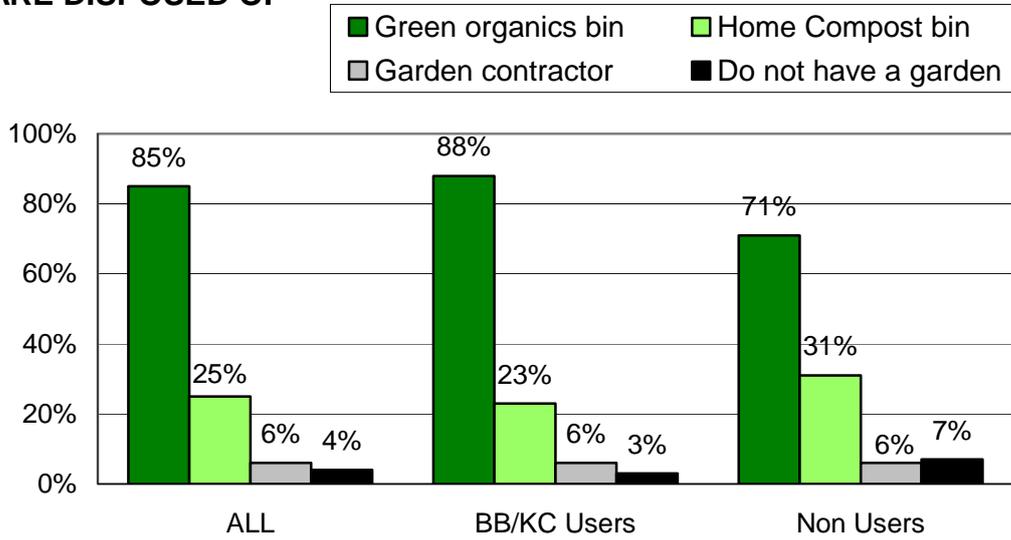
The other relatively popular response was **spread on garden / put in compost bin** (25%)

The only other responses of note were **garden contractor** (6%) and **do not have a garden** (4%).

All other responses were even lower.

As illustrated in the chart overleaf, non-users of the Bio Basket/Kitchen Caddy systems were less likely to regularly use their green organics bin (71% compared with 88% of Bio Basket / Kitchen Caddy users) and more likely to home compost (31% and 23% respectively).

HOW LAWN CLIPPINGS AND GARDEN PRUNINGS ARE DISPOSED OF



Area differences were apparent and these are discussed in following sections which explicitly ask about green organics bins and composting.

Use of a compost bin/system (Q9)

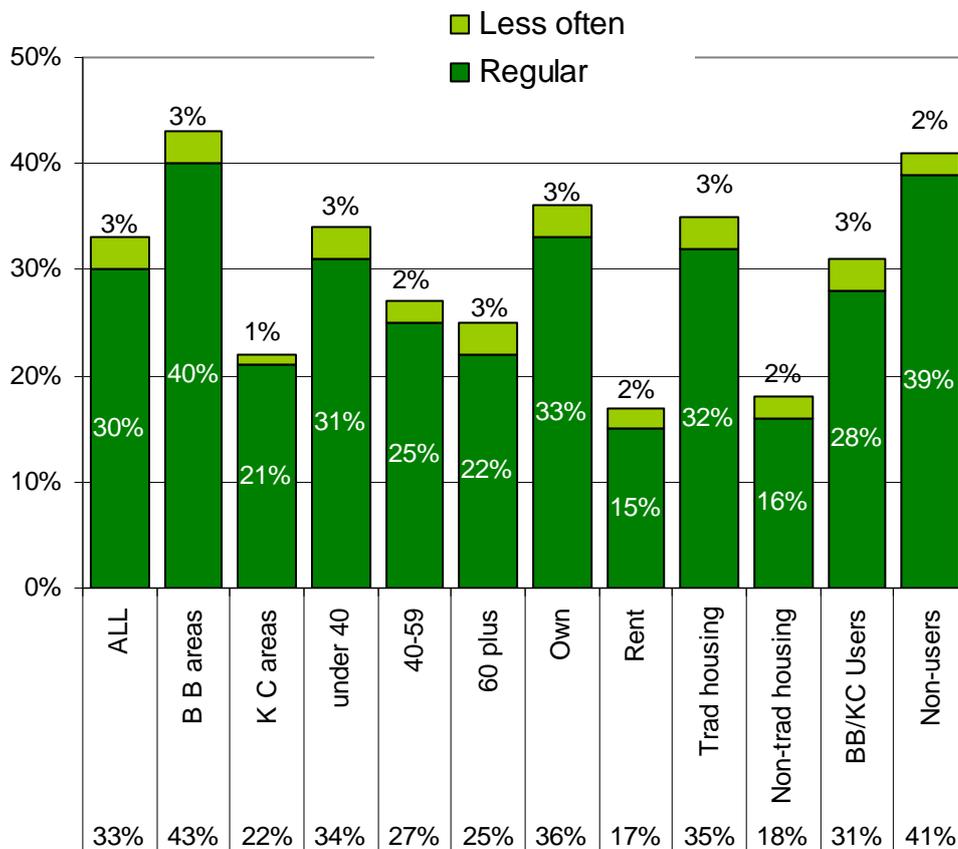
One third of respondents (33%) own a compost bin or compost system and most of these (30% of all respondents) claimed to use it on a regular basis.

As illustrated below, regular use was higher among owner occupiers (33%) compared with tenants (15%). The subgroup in non-traditional housing had a similar level of composting (16% regularly compost).

Users of the food waste systems were less likely to compost than non-users. Moreover, respondents in the Bio Basket area had higher levels of regular use (31%) compared with those in the Kitchen Caddy area (25%).

Similarly, only 25% of those aged under 40 compost.

OWNERSHIP & USE OF COMPOST BIN / SYSTEM



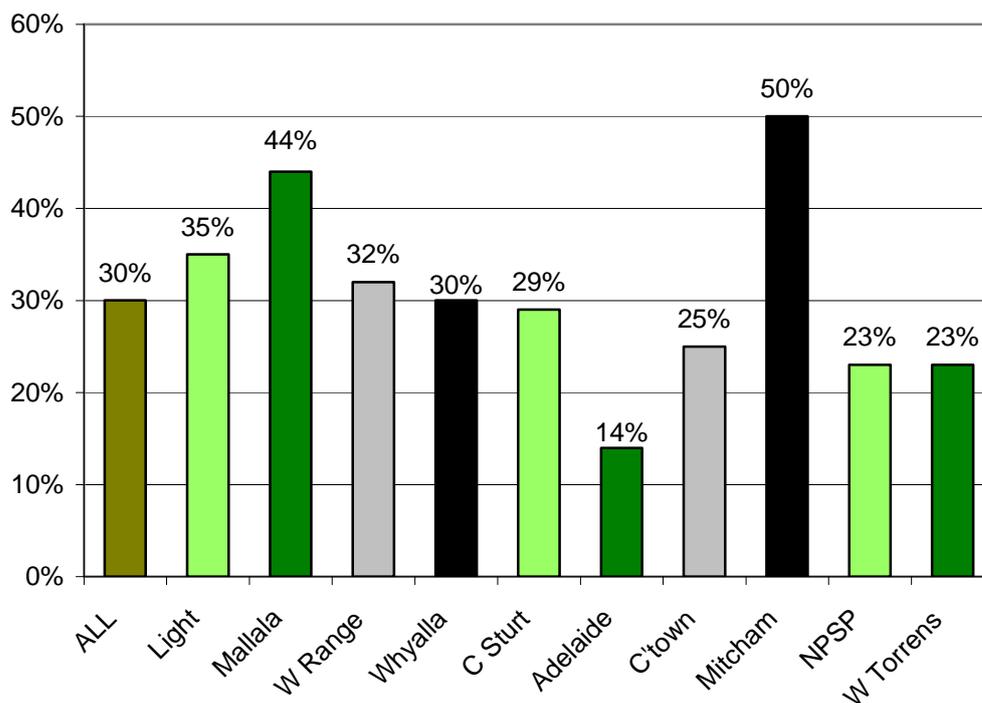
23% of people living alone regularly compost, rising to 35% among couples (families – 30%).

When we look at individual council areas, we have concentrated on regular use only.

Regular use can be seen to be highest in Mitcham and Mallala (50% and 44% respectively).

Adelaide (14%) has the lowest incidence of regularly composting. Campbelltown Norwood Payneham & St Peters and West Torrens were also significantly below the aggregate figure.

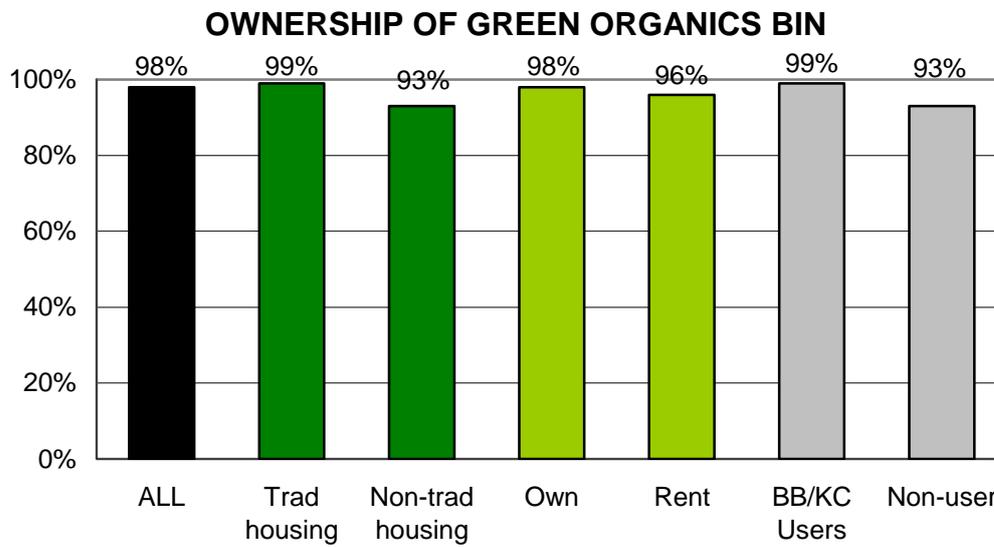
HOME COMPOST SYSTEM - USE REGULARLY



Ownership and use of green organics bin (Qs 6, 7)

98% of respondents have a green organics bin.

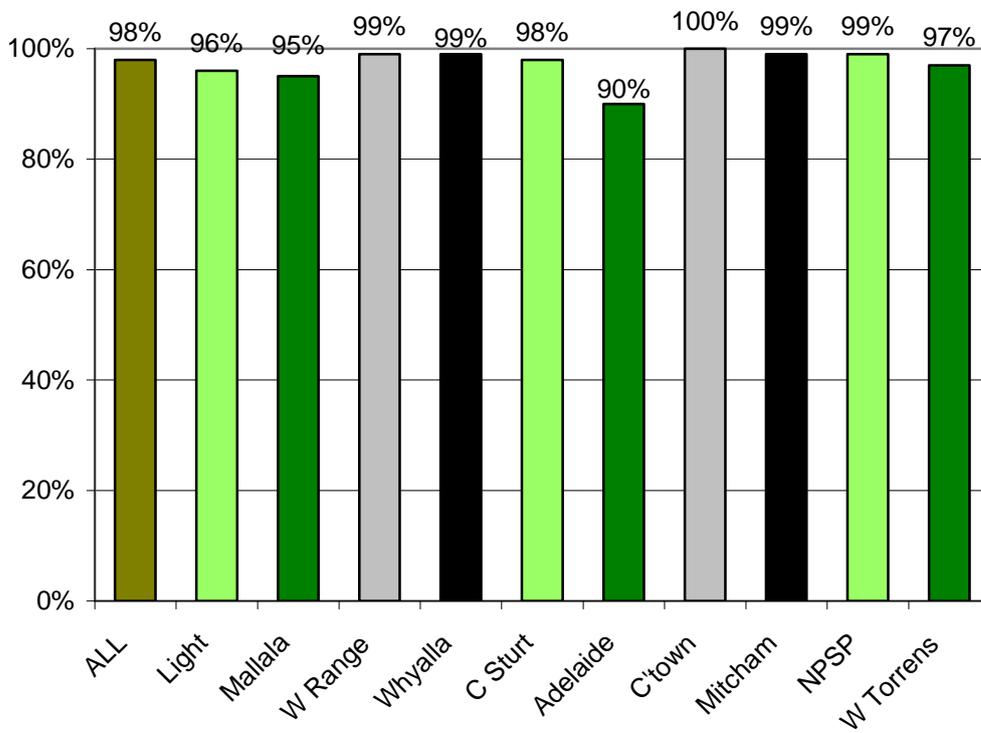
There was very little difference between demographic segments.



Area analysis showed that all Campbelltown residents surveyed had a green organics bin and the proportion exceeded 95% for all areas except Mallala (95%) and Adelaide (90%).

Users without a green organics bin reported either composting their food waste or using a neighbour's bin.

OWNERSHIP OF GREEN ORGANICS BIN



A further question explored how often green organics bins are put out for collection. This was asked of the 4171 people who have these bins.

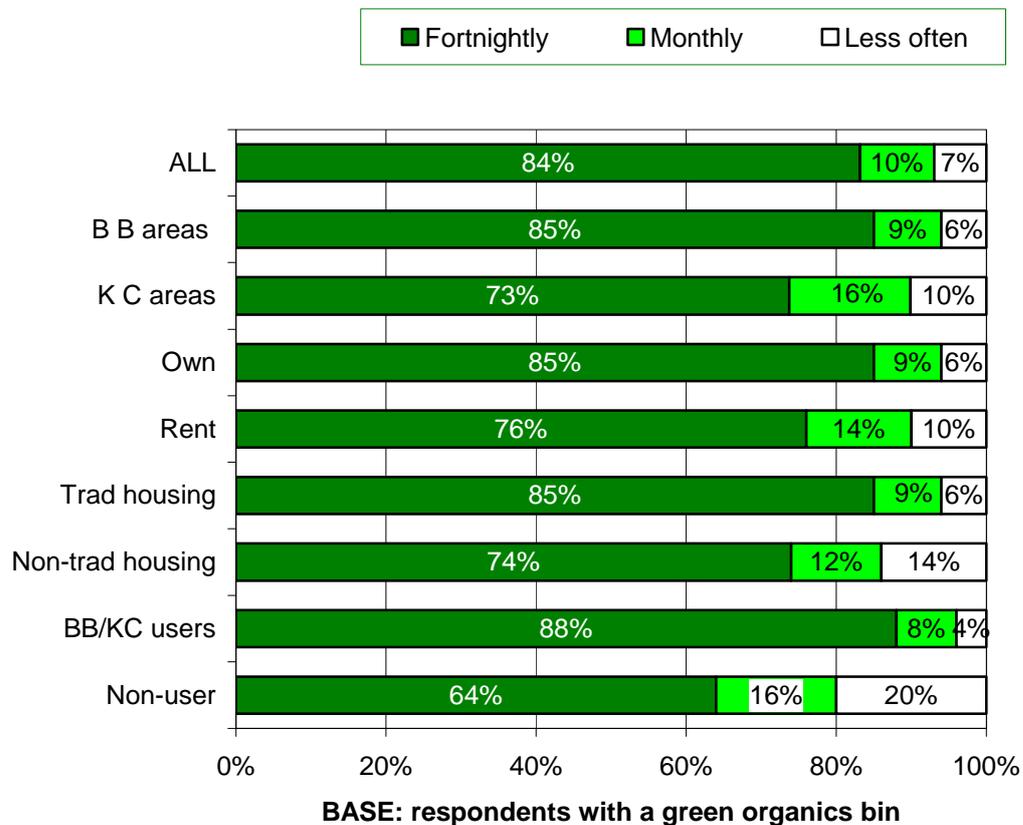
84% of respondents who have a green organics bin put this bin out fortnightly, 10% do so monthly and 7% less than monthly.

