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LFHW Resource Evaluation

Pre and post-survey results and follow-up
depth interviews

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1. Background on the Love Food Hate Waste business program

Food is the largest component of household waste, accounting for close to 40% of the contents in household red-lid bins going to landfill. Up to 60% of food waste could be avoided. The most recent Commercial and Industrial Waste audit shows business sends 170,000 tonnes of food waste to landfill in NSW each year. The EPA's Bin Trim Business Grant Program data shows food accounts for 33% of food businesses' waste to landfill.

Love Food Hate Waste (LFHW) is an education program focusing on avoiding food waste by changing behaviours and increasing knowledge and awareness. It was developed in the UK and used under licence by the EPA in NSW since 2010. To support the NSW Waste Avoidance and Resource Recovery Strategy target to divert 75% of all waste from landfill by 2021–22, the LFHW Business Program aims to help NSW business reduce food waste and boost their business performance with easy-to-adopt food waste avoidance actions.

LFHW Business Program will be delivered over four years, with the initial phase (2015–16) focusing on developing a LFHW Food Business Kit. The kit includes everything a food business would need to know to adopt good practices to avoid food waste, including how to conduct a food waste audit and develop an action plan to tackle food waste generated from spoilage, preparation and leftovers by consumers.

The core aims of the new LFHW Business Program are:

- increase the number of small to medium-sized food businesses practicing food waste avoidance behaviours, and
- make food waste avoidance behaviour a social norm in NSW food businesses.

2. ‘Your business is food, don’t throw it away’ pilot project rationale

The LFHW Business Program pilot project tested the Business Food Waste Avoidance Kit (the Kit) which included a range of tools and resources based on LFHW website food business information and WRAP UK research. It also tested different delivery methods. The pilot program targeted three key audiences:

- business owners — to raise the awareness of food waste in their business and the strategies available to tackle it, including a food waste audit sheet, action plans/ strategy to reduce food waste and share success
- staff — reminders and visuals to prompt avoidance behaviours highlighted in the action plan
- customers — to encourage customers to ask for portion size options, leftover containers and avoid unwanted ingredients to reduce plate waste.

The pilot engaged 79 small to medium (up to 199 staff) cafés and restaurants. It involved two food waste audits (before and after) and the implementation of an action plan to avoid food waste.

To eliminate the variables of this pilot project, selected businesses will be a café or restaurant that:

- prepares most of its food on site
- has food forming at least 30% of the waste in its waste bin
- has more than 50% of meals consumed at the premises and has a designated waste bin/ service.

The pilot project aimed to determine food business attitudes and opinions on a range of materials developed for the LFHW food business kit before it is rolled out state-wide. It involved Councils partnering in the Love Food Hate Waste program and Bin Trim assessors who have identified food waste as an action for savings in Bin Trim assessments.

The aim of the pilot was to measure the effectiveness of the program including:

- effectiveness of the food waste audit as a driver
- effectiveness of the resources as motivators for business to act
- effectiveness of direct contact and support to businesses to improve food waste avoidance
- determining the most effective/popular actions and behaviours adopted
- measuring improvements in knowledge, awareness and attitudes to food waste
- measuring cost-saving and volume of food waste diverted from landfill
- opportunities to refine the kit
- effectiveness of strategies to engage businesses.

Following the pilot testing of the LFHW Food Business Kit, the four-year LFHW Business Program project plan will be updated.

3. Methodology

An online survey was conducted with the assessors and the businesses involved in the Love Food Hate Waste program before the intervention, and again after the program had been implemented.

These surveys were undertaken by the assessors with the business participants present.

The following surveys were completed:

- Business Resource Evaluation Pre-Survey (assessors completed n=63)
- Business Resource Evaluation Assessors Post-Survey (assessors completed n=43).

Additional online surveys were undertaken that sought direct feedback from all the organisations involved to evaluate the resources used. However the response rates were very low:

- Business Resource Evaluation Business Pre-Survey Group 1 to 3 (6 food businesses completed)
- Business Resource Evaluation Business Post -Survey Group 4 to 5 (9 food businesses completed).