88% of Bio Basket / Kitchen Caddy users put their green bin out for collection every fortnight, compared with 64% of non-users.

As shown below, the practice of putting the green organics bin out fortnightly was more prevalent in the Bio Basket areas (85% - compared with 73% in the Kitchen Caddy areas).

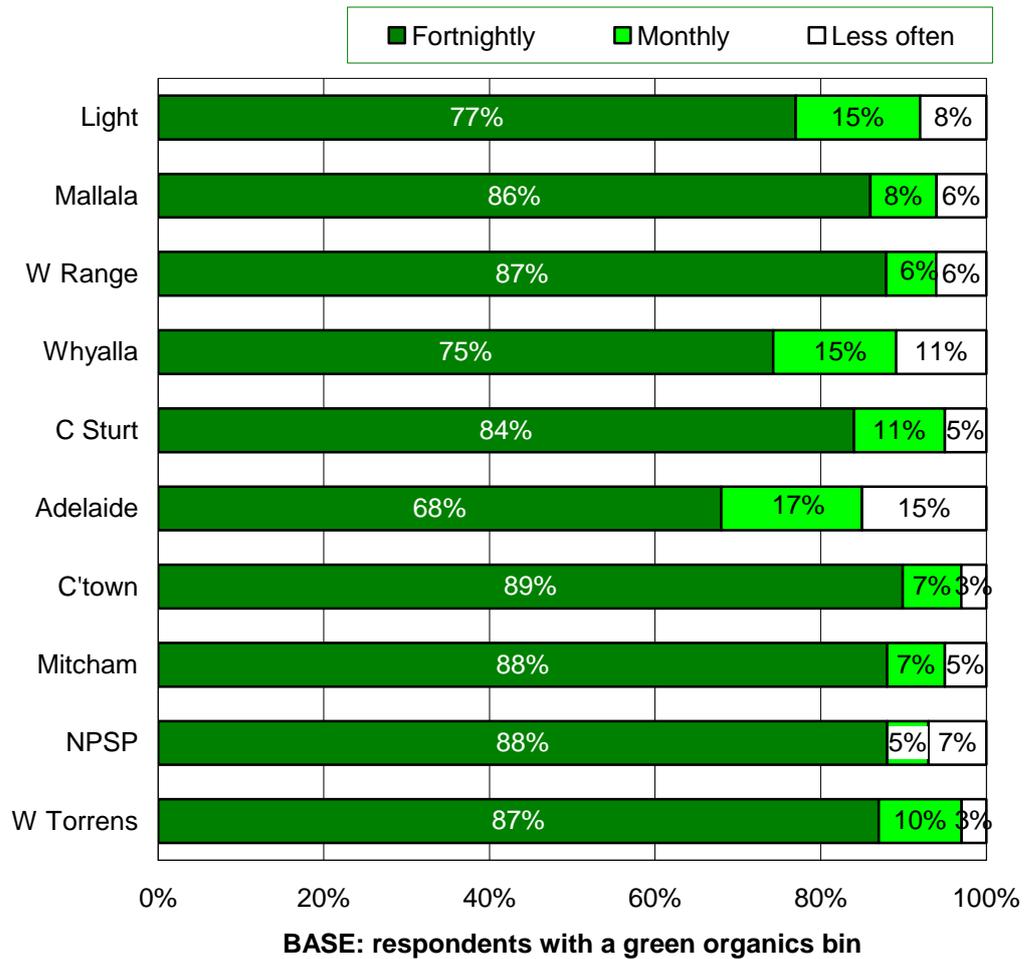
The practice of putting the green organics bin out fortnightly was also more prevalent for owner occupiers (85%; compared with 76% of tenants) and those in traditional housing (85% compared with 74% in other housing).

PRESENTATION FREQUENCY OF GREEN ORGANICS BIN DURING PILOT



Looking at individual council areas, response patterns were in line with the aggregate apart from Adelaide, Whyalla and Light where the proportion presenting their green organics bin every fortnight was lower than the aggregate.

PRESENTATION FREQUENCY OF GREEN ORGANICS BIN DURING PILOT



Please note that, due to rounding, percentages do not always sum to 100%

Increased level of awareness (Q 18)

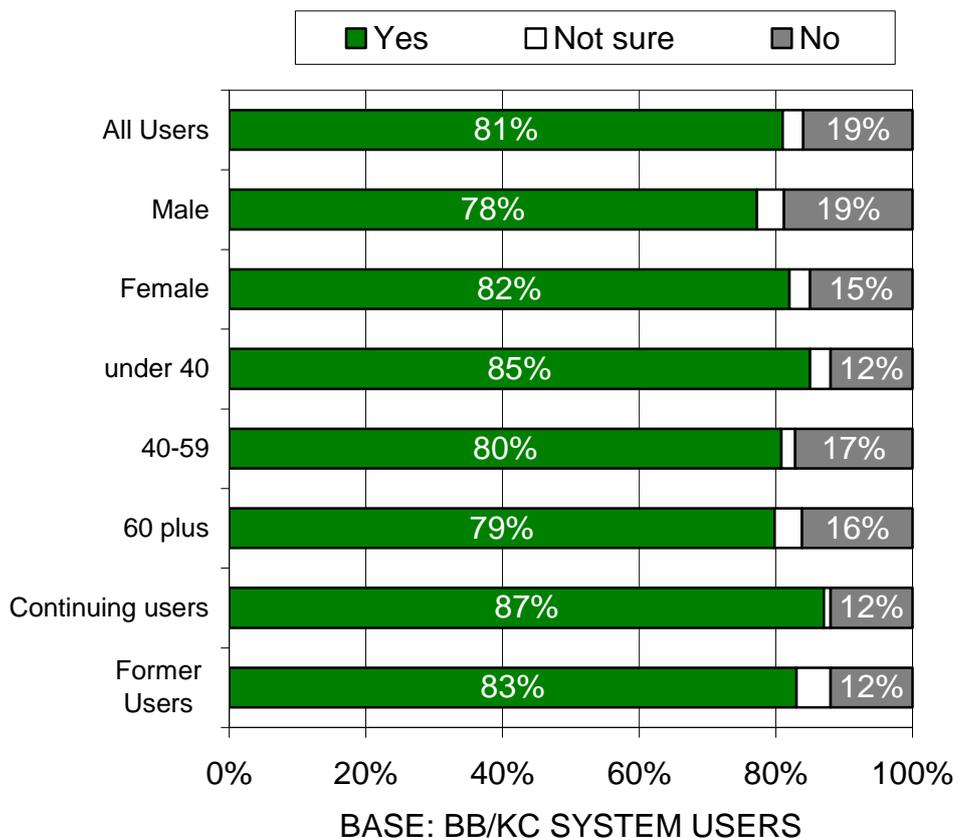
The 3448 respondents who had used the Kitchen Caddy or Bio Basket systems were asked if this use had made them more aware of what can be put in the green organics bin.

81% responded in the affirmative.

This proportion was consistently reported across all dwelling types. However, females had a higher level of increase awareness than males (82% compared with 78%) and the under 40's also reported a comparatively large 'yes' response (85%).

Those people who were still using the food waste system at the time of interview were more likely to say yes than the relatively small (389) group of people who had stopped (87% and 83% respectively).

INCREASED AWARENESS ALLOWABLE ITEMS GREEN ORGANICS BIN





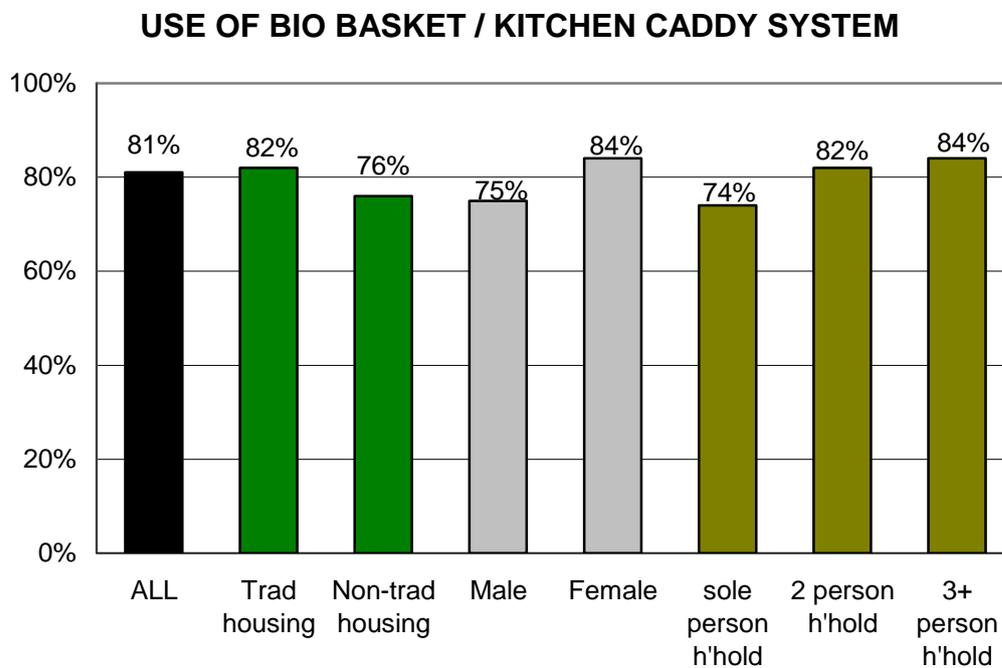
When we examine individual council areas, it emerges that Mallala and Whyalla reported a comparatively large 'yes' (88% and 86% respectively), response while Norwood Payneham & St Peters was considerably lower (73%)

Use of food waste system (Q 10)

81% of all respondents (3448 people) indicated that they have used the food waste system at some point during the trial.

The incidence of use increases with the number in household. It was also higher among females interviewed (84% compared with 75% of males), with a similar disparity between detached and non-traditional housing.

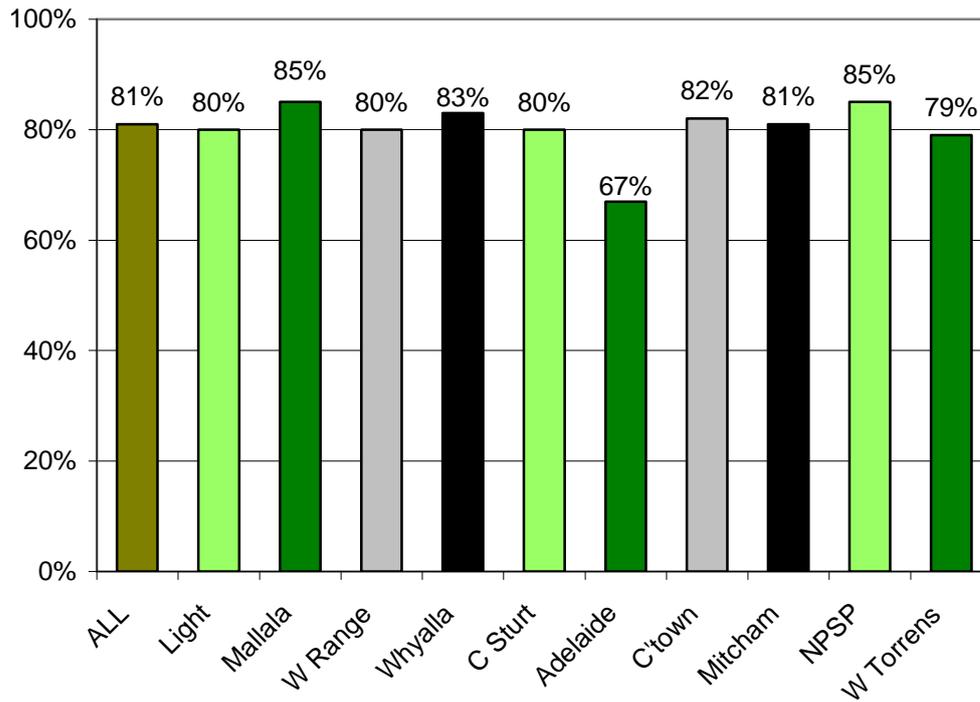
This is illustrated below.



The level of use reported in the Bio Basket areas was statistically identical with Kitchen Caddy areas, at 81% and 79% respectively. This was also true for owner occupiers and tenants.

Analysis by area highlighted a lower take up rate in Adelaide (67%). Otherwise, results were consistent across all areas.

USE OF BIO BASKET / KITCHEN CADDY SYSTEM



Reasons for not using the food waste system (Q 11)

The 812 respondents who have never used the food waste system were asked why they had not done so.

The most common reason was that they already have their **own compost system** (25%).

13% of respondents said they prefer to give scraps to their chickens, or other **animals**.

These were the only double digit answers, with the response generally being very fragmented.

6% had **not received their container** – rising to 13% in the Kitchen Caddy areas (NB this is only 13 people).

A full list of responses is given in the table overleaf. As well as aggregate responses, the results are broken down for Bio Basket and Kitchen Caddy areas. This suggests **hygiene and smell issues** were more of a concern in Kitchen Caddy areas.

(NEVER USED FOOD WASTE SYSTEM)

Can you tell me why this was so? (Inc. multiple responses)

BASE: never used food waste system	ALL (N=812)	Bio Basket (N=677)	Kitchen Caddy (N=135)
Already compost	25%	29%	6%
Feed scraps to chickens etc	13%	15%	7%
Not aware/new resident	7%	8%	2%
Not interested	7%	8%	4%
Didn't want odours, flies, rotting food in kitchen	7%	5%	18%
Not enough food waste	7%	5%	14%
No room on bench	6%	7%	4%
Didn't receive container	6%	5%	13%
Need to wash caddy/bin often	5%	0%	27%
Too busy/away/renovating etc.	3%	3%	4%
Don't know/no explanation	3%	3%	2%
No green organics bin	2%	2%	0%
Didn't understand how to use/ brochure unclear	2%	2%	1%
Green organics bin smelly	2%	0%	13%
Use insinkerator	1%	1%	0%
Didn't want in kitchen/doesn't fit	1%	1%	1%
Use own container/put straight in GO bin	1%	0%	2%
Attracted maggots/ants	1%	0%	7%
Other (single responses)	2%	2%	2%

Continuing use of the food waste system (Q 12)

All respondents who had used the system were asked if they were still using it. The vast majority of these - 89% - were **still using** it.