As the feedback from participating food businesses was insufficient, Instinct and Reason conducted 18 post-pilot telephone interviews lasting approximately 20 minutes each that allowed the participating business to detail their thoughts and feelings towards the pilot program, the actions conducted and not conducted, and the resources they used.

4. Evaluation objectives

The research was conducted to support and inform the evaluation of the Love Food Hate Waste program by:

- Determining whether the information and resources provided during the pilot were clear and concise and easily understood by the businesses
- Determining whether educating staff and customers helped businesses to reduce their level of food waste
- Gauging customers' feedback to the actions conducted by the business
- Determining if there are any differences between the overall results of businesses who consulted with Bin Trim versus those who consulted with a local Council representative
- Assessing if the message to businesses was powerful enough to influence their perceptions and behaviours, and discover whether the resources were effective in helping businesses to reduce their level of food waste.

5. Executive summary

Key points

The main points to emerge from the Love Food Hate Waste (LFHW) Your Business is Food program are as follows:

1. The program has maximum effect on food businesses with 30% or more food waste in their general waste bins. Businesses with high levels of food waste are grateful for the support and find the kit a useful tool to help them reduce their food waste.
2. Importantly, for those food businesses who are well-advanced in food waste prevention, or that have little food waste, the kit is not as useful. Recruiting these businesses to the program should be avoided.
3. Participating food businesses respond better to the idea of making a small number of targeted changes to their business operations than they do to making many changes. The three changes approach in the kit (1, 2, and 3) is well received. This iterative change approach should be continued.
4. Successful implementation of the three changes triggers a need for more change and businesses will want another targeted set of changes to reduce food waste even further. The program triggered ongoing innovation in some participating organisations, and new ideas should be included in future kits to meet this need.
5. Many of the action plans provided to participating food businesses placed an emphasis on reduction or enhanced recycling rather than avoiding food waste. Future programs need to focus efforts on clearer training and communication with assessors to ensure avoidance actions are carried through into the action plans.
6. Cost saving and/or improved profit increases interest and commitment to food waste avoidance, and businesses that experience cost savings are eager to implement further avoidance actions. Ensuring businesses calculate their savings will have a positive impact on future actions of food waste avoidance.
7. With a **customer** base likely to be supportive of food waste avoidance, businesses are motivated to reduce food waste as it improves their brand image and provides personal satisfaction. Providing visual communications such as posters and coasters to businesses promoting their waste avoidance initiatives would be effective and likely to be used. These could suggest customers ask for smaller serves or ask for take-away containers. When

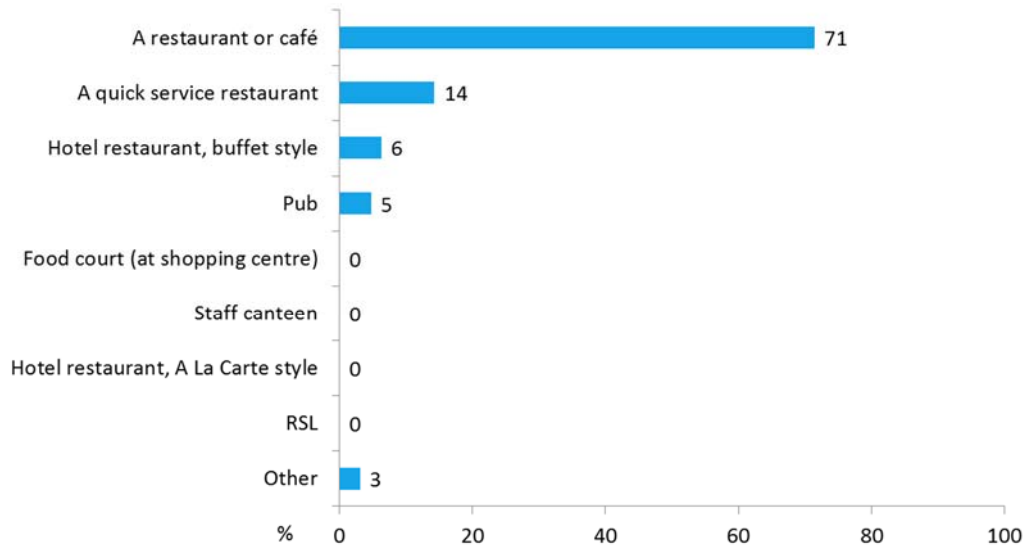
deciding on which business to bring into the program, assessors should ask the business whether the customer base is the right one to promote food waste avoidance.

8. With supportive and interested **staff**, (and the right customer base) businesses are motivated to take the initiative and make suggestions directly to customers about ways that they can reduce food waste. Again, providing visual communications to businesses that encourage staff to suggest to customers to ask for smaller serves, etc, are desirable in the right place. When deciding on which businesses to bring into the program, assessors should ask the business whether the staff will promote food waste avoidance.
9. Some promotional materials provided by the program were not used in the pilot program because they were unable to be displayed or deemed to be inappropriate for a particular customer base. Businesses should be given the ability to choose the materials best for them.
10. Personal contact allows assessors to put forward relevant arguments to participating food businesses and tailor action plans. The personalisation of the communication and the emotive connections make it easier for busy food businesses to adopt the program. As such, assessors need to be well-equipped with knowledge and resources to assist businesses to adopt new initiatives and practices.
11. The assessors' contact has led to ongoing relationships with businesses which has fostered ongoing innovation. The program should continue to be resourced to allow assessors to maintain their connection with participants.

6. Type of food businesses

Restaurants and cafes made up most of the participants in the Love Food Hate Waste program (71%), with 14% describing themselves as a quick service restaurant. A small number of pubs (5%) and hotel restaurants (6%) made up the remainder of those who participated.

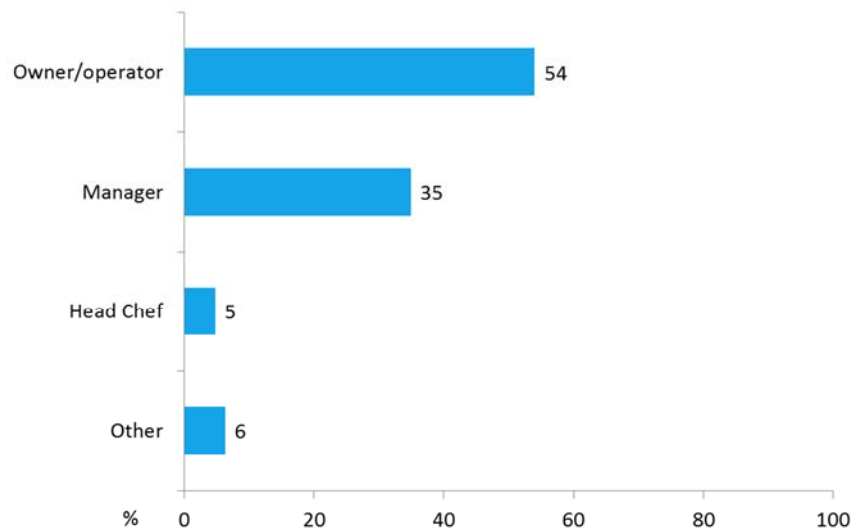
Figure 1: Type of food business



S1. What type of food business do you work in?
 Base: Total pre-survey sample, n=63.

Owners and operators were the main people who completed the survey (54%), with managers accounting for the other main respondent type (35%). Occasionally the head chef (5%) responded.