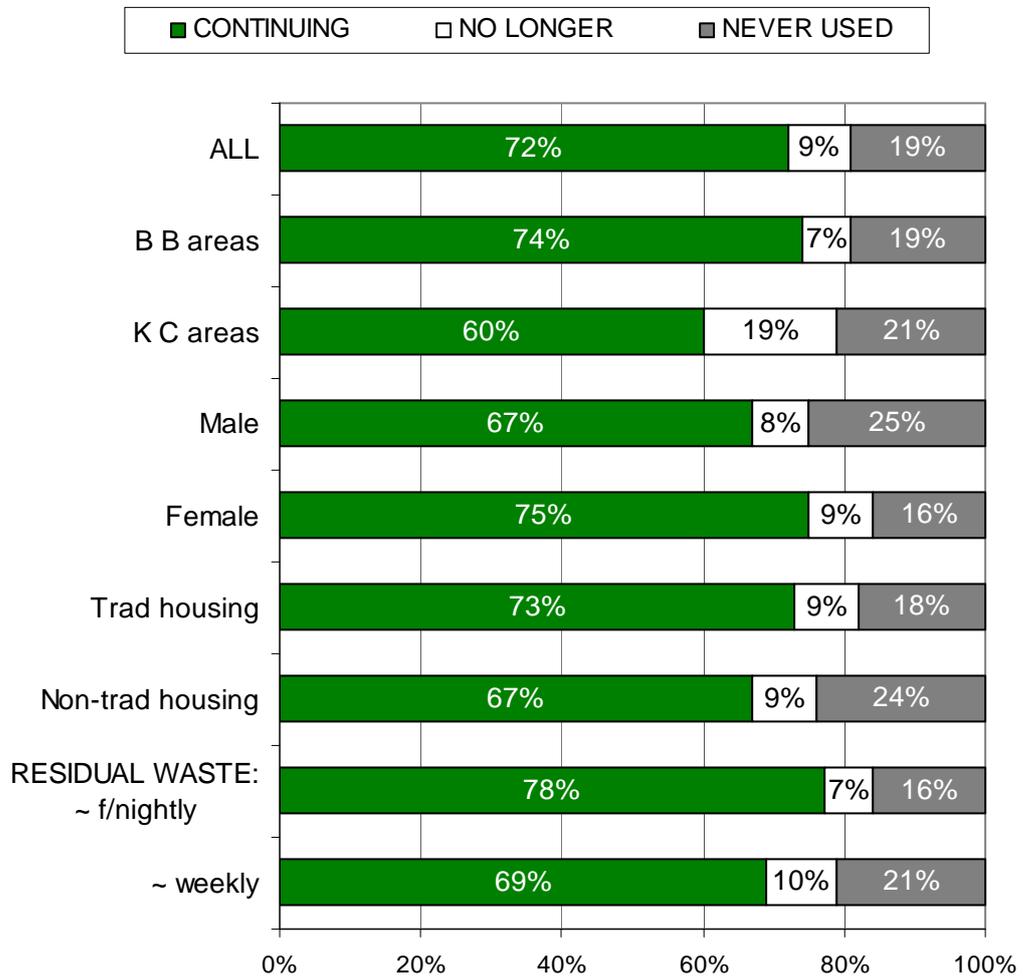
This equates to 72% of the whole sample, with 9% having tried the system and stopped.

However, when the two systems are examined individually, it can be seen that the Bio Basket has significantly higher incidence of **continued** use – 74% compared with 60% for the Kitchen Caddy.

19% of people in the Kitchen Caddy areas had tried that system and stopped before the survey period, compared with 7% in the Bio Basket areas.

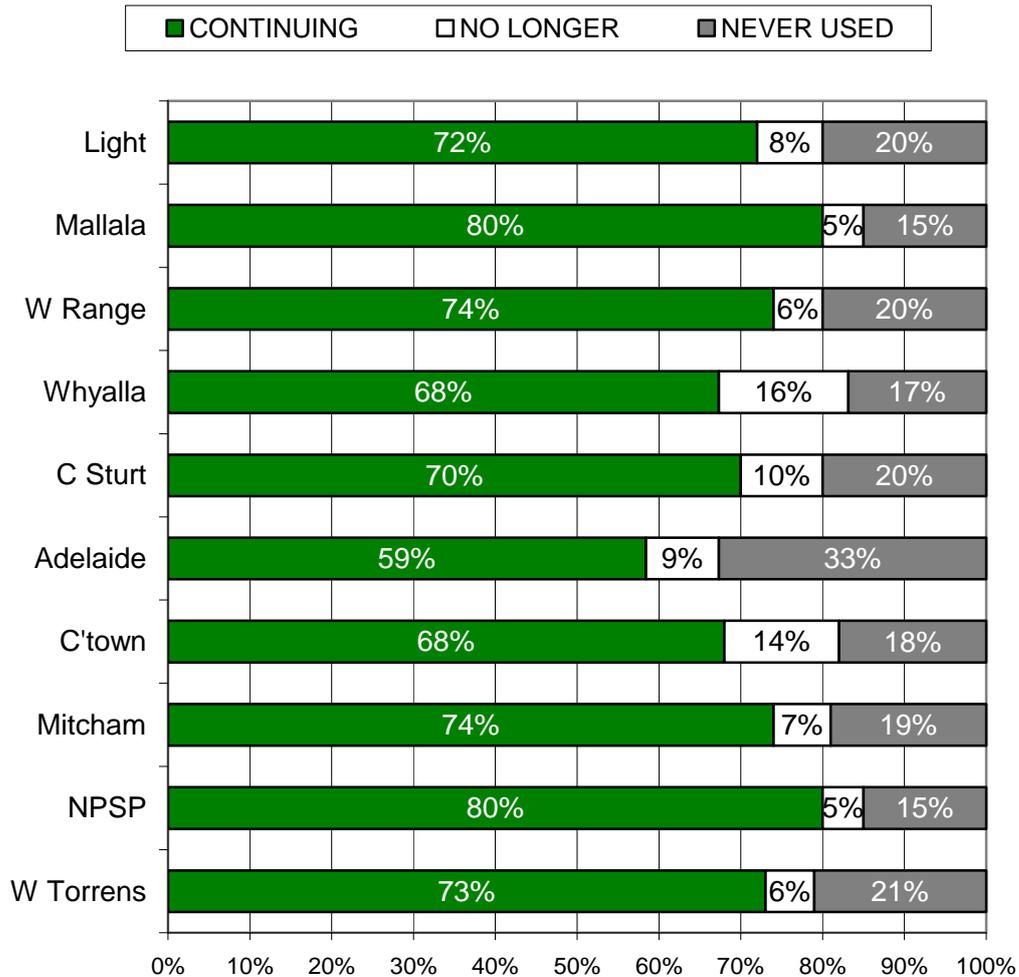
The accompanying chart (overleaf) also highlights differences by gender, dwelling type and residual waste collection frequency. Males, occupants of non traditional dwellings and those with weekly residual waste collection all had a lower than average incidence of continued use.

FOOD SYSTEM - USAGE SUMMARY



Area analysis showed above average rates of continuing use in Mallala and Norwood Payneham & St Peters (both 80%). At the opposite end of the spectrum was Adelaide (59%).

FOOD SYSTEM - USAGE SUMMARY



Reasons for ceasing use of the food waste system (Q 13)

Those respondents (390 individuals) who were no longer using the food waste system were asked why they had stopped.

28% of these people stated that they **didn't want odours, flies, rotting food in kitchen**.

There were also 21% who use **own compost system/worm farm/feed to chickens**.

15% reported hygiene problems with their **green organics bin**, while 11% had a **vermin** problem.

Issues specific to the Kitchen Caddy were the **smell** and **build up of food waste** (reported by 35% and 19% of this subgroup).

Problems with the Bio Basket were down at the 1%-2% level.

All reasons given by 4 or more respondents are listed in the table overleaf.

(NO LONGER USING FOOD WASTE SYSTEM)

Can you tell me why this was so? (Inc. multiple responses)

BASE: no longer using system	ALL (N=390)	Bio Basket (N=269)	Kitchen Caddy (N=121)
Didn't want odours, flies, rotting food in kitchen	28%	29%	26%
Use own compost bin/worms/chickens	21%	25%	12%
Found GO bin smelly, attracted flies	15%	13%	18%
Ant / mouse / cockroach / insect problem	11%	10%	13%
KC smelt /needed to be rinsed	11%	-	35%
Kitchen Caddy: didn't like build-up of food waste	6%	-	19%
Not enough waste/away frequently	4%	4%	4%
Smell in hot weather	4%	1%	10%
Doesn't fit well in kitchen	3%	4%	2%
Didn't want to be part of the audit	2%	3%	0%
Fortnightly residual waste not frequent enough	2%	2%	0%
Green organics bin not collected fortnightly	2%	3%	0%
Too small/empty too often	2%	3%	0%
Found bags awkward to fit into basket	1%	1%	-
Lid came off/broken	1%	2%	-
Prefer own container	1%	1%	1%
Needed too much newspaper to mop up liquids	1%	-	2%
Don't know/no explanation	1%	1%	0%
Trial was stopped	1%	1%	-
Ran out of Bio Basket bags	1%	1%	-
Forgot to use it	1%	1%	0%
Not know where to empty it	1%	0%	2%
Other (single responses) *	11%	13%	7%

Number of times / week container emptied (Q 14)

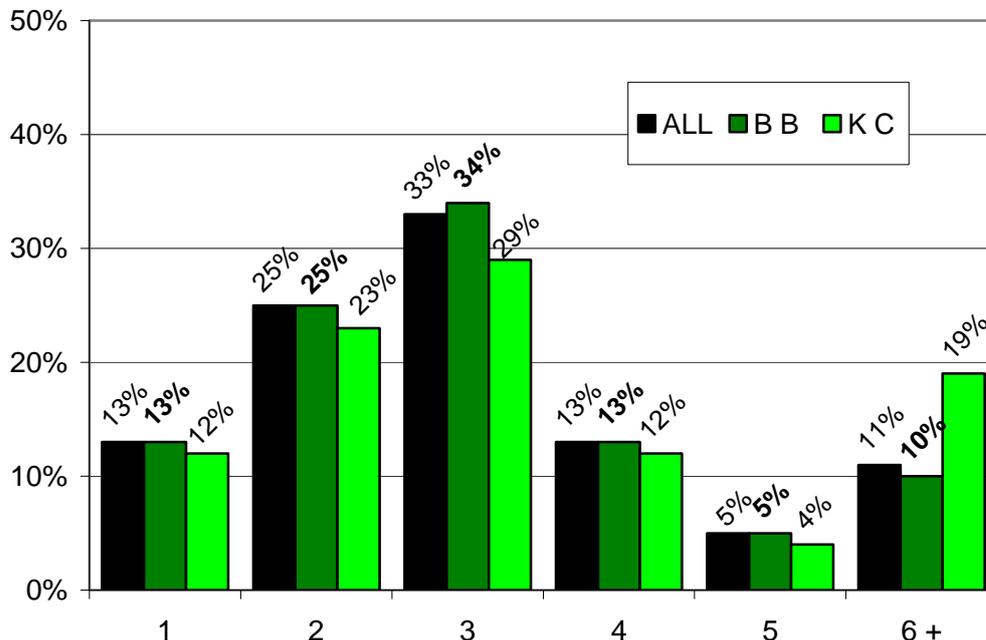
Respondents who have used either food waste system (3448) were asked to indicate how many times they would empty the container in an average week.

The most common response was **three times**, which applied to one third (33%) of all users.

38% reported emptying their container **less frequently** (once a week – 13%, twice – 25%), while the remaining 29% empty their container **at least four times** a week. The maximum number reported was 28.

Response patterns for Bio Basket and Kitchen Caddy users are shown in the accompanying chart. Kitchen Caddy users were more likely to be emptying the container more than 6 times a week (17% daily).

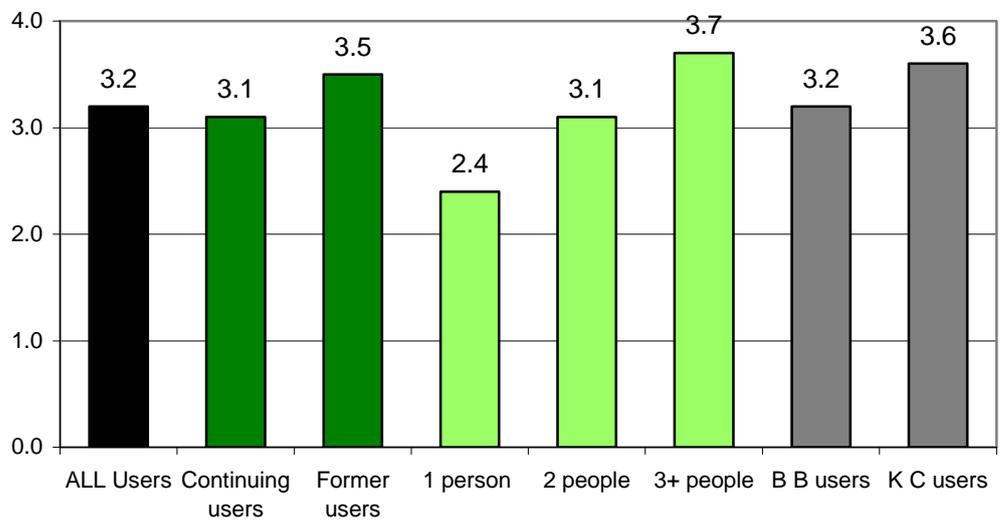
NUMBER OF TIMES CONTAINER EMPTIED / WEEK



Another way of looking at usage is to compare average usage across segments. Overall, an average of 3.2 times per week was recorded (3.6 for Kitchen Caddy users).

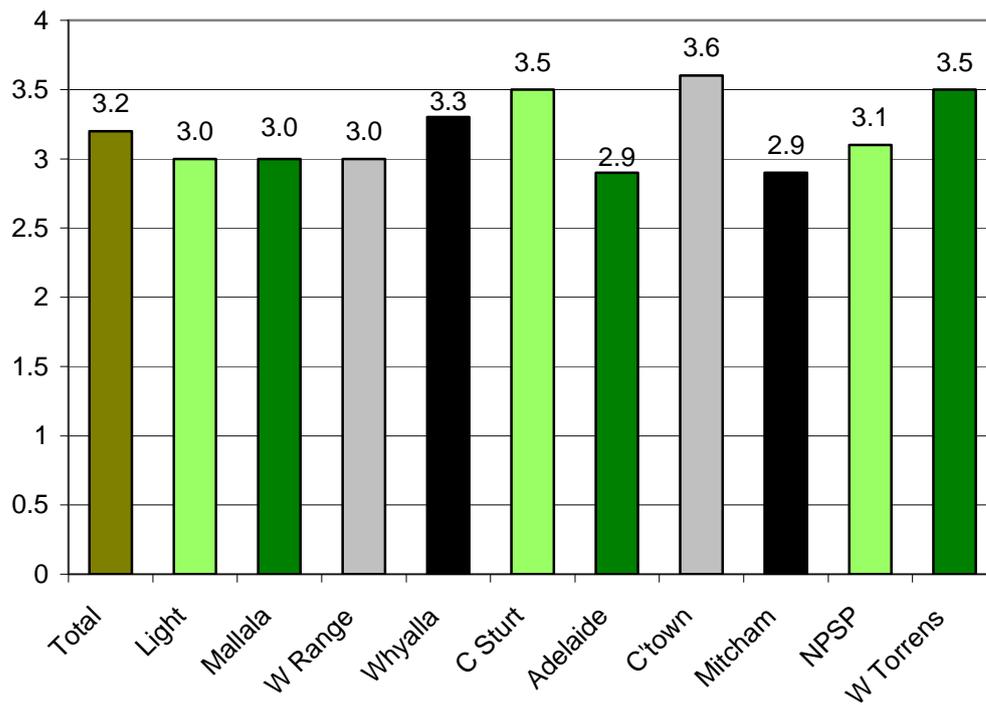
The number of times emptied per week varied with number of people in the household, from 2.5 for sole occupants to 3.7 for three or more in the household.

NUMBER OF TIMES CONTAINER EMPTIED / WEEK
[Mean]



When results are segmented by Council area, Campbelltown, Charles Sturt and West Torrens are found to have the highest frequency of emptying the container, Adelaide and Mitcham the lowest.

NUMBER OF TIMES CONTAINER EMPTIED / WEEK
[Mean]



Prompts for emptying container (Q 15)

The 3448 respondents who have used the food waste systems were asked to indicate what prompted them to empty the container.

Two thirds (66%) indicated that they empty their food waste container **when it is full**. When we examine the responses this group of people gave in the previous question, we see that they empty their containers 3.0 times a week on average.

Only 11% specifically referred to a frequency of **2 – 3 days** as suggested in the documentation accompanying the food waste system. On average, this group empties their container 2.9 times a week.

Both of these groups (equivalent to 76% of users) can be regarded as complying with instructions on this aspect of use.

The table shows that the responses from users of both systems were similar, with smell being more of an issue (but still a minor response) for the Kitchen Caddy users.

What prompts you to empty the container?

(Inc. multiple responses)

	ALL (N=3448)	Bio Basket (N=2947)	Kitchen Caddy (N=501)
BASE: ever used system			
When full	66%	68%	53%
Every 2 -3 days	11%	12%	8%
When it starts to smell/ before it starts to smell	10%	9%	16%
Daily	6%	5%	10%
After each meal	1%	1%	0%
Other (each 1% or less)	6%	5%	10%

Difficulty in using food waste system (Q 16)

Respondents who have used the food waste system were asked to indicate how easy or difficult they found it.

Responses were recorded using the following scale:

<i>very easy</i>	<i>quite easy</i>	<i>quite difficult</i>	<i>very difficult</i>
------------------	-------------------	------------------------	-----------------------

A 'don't know' category was also used.

Overall, 92% of those who have used either food waste system rated it as **easy** to use (either very or quite easy). Only 6% described it as **difficult** (either very or quite difficult).

Continuing and former users had very different response patterns. 64% of continuing users and 24% of former users found the system **very easy to use**.

23% of former users found it **difficult** to use.

Only 4% of continuing users found using the system **difficult**,

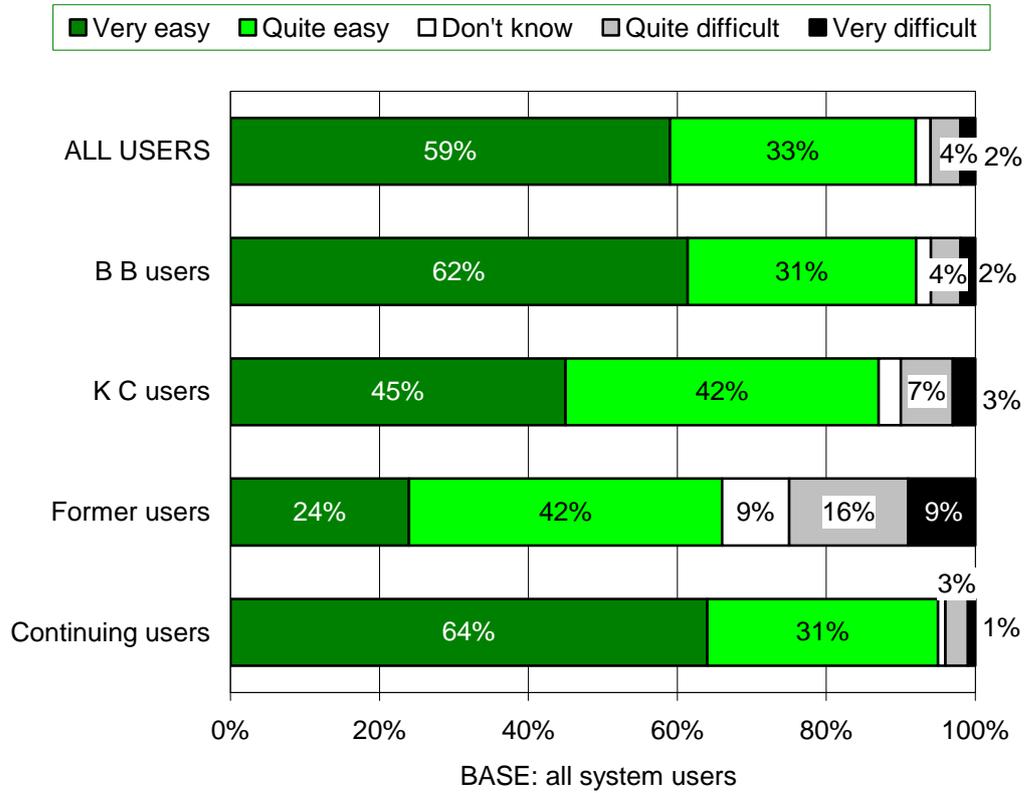
There were also differences between the ratings of the two systems.

Although 93% of Bio Basket users and 87% of Kitchen Caddy users characterising them as **easy** to use, the Bio Basket was often reported to be **very easy** to use – 62% - with the corresponding response for Kitchen Caddy users much lower at 45%.

The proportions of respondents describing either system as difficult was small – 6% in the case of the Bio Basket, 10% for the Kitchen Caddy.

These results are given in chart form overleaf.

EASE OF USING FOOD WASTE SYSTEM



Extent of use of the food waste system (Q 17)

Respondents who had used the food waste systems (3448) were asked to indicate the extent of their use of the system in the following terms:

- **I used it for everything possible**
- **I used it for most things**
- **I used it for selected items only**
- **I used it for fruit and veg only**
- **I hardly used it.**

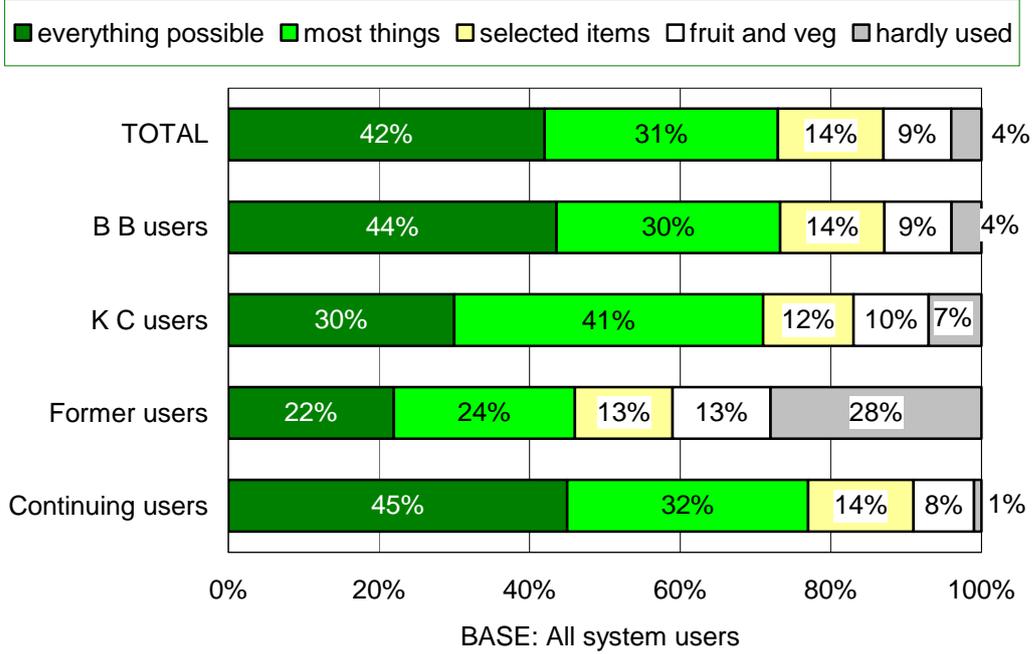
As illustrated below, the small group of former users had used the system less extensively than continuing users.

45% of continuing users claimed to use the system for **everything possible**. A further 32% used it for **most things**.

26% of former users had used the system for **selected items** or **fruit and veg only**, while 28% had **hardly** used the system at all.

The accompanying graph shows that reported usage profile for Kitchen Caddy user segment was less extensive than Bio Basket segment.

USE OF FOOD WASTE SYSTEM



Household use of the food waste system (Q 35)

Respondents were asked to indicate the number of people in the household who use or have used the system.

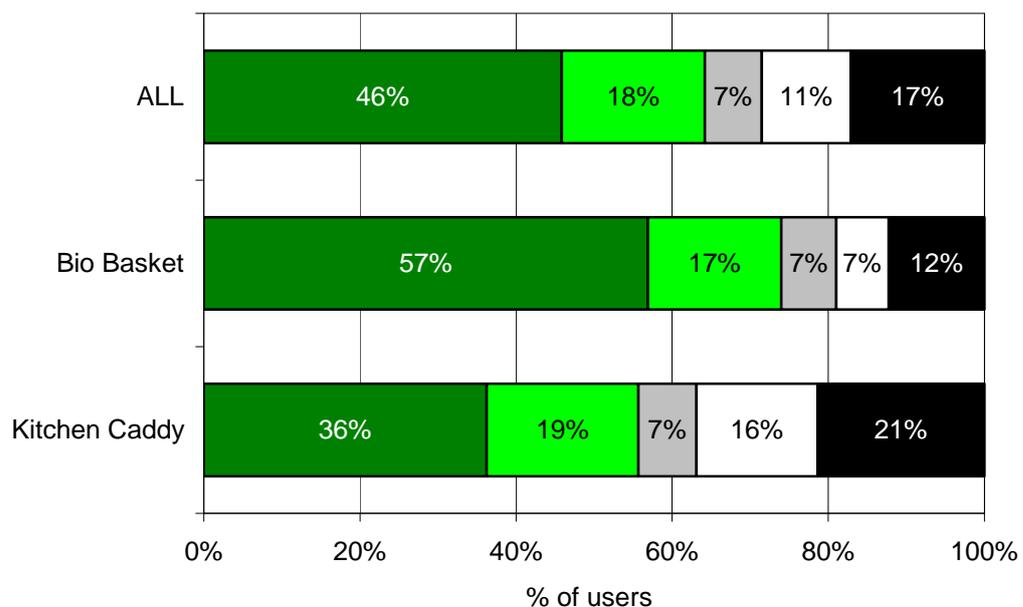
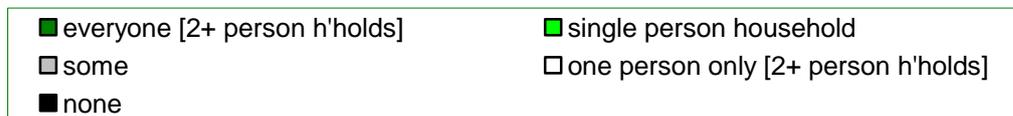
As already reported there was one fifth of households (20%) with no users.

15% of the sample were single person households where that person was a food waste system user.

There were another 9% of households with a single user.

However in 60% of cases, it was reported that all household members use the food waste system. (This includes single person households – 15% - and multiple person households – 45%).

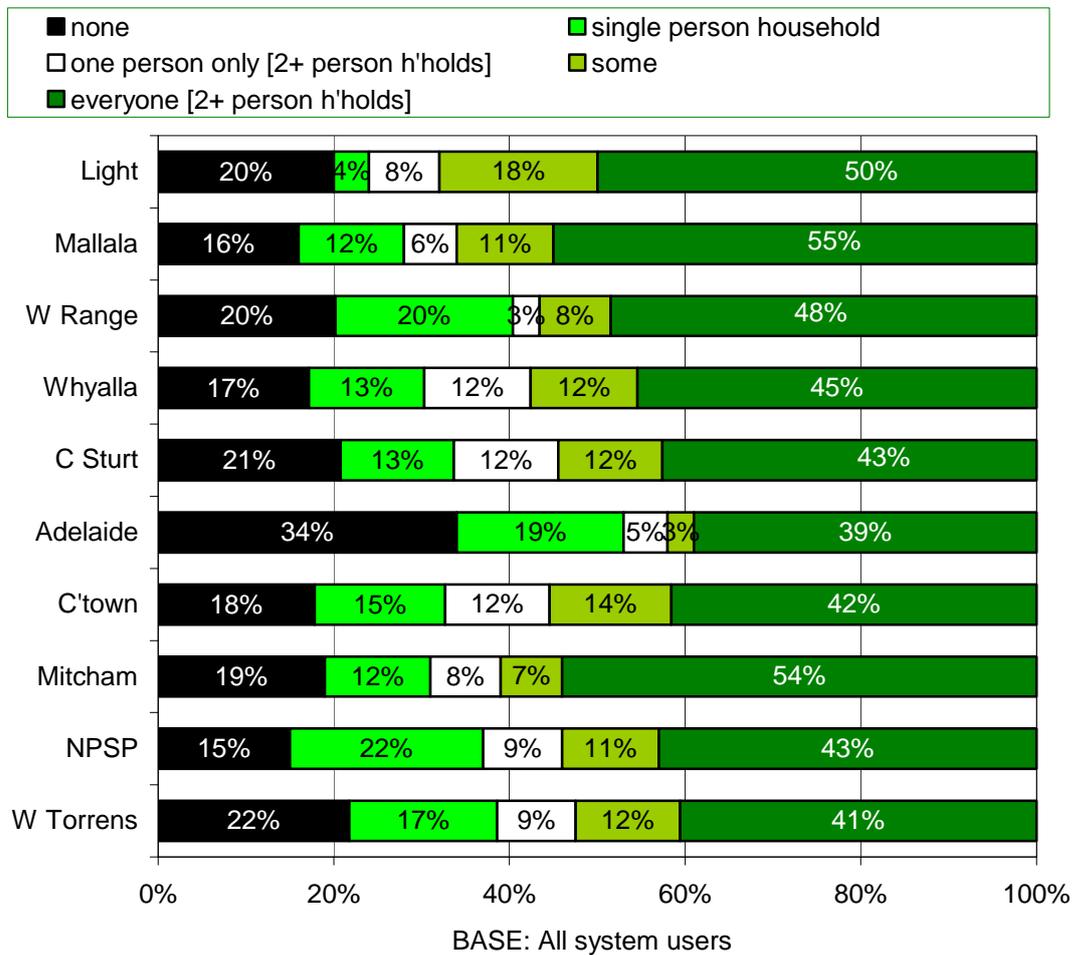
HOW MANY HOUSEHOLD MEMBERS USE FOOD WASTE SYSTEM



The chart below gives the breakdown for each council area.

The proportion of multiple person households where all occupants were users of the food waste system is the dark green bar on the left. This proportion is highest in Mallala and Mitcham and lowest in Adelaide (which had a large proportion of non – users).