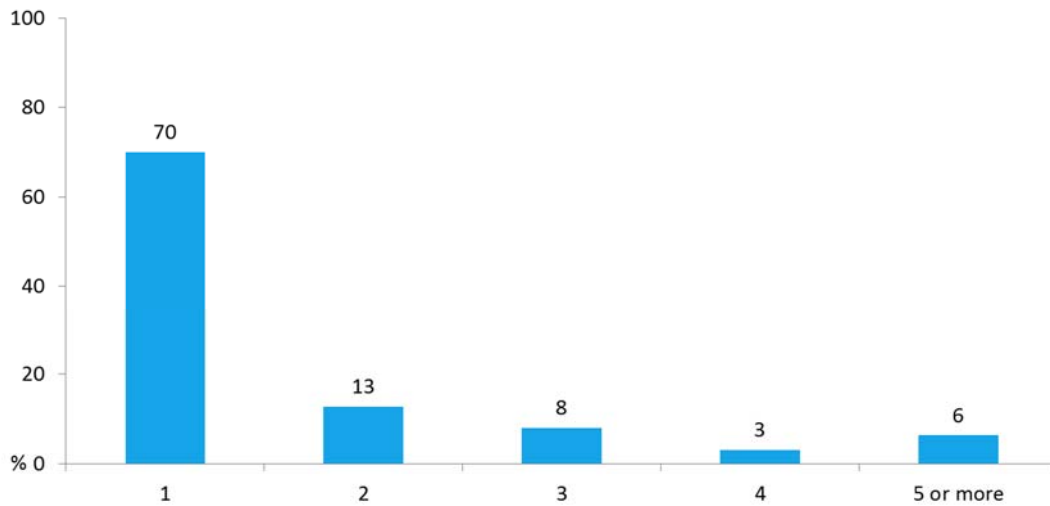
Figure 2: Who completed the pre survey?



S2. What is your position in the business?
 Base: Total pre-survey sample, n=63.

Most participating food businesses had one location (70%), with 13% having two and 8% having three locations. About one in ten (9%) had four or more locations.

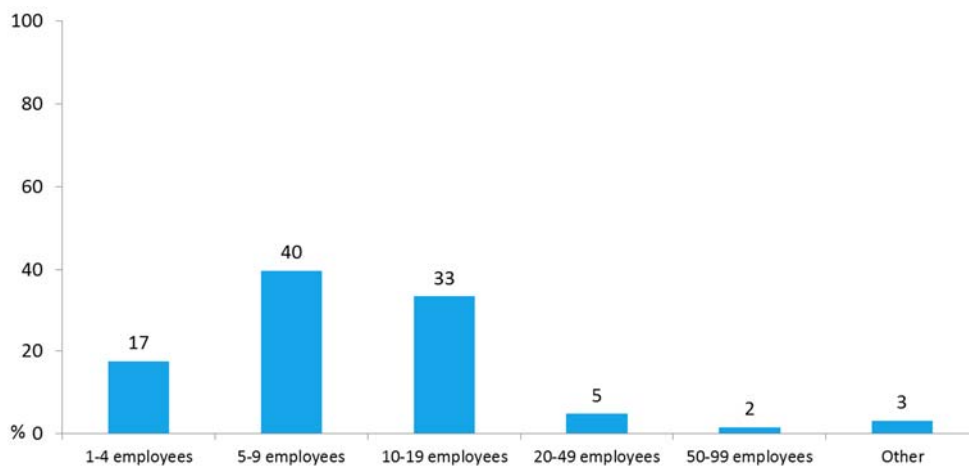
Figure 3: How many locations did the business have?



S3. How many sites or locations does your business have?
 Base: Total pre-survey sample, n=63.

17% of the participating food organisations were micro food businesses with less than five employees, 40% had 5-9 employees and 33% had 10-19 employees. The organisations with multiple locations had more than 20 employees. While every individual location could be considered an SME there were a number that were part of larger organisations which may have impacted on their ability to make changes to food waste avoidance, both positively and negatively.

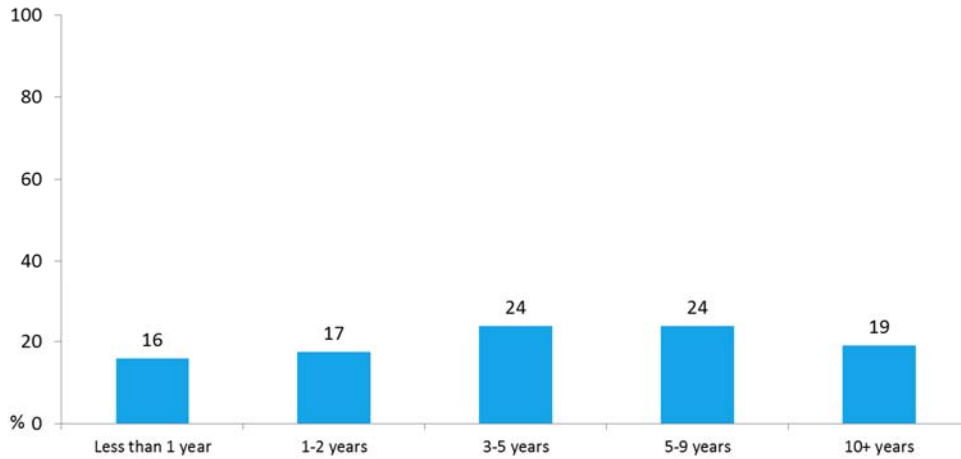
Figure 4: Number of employees



S4. Including yourself, how many employees do you have at all sites in total?
 Base: Total pre-survey sample, n=63.

There was a relatively equal spread of the length of time businesses had been operating. 16% had been operating for less than one year and a further 17% for less than two years. 48% had operated for between 3 and 9 years and only 19% for more than ten years.

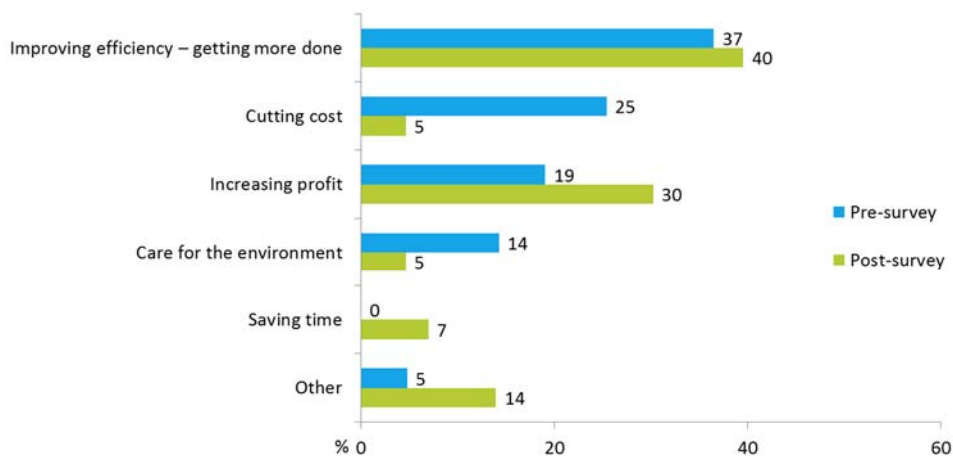
Figure 5: Length of time business has been operating



Q5. How long has the business been operating for?
Base: Total pre-survey sample, n=63.

Before the pilot, participating food businesses thought improving efficiency (37%) and cutting cost (25%) were critical motivators for running their business and potentially encouraged engagement with the LFHW program. Increasing profits was only mentioned by (19%). Post survey results saw shifts in motivations with more participating food businesses recognising the impact of profit as a motivator for the business itself (30% now citing increasing profit as a key motivator for running their business). The shift from cost cutting to profitability suggests the program influenced the strategic intent of many food businesses and caused them to think more deeply about the impact of avoiding food waste.

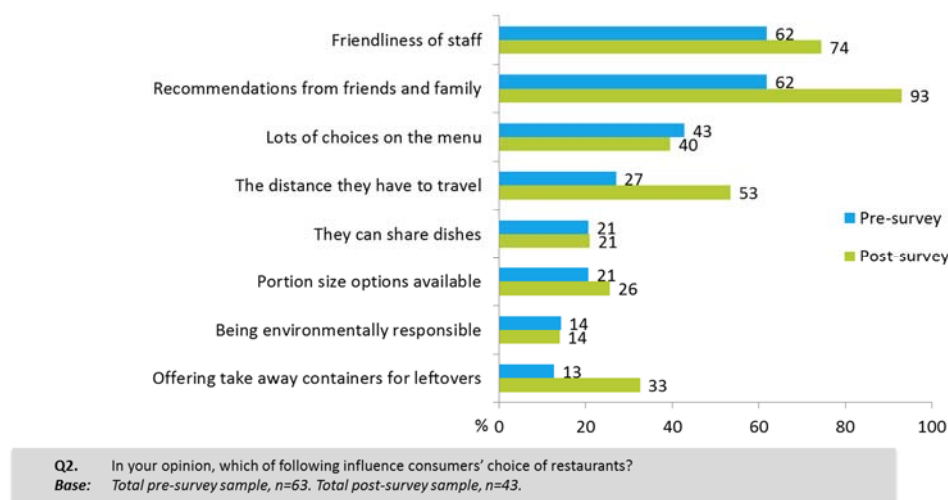
Figure 6: Key motivations for running the business