PEOPLE IN HOUSEHOLD USING FOOD WASTE SYSTEM



Problems or shortcomings with food waste trial (Q 19)

Continuing and former users of either system (3448) were asked if they thought there were any problems or shortcomings with the trial.

61% felt there were **no problems**.

Of the 39% who indicated specific problems, the response was fragmented. 78% of the relatively small group of former users cited problems or shortcomings, compared with 34% of continuing users.

46% of Kitchen Caddy users reported problems, compared with 37% of Bio Basket users.

The issue most often mentioned was **green organics bin smelt** - mentioned by 14% overall including 23% of Kitchen Caddy users.

8% of Bio Basket users mentioned problems with the **bags** or the **container** itself.

A comprehensive list of responses follows overleaf.

Were there any problems or shortcomings with the trial?

(Inc. multiple responses)

BASE: ever used system (N=3448)

Green organics bin smelt	15%
Fortnightly collection of G O bin insufficient	9%
Didn't want odours, flies, etc in kitchen	7%
Fortnightly collection of residual waste bin insufficient	6%
Ant / mouse / vermin problem	5%
Bags break or deteriorate and leak	3%
Hassle to keep G O bin clean	2%
Problems with lid	2%
Didn't understand how to use/brochure	1%
Needs liner/prefer Bio Basket	1%
Size – too big or small	1%
Missed collections/couldn't follow calendar	1%
Unsightly on bench	1%
Need to change daily/running out of bags	1%
Other (residual – each <1%)	4%
Total – reporting problems/issues	39%
No problems	61%

Other problems included: *not worth the effort - little food waste, no green organics bin, unhygienic, placement dilemma, had to use a lot of newspaper for wrapping, not interested, hassle to keep green organics bin clean, caddy smelt.*

Incidence of capacity issues residual waste bin (Q 20)

The 1313 respondents living in areas where the residual waste bin was collected fortnightly were asked whether they experienced capacity issues during the trial ...

- Frequently - every fortnight
- At least once per month
- Seldom, not enough to be an ongoing concern (they managed)
- Rarely – only once or twice

These were people who lived in Norwood Payneham & St Peters, Mallala, Hectorville (Campbelltown) and part of Wattle Range.

36% indicated that this had been **a problem** for them at least once during the pilot period.

24% claimed to have had **a problem every fortnight**.

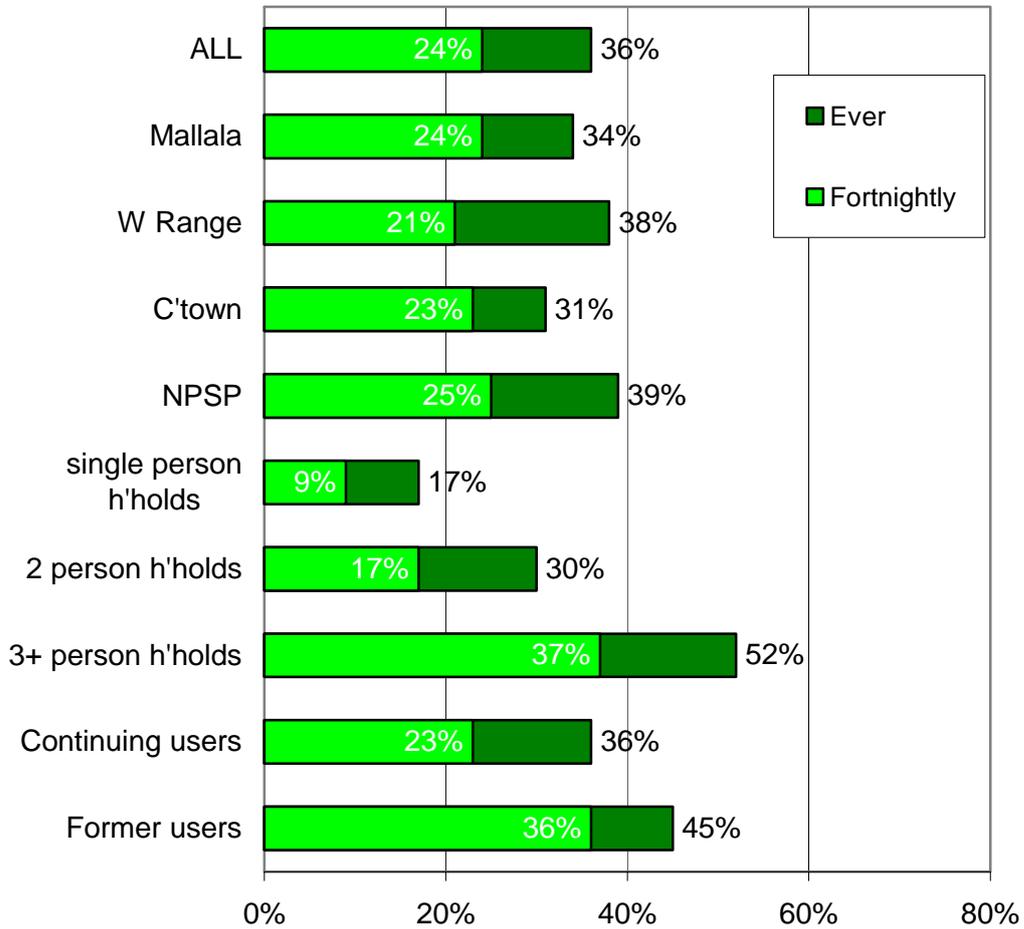
64% reported that there were **no capacity problems**.

As would be expected, the incidence and frequency of capacity problems increased with household size. Only 17% of those living alone reported such problems, compared with 45% of those with a household size of 3 or more. 36% of this latter group reported having problems every fortnight.

Segmented results appear in the chart overleaf.

36% of continuing uses indicated that they have capacity issues with their residual waste bin to some extent.

**INCIDENCE OF CAPACITY ISSUES FORTNIGHTLY
COLLECTION RESIDUAL WASTE BIN**



Benchmark rating of three bin system (Q21)

All respondents were asked to rate the three bin system for waste, recyclables and green organics, as it was before the trial.

They were asked to use the following ten point scale:

1	2	3	4	5	6	7	8	9	10
Poor					Excellent				

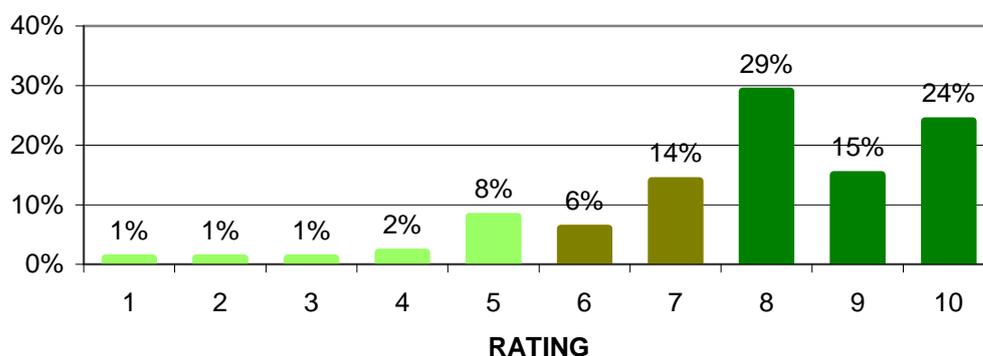
A 'don't know' response was also allowed. This was utilised by 100 respondents (2% of the total).

- A total of 68% gave a rating of 8 out of 10 or better.
- A further 20% gave a rating of 6 or 7.
- The remaining 13% gave a rating in the lower half of the scale (1-5).

The average rating given was 7.9.

The chart below details individual points on the scale for the sample as a whole.

RATING: 3 BIN SYSTEM

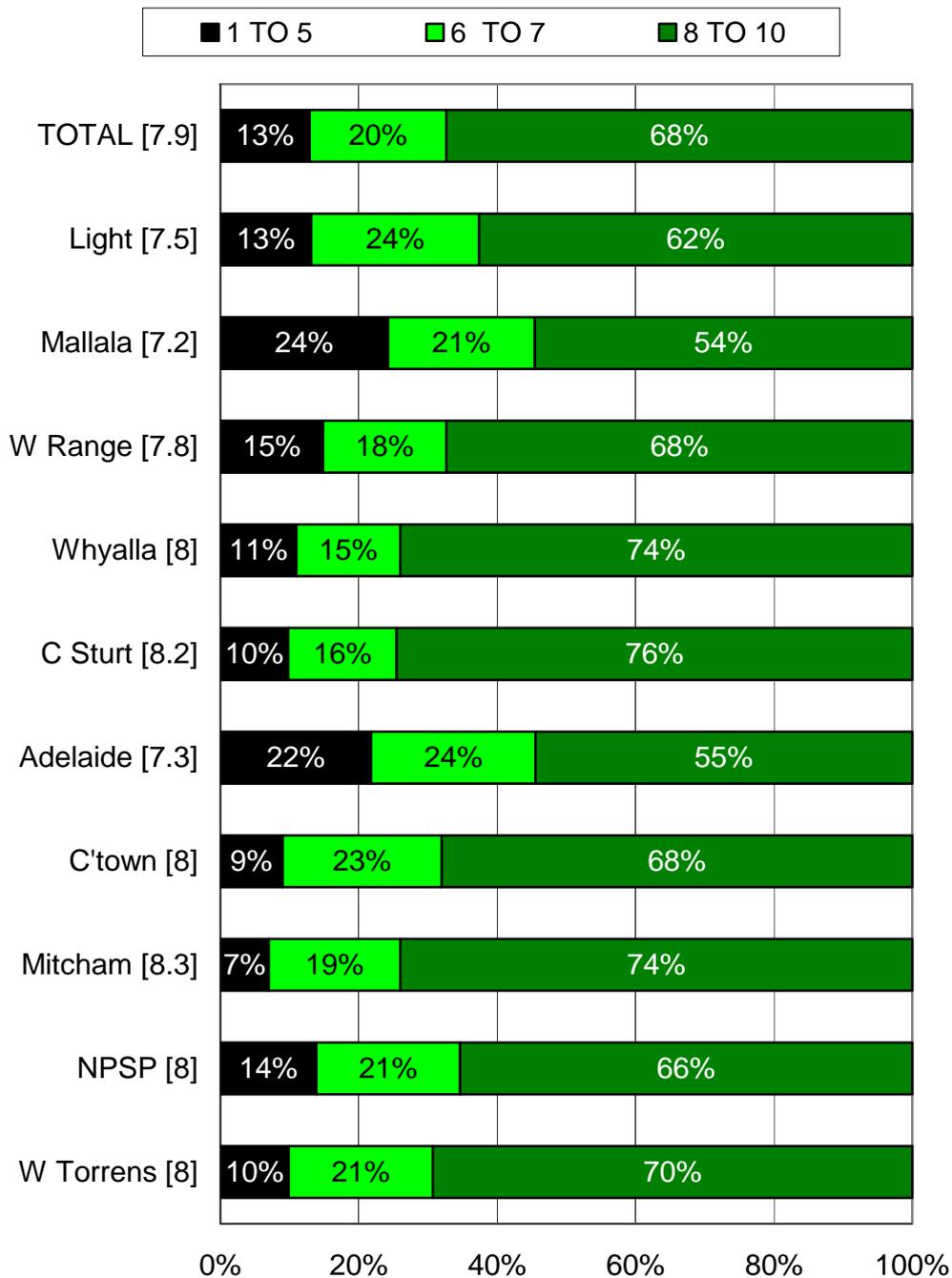


The chart below summarises results that are **below average** (rating 1 to 5), **above average** (rating 6 to 7) and **very positive** (rating 8 to 10).

The mean rating for each segment is given in brackets next to each segment name.

As shown below, the cities of Mitcham (8.3) and Charles Sturt (8.2) had mean scores significantly higher than the aggregate (7.9). Light (7.5), Adelaide (7.3) and Mallala (7.2) were below par.

RATING - EXISTING 3 BIN SYSTEM [MEAN SCORE]



Rating of food waste system (Q 22)

Respondents were asked to rate the food waste system in terms of assisting with recycling of food waste.

This question was asked of all respondents – including those who had never tried the system.

They were asked to use the same scale as in the previous question:

1	2	3	4	5	6	7	8	9	10
Poor					Excellent				

A 'don't know' response was also allowed. This was utilised by 506 respondents, 465 of whom were non users. 99% of people who had used one of the food waste systems gave a rating.

Among those who gave a rating, the aggregate response pattern was as follows:

- A total of 71% gave a rating of 8 out of 10 or better.
- A further 9% gave a rating of 6 or 7.
- 20% gave a rating in the lower half of the scale (1-5).

The average rating given was 7.8.

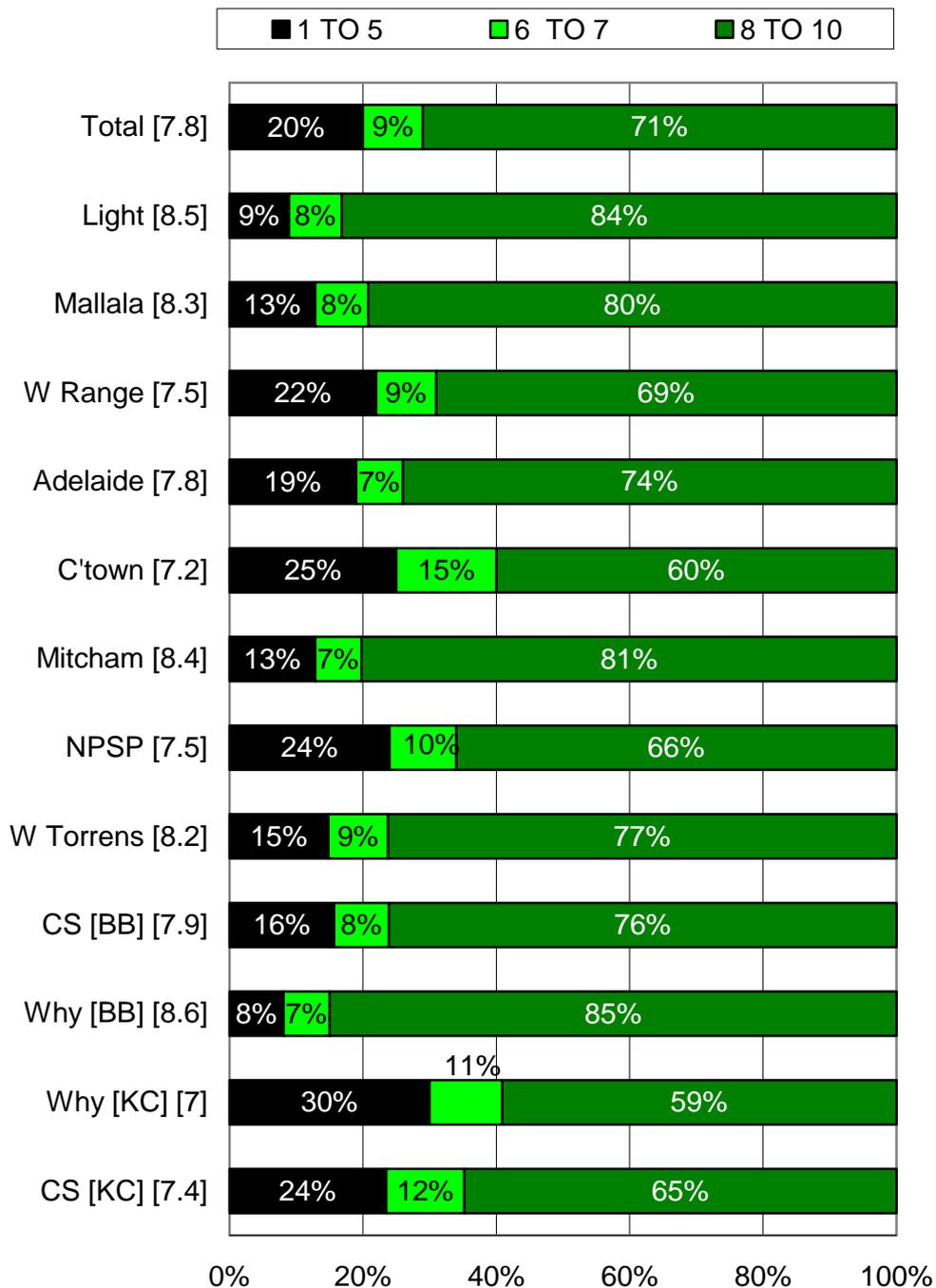
Looking at the two systems individually, we can see that the **Bio Basket** system was more favourably rated. 72% of residents of this area gave their system a score of 8/10 or better and the mean score was 7.9. 19% gave this system a rating of 5 out of 10 or lower.

62% of residents of the **Kitchen Caddy** area gave their system a score of 8/10 or better, while 27% gave a rating of 5 or less. The mean score was significantly lower at 7.2.

The chart below summarises results by area. The two Kitchen Caddy areas are at the bottom of the chart. Along with Campbelltown (which terminated the trial during the survey period), these areas also have the lowest average ratings.

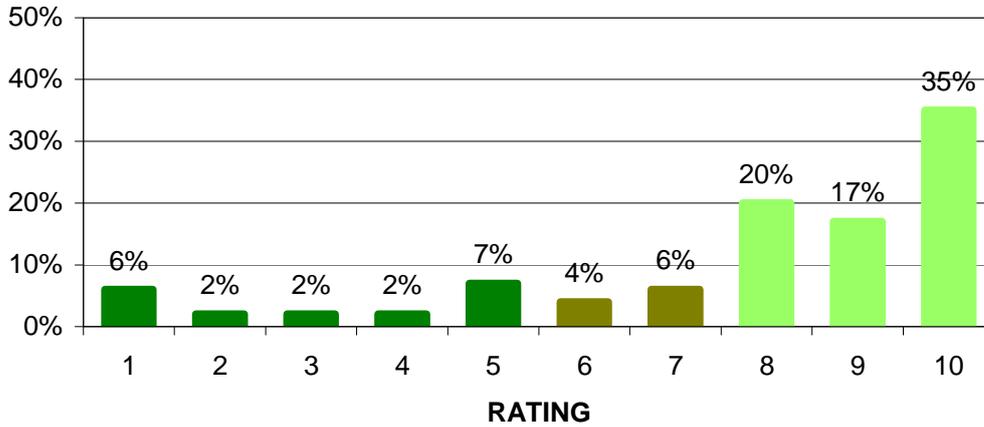
In contrast, the Whyalla Bio Basket area has the highest rating (mean 8.6), followed by Light and Mitcham.

RATING - FOOD WASTE SYSTEM [MEAN SCORE]

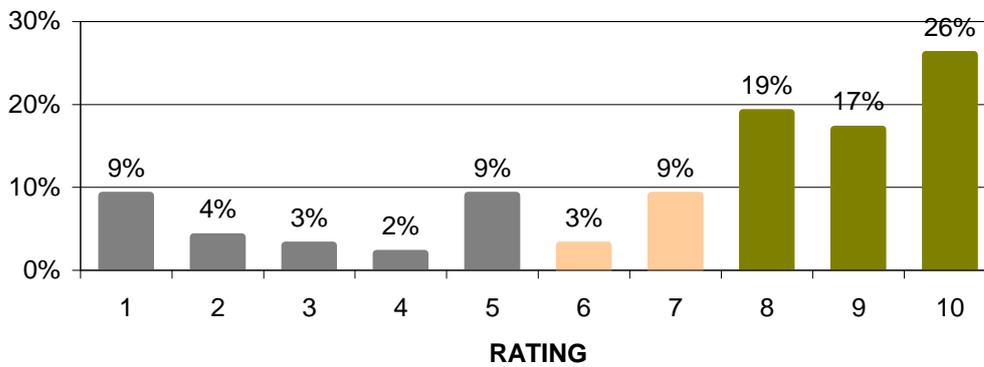


The charts below detail individual points on the scale for the two systems.

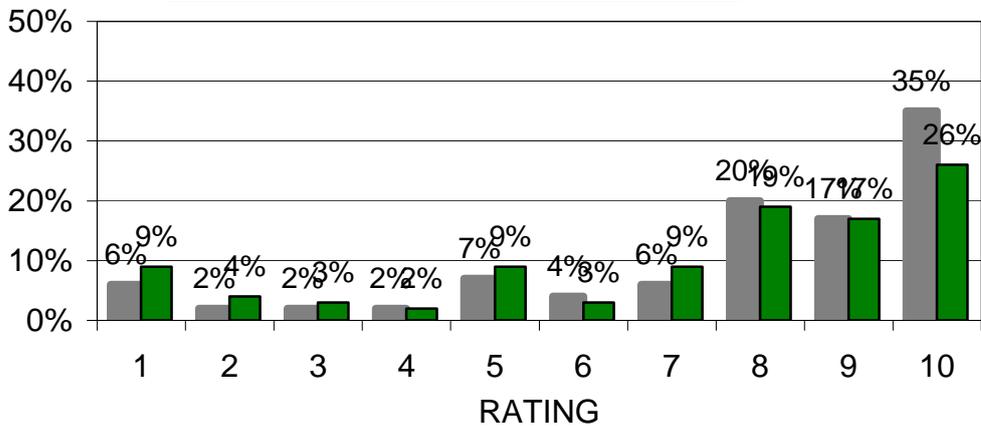
RATING: BIO BASKET



RATING: KITCHEN CADDY



RATING: BIO BASKET KITCHEN CADDY



Rating of collection frequency - residual waste bin (Q23)

Respondents were also asked to rate the collection frequency of their residual waste bin. They were asked to use the same ten point rating scale as the previous questions.

Of the 4224 survey participants who gave a response:

- 76% gave a rating of 8 out of 10 or better.
- A further 9% gave a rating of 6 or 7.
- This leaves 16% who gave a rating in the lower half of the scale (1-5).

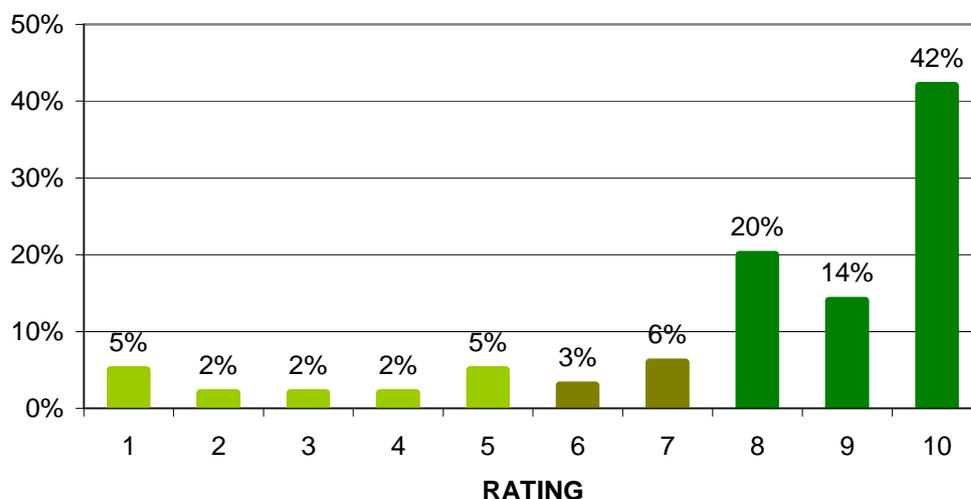
The average rating given was 8.1.

However, there were four areas where this collection was fortnightly rather than weekly and these respondents have markedly lower ratings.

Looking at the **weekly residual waste collection** areas, collectively, 89% gave a rating of 8/10 or better and the mean score was 8.9.

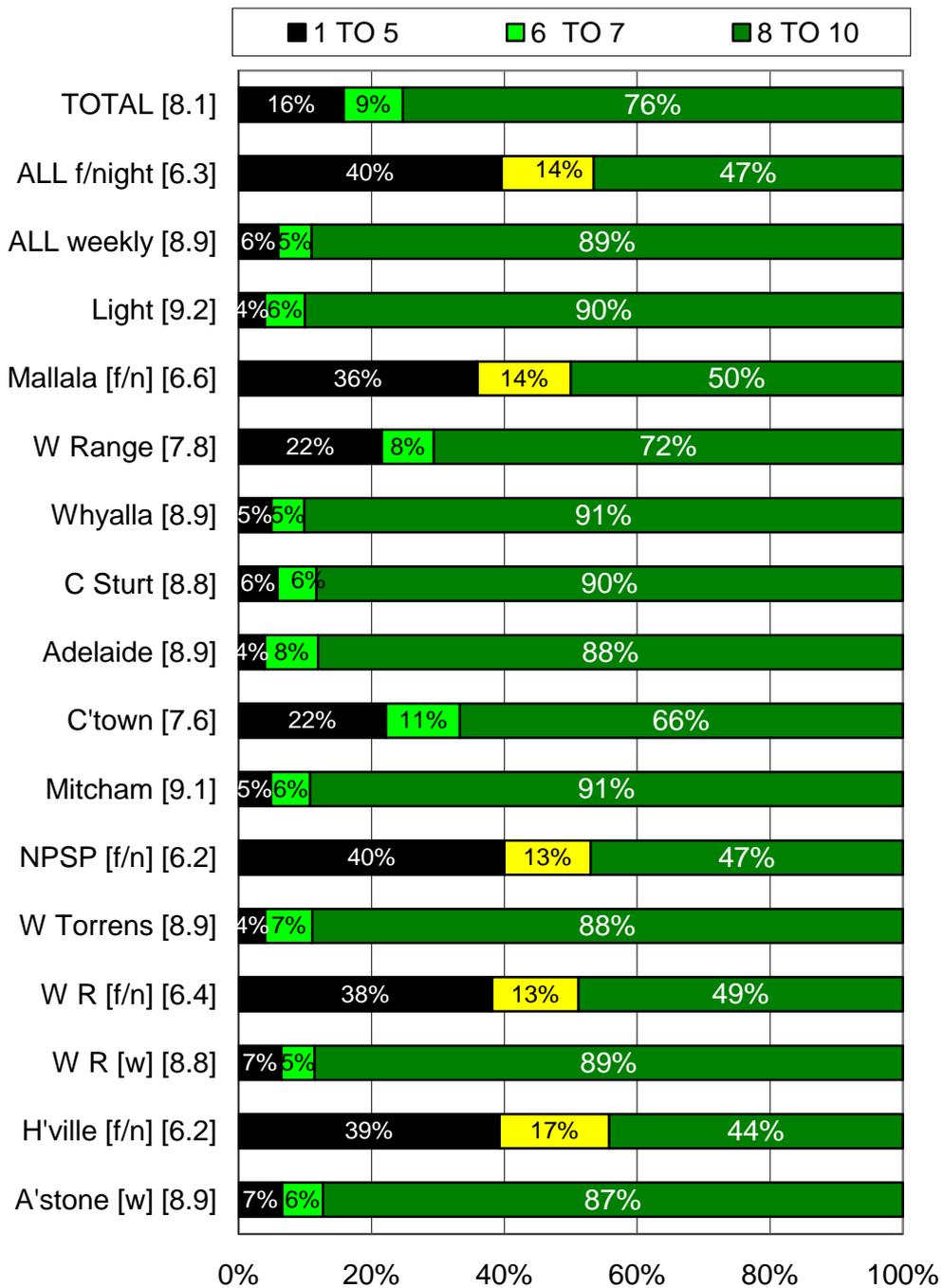
In the **fortnightly collection** areas, only 47% gave a rating of 8/10 or better, with a similar proportion rating at 5 or lower (40%). The mean score for this cohort was 6.3. The response pattern was consistent across all four of these areas – Norwood Payneham & St Peters, Wattle Range, Hectorville and Mallala.

RATING: COLLECTION FREQUENCY RESIDUAL WASTE BIN



In the accompanying chart, areas with fortnightly residual waste collection are highlighted by having the mid range 6-7 score coloured yellow.

RATING - COLLECTION FREQUENCY RESIDUAL WASTE BIN [MEAN SCORE]



Rating of collection frequency - green organics bin (Q24)

Finally, in this series of questions, respondents were asked to rate the collection frequency of their green organics bin. In all cases, this is a fortnightly collection service.

They were asked to use the same ten point scale:

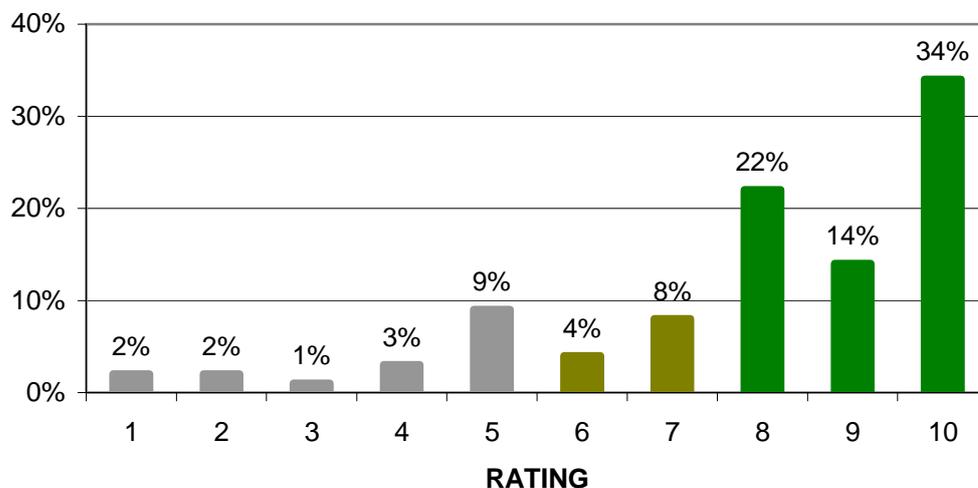
1	2	3	4	5	6	7	8	9	10
Poor					Excellent				

A 'don't know' response was also allowed. 122 respondents (3%) were unable to give a rating.

- A total of 70% gave a rating of 8 out of 10 or better.
- A further 12% gave a rating of 6 or 7.
- The other 17% gave a lower rating.

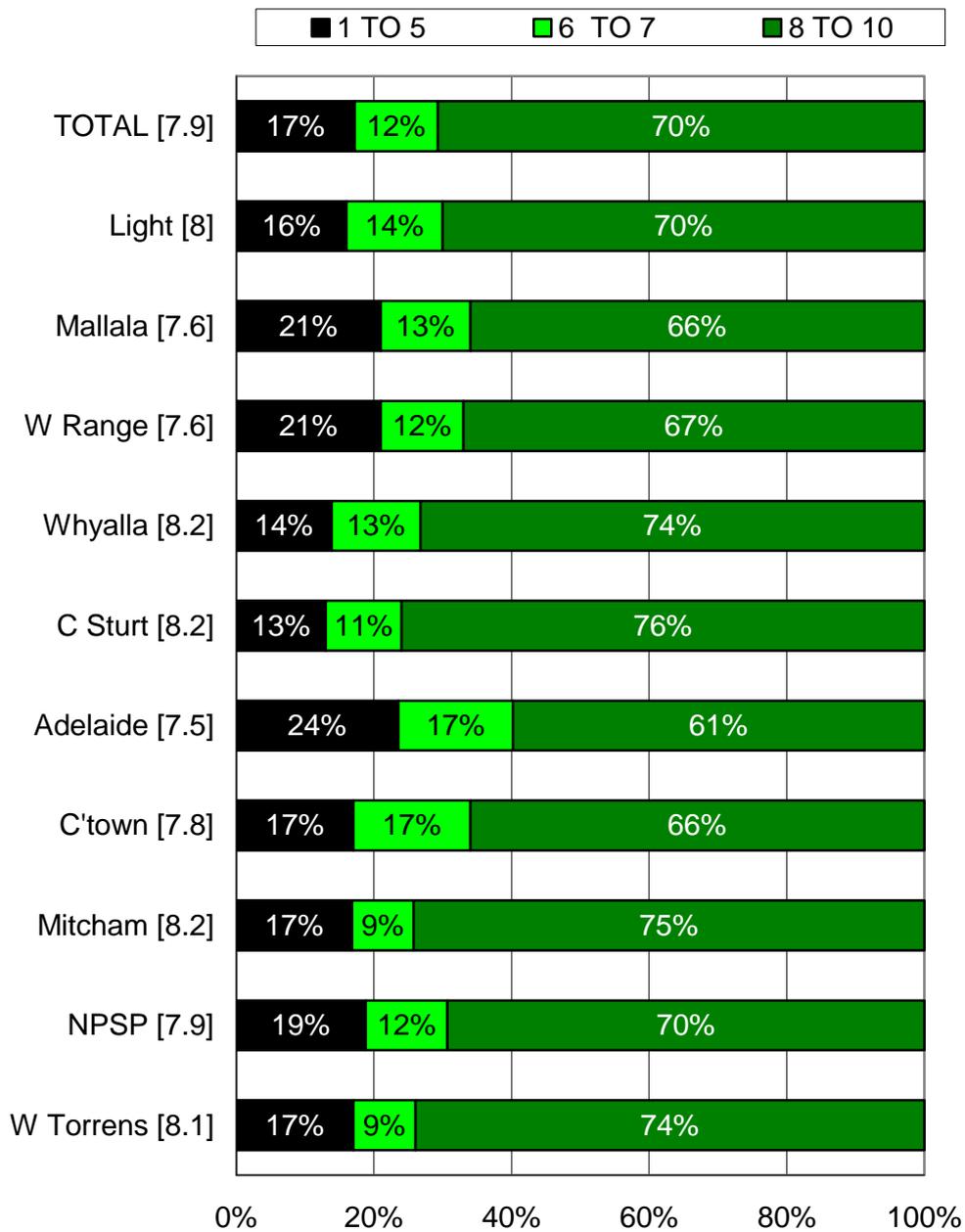
The average rating given was 7.9.

RATING: COLLECTION FREQUENCY GREEN ORGANICS BIN



As illustrated below, ratings ranged between 8.2 (Whyalla) and 7.5 (Adelaide), which is less variation than was recorded for the other three ratings questions.

RATING - COLLECTION FREQUENCY - GREEN ORGANICS BIN [MEAN SCORE]



Predicted future use of food waste system (Q25)

All respondents were asked to indicate their likelihood of using their respective food waste system on an on-going basis.

Responses were recorded using the following scale:

<i>very likely</i>	<i>quite likely</i>	<i>quite unlikely</i>	<i>very unlikely</i>
--------------------	---------------------	-----------------------	----------------------

A 'don't know' response was also used.

72% of respondents felt it **likely** they would continue to use the system, including 54% who considered it **very likely**.

23% of respondents stated they would be **unlikely** to continue to use the system, including 17% who considered it **very unlikely**.

5% were uncertain.

As would be expected, those who are continuing to use the food waste system usually indicated they were **likely** to use it on an on-going basis (93%), with only 4% saying they would be **unlikely** to continue in the long term.

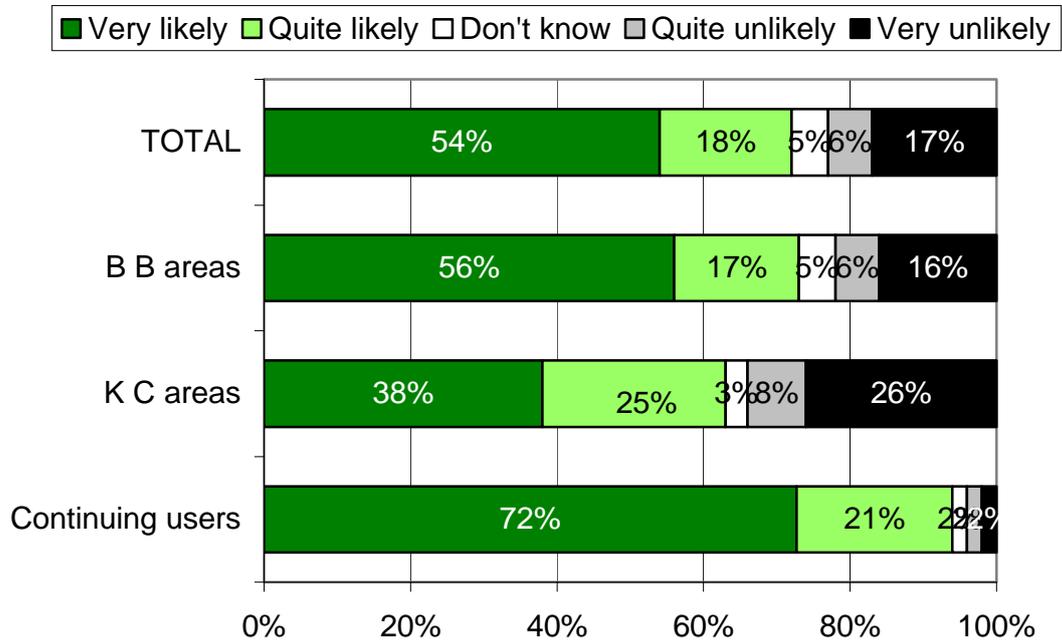
Amongst the balance of the sample, the response was quite different. 18% of this subgroup was **likely** to use the system in future, while 71% said they would be **unlikely** to continue.

The response from the **Bio Basket** areas was generally favourable, with 73% **likely** to continue to use the system, including 56% who considered it **very likely**. 15% were **unlikely** to continue.

The corresponding figures for the **Kitchen Caddy** areas were not quite as positive. 63% said they were **likely** to continue to use the system, including 38% who considered it **very likely**. 34% were **unlikely** to continue.

If we isolate the responses of the people who were still using the food waste system at the time of interview, we find that 69% of people living in the Bio Basket areas were still using that system and intending to continue. The corresponding figure for the Kitchen Caddy system was 56%.

PREDICTED FUTURE USE



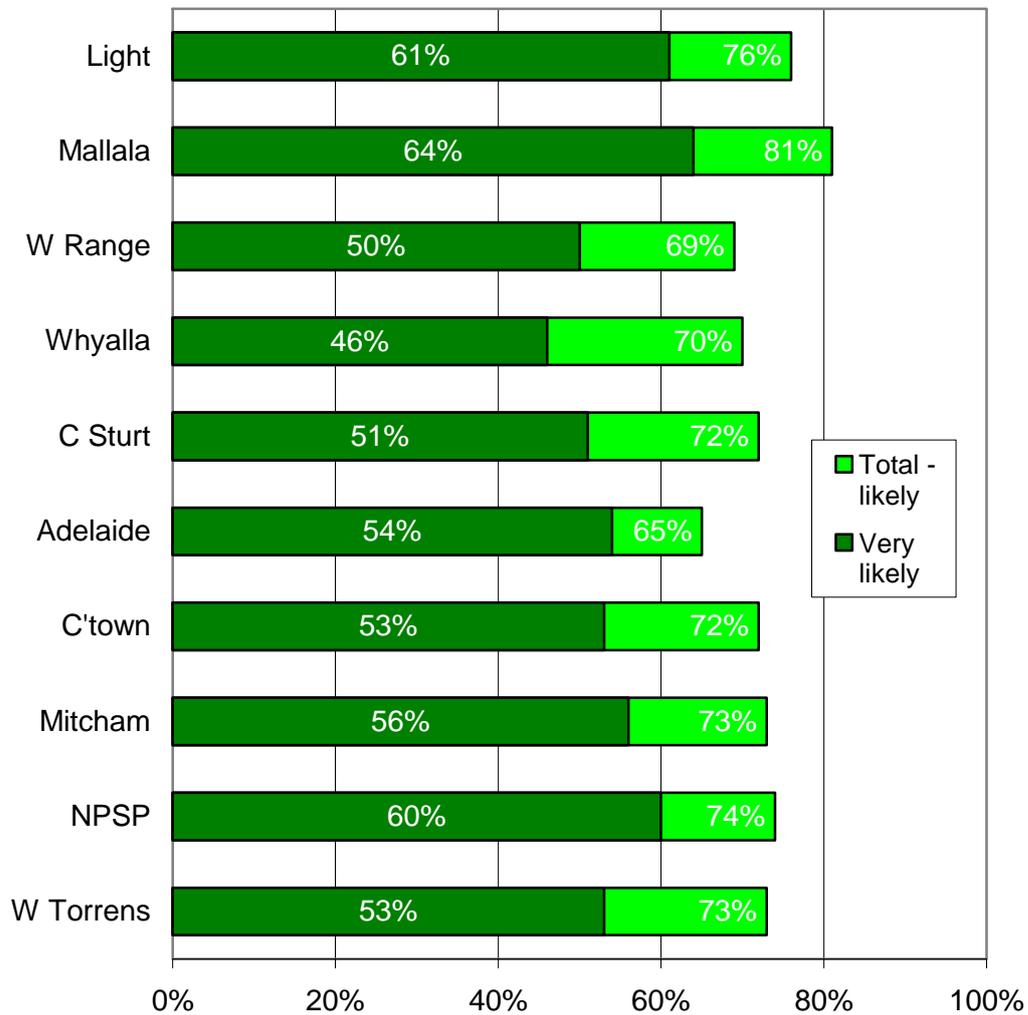
The chart below summarises the 'likely' responses for all ten councils.

Mallala was the most positive area, with 81% pronouncing themselves likely to continue, including 64% who were very likely to continue using the food waste system.

Charles Sturt and Whyalla are relatively low because of the Kitchen Caddy components.

Adelaide was again the least positive area.

PREDICTED FUTURE USE



Cost perceptions (Qs 26, 27)

All respondents except Campbelltown residents were reminded that: *during the trial, the food waste system is provided at no direct cost to residents.*

They were then asked: *If Council implemented the system, what statement best describes your thoughts on costs? (Understanding there may be a cost increase with the introduction of a new service)*

- *Not concerned – found the system very good and think it should be implemented regardless of cost*
- *Willing to pay \$15 - \$20 a year as part of rates*
- *Willing to pay \$10 - \$15 a year (as part of rates)*
- *Willing to pay \$5 - \$10 a year (as part of rates)*
- *Willing to pay no more than \$5 a year (as part of rates)*
- *Not willing to pay any extra*

The last option was the most common answer, chosen by 59%.

In each segment, the most frequent response was **not willing to pay any extra.**

This answer was given by 53% of food waste system users and 81% of non users.

Overall, 41% are willing to pay something for the Food waste system.

This includes 55% in the Bio Basket area and 36% in the Kitchen Caddy area.

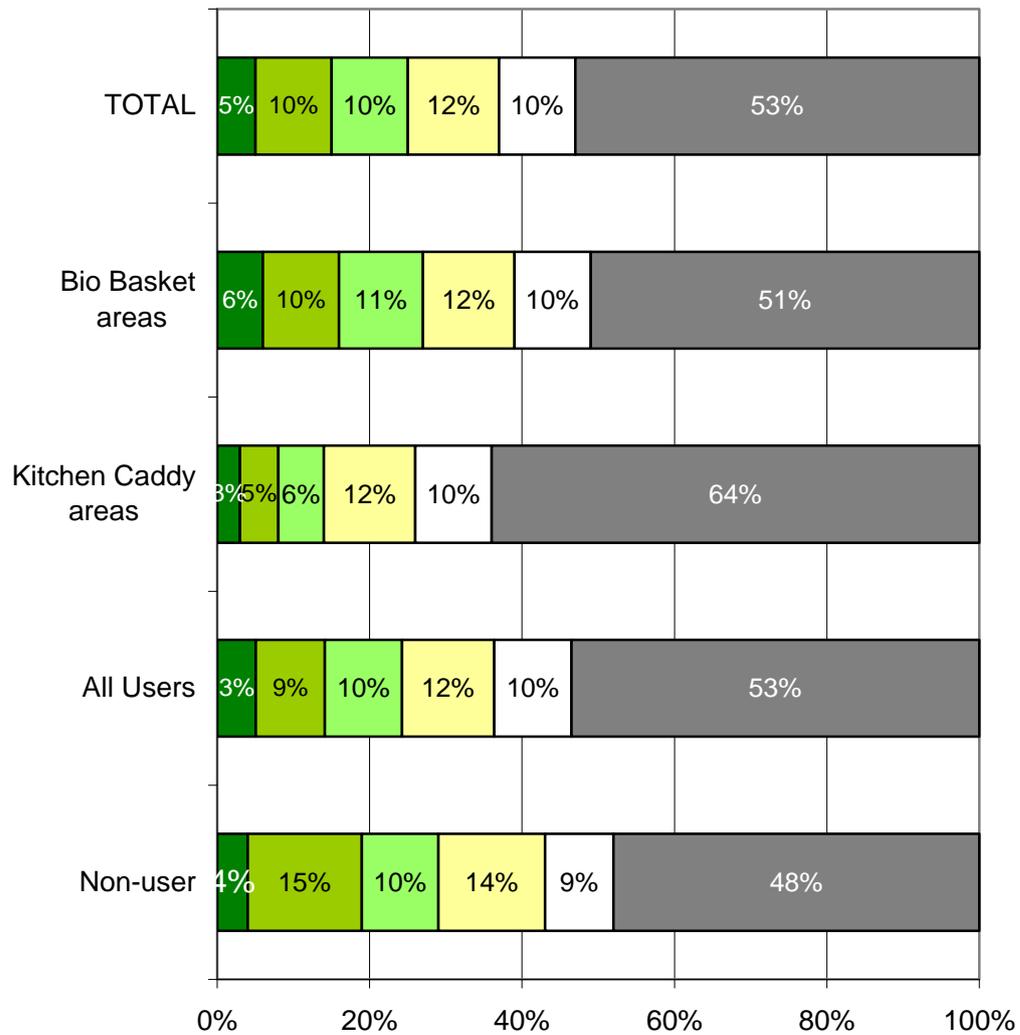
Results for these segments are given in the chart overleaf.

If we isolate the responses of the 2767 people still using the system, the proportion willing to pay becomes 50%.

Likely future users who are willing to pay for the food waste system constitute 39% of the total sample. Segmenting this by the particular waste system respondents were exposed to, the figures are 49% in the Bio Basket areas (excluding Campbelltown) and 30% in the Kitchen Caddy areas.

WILLINGNESS TO PAY

- Implement at any cost
- Willing to pay \$15 - \$20
- Willing to pay \$10 - \$15
- Willing to pay \$5 - \$10
- Willing to pay <\$5 a year
- Not willing to pay any extra





Respondents were invited to comment further (Q27). The vast majority made a comment.

50% of the total sample made comments to the effect that they were **not willing to pay any extra**, which are summarised below. It should be noted that non-users of the system feature strongly in this group.

NOT WILLING TO PAY ANY EXTRA

Most comments under this heading (from 26% of the sample) were about **paying too much in rates / should already be included in rates**. Examples of these comments are as follows:

- *Because we pay enough rates already and the stuff is sold back to you.*
- *Hard enough as it is. They do buckleys. I don't want to pay any more*
- *Council are getting the work of recycling done for them by residents in recycling food scraps and making compost so why do council want to charge residents extra.*
- *Because we already pay for the bin to be emptied, no extra service really.*
- *Because we are not paying for it now.*
- *Because the cost of the system should be offset by the savings in landfill.*
- *Because we already have the bins and bio basket, I don't feel to pay extra rates just for bags.*
- *Council charges high enough rates as it is.*
- *Council rates should cover costs.*

4% of the sample - mainly pensioners and others on a low income - felt they *could not afford any increase*.

13% of the people interviewed commented that they **did not use the system**, and felt they should not pay for something they don't use. Typical responses were:

- *I don't need it so don't want to pay for something I don't use / I have a better system*
- *I have always recycled my food waste.*
- *I don't use it so I am not happy to pay for it.*
- *I would probably compost everything instead as I used to do.*
- *Because I could put it for free in my compost mulch bin and get compost from it for the garden, I was doing this before the trial and it was a very good way of dealing with organics.*

A further 4% commented that they did **not see the need** for the food waste system; while 3% regarded it as a **waste of time and/or money**.

NOT CONCERNED – FOUND THE SYSTEM VERY GOOD AND THINK IT SHOULD BE IMPLEMENTED REGARDLESS OF COST

4% made comments under this heading. These people are almost all users of the system and their comments are positive. A selection is reproduced below.

- *I think the whole scheme works beautifully. Good for the environment.*
- *Our general waste has been reduced to only one bag of rubbish per fortnight thanks to council recycling initiatives*
- *No matter what it costs I would use the system - it saves filling my blue lidded bin up and it is easy to throw in the green bin.*
- *Won't have to have collect bin weekly if everyone recycles correctly.*
- *Know we have to pay something - doesn't bother me if I have to pay because it's good for environment.*
- *Not concerned, \$20 a year is nothing.*
- *There needs to be a cost/ these things cost money*



ONLY WILLING TO PAY Up To \$20 / year

31% of residents were prepared to pay something - but no more than \$20. These comments fell into the following categories:

- *Like it but can't/won't pay much (12%)*
- *Great system - happy to use it (9%)*
- *Good for environment (6%)*
- *Good system - but could be improved (3%)*

Willingness to pay for refill bags cost \$15/150 (Q 28)

All 3042 respondents who had used the **Bio Basket** system or considered themselves likely to use the system in the future, were asked if they would be prepared to pay for re-fill bags at a cost of \$15 for a roll of 150 bags on an on-going basis.

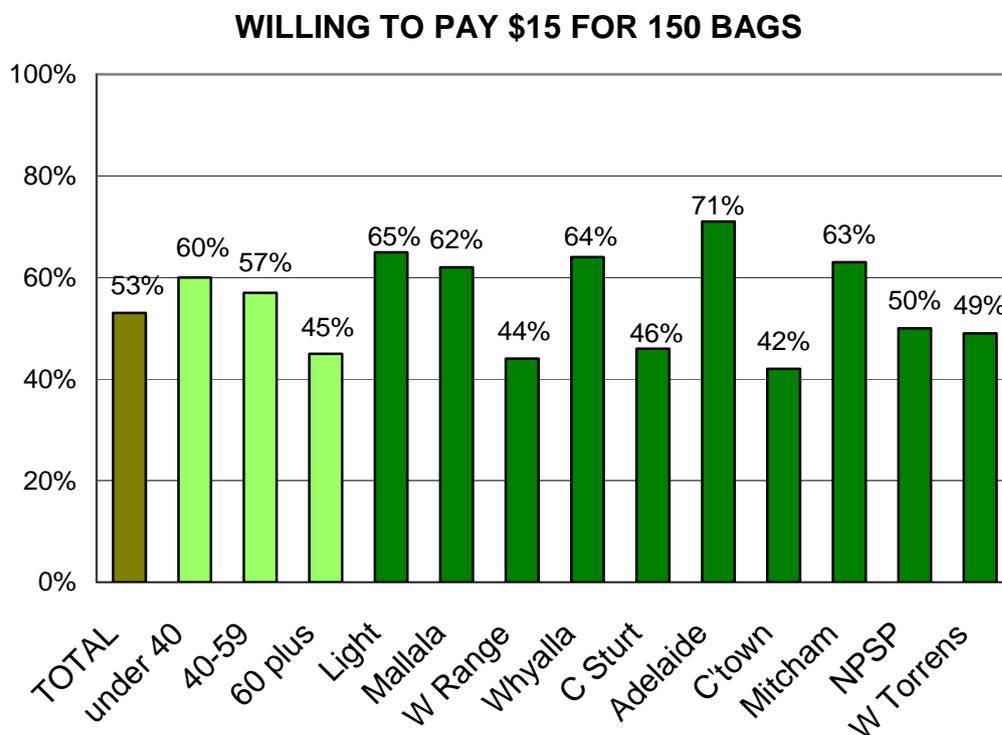
53% were prepared to pay this cost, while 35% were not. 12% were not sure.

As illustrated below, willingness to pay varied with age.

The people prepared to pay the cost represent 44% of the total sample for the Bio Basket areas.

Areas where a particularly high proportion of residents indicated a willingness to pay were Adelaide, Light, Whyalla, Mitcham and Mallala.

Relatively few people in Wattle Range and Campbelltown were willing to pay this cost.



Willingness to pay for bags after first 150 (Q 29)

The 805 **Bio Basket** users who used more than 3 bags a week in the trial were asked to indicate the likelihood of them using the system on an on-going basis if the council supplied only enough free bags for 3 bags to be used a week and they had to pay \$15 for a roll of 150 additional bags.

Responses were recorded using the following scale:

<i>very likely</i>	<i>quite likely</i>	<i>quite unlikely</i>	<i>very unlikely</i>
--------------------	---------------------	-----------------------	----------------------

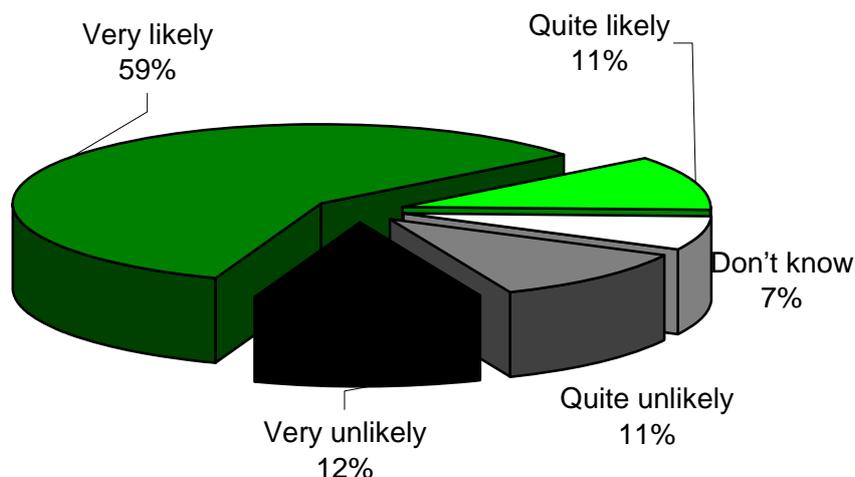
A 'don't know' response was also used.

70% of these respondents felt it **likely** they would continue to use the system, including 59% who felt it **very likely**.

23% of respondents felt it **unlikely** they would continue to use the system, 12% of these were **very unlikely**.

7% were not sure if they would use the system under these circumstances.

WILLING TO PAY \$15 FOR 150 BAGS AFTER FIRST 150 BAGS



14% of heavy (4+ bag) users felt it unlikely they would continue before told of this extra cost.

Further comments (Q 30)

Before concluding the interview, respondents were asked if there were any changes they would suggest or if there were any other comments they would like to make.

Respondents made 2731 comments. They are summarised below.

15% of respondents made **general positive comments** praising the system (Bio Basket areas - 16%: Kitchen Caddy – 14%).

10% of comments in both areas related to **containers and bags**, with people in the Bio Basket area reporting problems with leaking bags or broken lids, while those with Kitchen Caddies often wanted them to have liners or bags like the Bio Basket system.

Another common theme was the **collection frequency** of bins.

- *The **green organics bin** should be collected weekly* - suggested by 10% of respondents.
- *The **residual waste bin** should be collected weekly* was mentioned by 19% of respondents overall (fortnightly collection areas - 21%; weekly collection areas - 4%. During the survey, there were media reports about councils seeking to reduce residual waste collection frequency as part of this trial or a general cost cutting measure).
- *The **recycling bin** needs weekly collection* was mentioned by 3% of respondents.

4% made negative comments about **hygiene, smell or vermin**. This was more prevalent in the Kitchen Caddy areas (6%, 3% in the Bio Basket areas).



The issue of **cost** also attracted comments from 5% of those interviewed.

There were a number of single responses, including:

- *Should be a choice to residents who mulch themselves not to pay extra as they are doing things for environment anyway.*
- *I don't want any more bins - three is enough! / I don't want the bio basket because I bury my vegetable scraps in the garden.*
- *In this new system there is fish waste, oyster shells and meat scraps and bones. Council is going to make compost out of this it will have all these shells and bones in it. I think it's the wrong sort of stuff for compost.*
- *A sticker for the top of every bin would be good so we know what can be put in all the bins.*
- *I think older people have trouble getting heavy bins out to the footpath and people with disabilities have trouble with heavy bins also.*
- *Concerned about uneducated people using the system incorrectly*
- *Just that I keep the full bags in my freezer in the summer/ I drop them into the green bin each fortnight on the day of collection/ otherwise it gets a bit smelly.*
- *Don't want to do anything extra.*
- *Get rid of the system as I think it is unhealthy. If waste is decomposable, it will disintegrate in the landfill anyhow.*

EXCEPTION REPORTING

Across most areas and most questions, results were relatively consistent. Certainly, response patterns were similar and any differences reported below tend to be differences in degree rather than radical departures from the norm.

These divergences are summarised below.

WHYALLA

- A high concentration of tenants was recorded in the Whyalla sample.
- In common with the other Kitchen Caddy area, awareness of the system and how to use it was lower than was the case for the Bio Basket.
- Although take up of the Kitchen Caddy was in line with the Bio Basket, continuing use was significantly lower.
- Satisfaction with weekly green organics collection was higher in Whyalla than anywhere else.
- However, the incidence of putting this bin out very fortnight was lower than elsewhere. This may have been related to the blow fly problem (not mentioned elsewhere).
- Performance ratings for the system trialled showed the greatest variation in Whyalla, with the Bio Basket being rated highest here and the Kitchen Caddy rating poorly.

CHARLES STURT

- In common with the other Kitchen Caddy area, awareness of the system and how to use it was lower than was the case for the Bio Basket.
- Although take up of the Kitchen Caddy was in line with the Bio Basket, continuing use was significantly lower.
- This council area had one of the highest performance ratings for the existing three bin system.
- Otherwise, this council area was largely consistent with the aggregate response pattern.

ADELAIDE

- Singles were a particularly numerous household type in Adelaide.
- Fewer ACC residents compost than anywhere else in the trial.
- Whereas having a green organics bin was almost universal elsewhere, only 90% of trial households in Adelaide had one.
- The food waste system had an awareness level in Adelaide, 10% lower than the sample as a whole.
- Incidence of trying the food waste system and continuing to use it were both considerably lower than for suburban and country councils.
- Ratings for the three bin system as it existed before the trial; and the fortnightly green organics collection frequency were lower in Adelaide than elsewhere.

CAMPBELLTOWN

- Campbelltown was generally in line with the aggregate response pattern.
- Residents here tended to empty their containers more frequently than elsewhere (3.6 times a week compared with 3.2 overall).
- The performance of the Bio Basket system was rated lower here than in other areas – possibly because the trial was curtailed.
- In common with other areas with fortnightly residual waste collection, performance ratings for this aspect of service were low in Hectorville.

LIGHT

- Light was characterised by very high owner occupancy.
- The age profile was younger than other areas and families predominated.
- In terms of average length of residence, the District Council of Light was unlike other areas surveyed, with an average period of residence half that recorded in other areas.
- Despite this demographic profile, the District of Light was generally in line with the aggregate response pattern.
- Ratings for the weekly collection of residual waste were a little higher than elsewhere.
- Ratings for the Bio Basket system were also slightly higher than elsewhere.



MALLALA

- Mallala had an above average incidence of continued use of the Bio Basket system.
- This area had a relatively high concentration of multiple person households where everyone used the food waste system.
- A relatively high proportion compost.
- This council area had one of the lowest performance ratings for the existing three bin system.
- In common with other areas with fortnightly residual waste collection, performance ratings for this aspect of service were low.

MITCHAM

- Mitcham was characterised by very high owner occupancy and a high proportion of older residents.
- More Mitcham residents compost than any other council area.
- This area had a relatively high concentration of multiple person households where everyone used the food waste system.
- This council area had one of the highest performance ratings for the existing three bin system.
- It also had one of the highest performance ratings for the Bio Basket system.
- Ratings for the weekly collection of residual waste were a little higher than elsewhere

NORWOOD, PAYNEHAM & ST PETERS

- Twice as many of those interviewed in Norwood Payneham & St Peters were tenants, compared with the sample as a whole.
- Norwood Payneham & St Peters was unusual in that males constituted 42% of the sample (33% for the sample as a whole).
- Singles were particularly numerous in Norwood Payneham & St Peters (particularly in Kensington).
- NPSP had an above average incidence of continued use of the Bio Basket system.
- In common with other areas with fortnightly residual waste collection, performance ratings for this aspect of service were low.
- The proportion admitting that being involved in the trial had increased their awareness of what can go in the green organics bin was lower here than in any other area.
- Composting was relatively uncommon.

WATTLE RANGE

- This council area was largely consistent with the aggregate response pattern.
- In all areas with fortnightly residual waste collection, performance ratings for this aspect of service were low.
- Composting was relatively uncommon.

WEST TORRENS

- This council area did not diverge from the aggregate response pattern to any significant extent.