Q1. When it comes to running your business, which one of the following motivates you the most?
Base: Total pre-survey sample, n=63. Total post-survey sample, n=43.

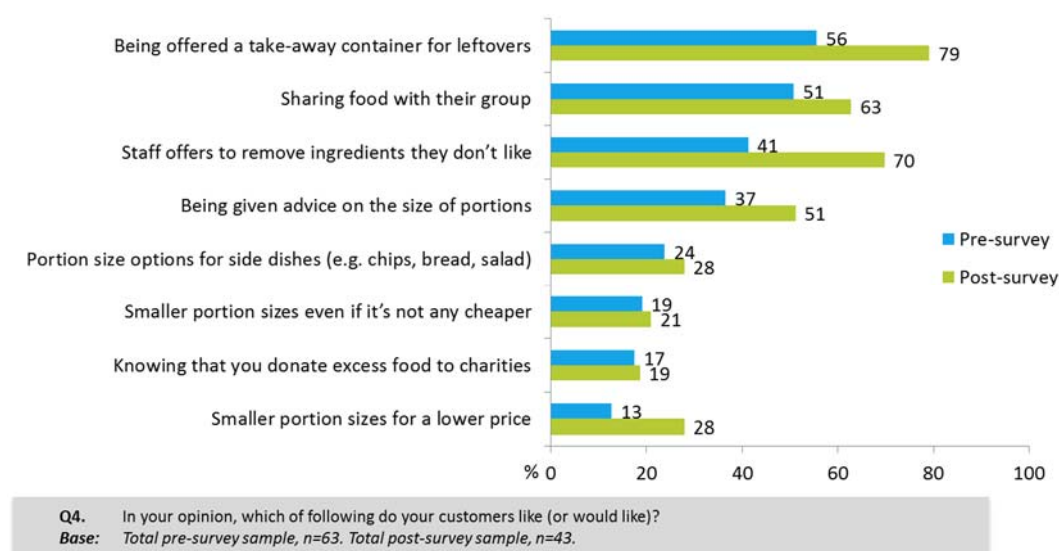
Similarly, the post survey showed changes in the factors that participating food businesses believe might influence consumers' choice of restaurant. The post survey revealed that food businesses think recommendation (93%; up 31%) along with staff friendliness (74%; up 12%) are the two key influences on customers' choice of restaurants. They also realised that offering takeaway containers for leftovers might influence restaurant choice (up 20%). There was little change in the proportion thinking the ability to share dishes and have a greater choice in portion size might influence restaurant choice. However distance travelled was thought to have a much greater impact on choice of restaurant (up 26%) in the follow-up survey.

Figure 7: Perceptions on what influences the customers' choice



Again, the post survey revealed shifts in the views of participating food businesses about customer preferences. More food businesses realised that customers want to be offered take-away containers (up 23%), for staff to offer to remove ingredients they don't like (up 29%), to offer smaller portion sizes for a lower cost (up 15%) and to share food with their group (up 12%).

Figure 8: Perceptions on what the customers want



Participating food businesses also changed their position on some key issues post the LFHW program experience. Fewer think it's their responsibility to reduce food waste (down 10% from 75% who agree pre-program, to only 65% who agree post-program). Fewer think it doesn't cost much to reduce food waste (down 19%) and fewer think they could do more (down 6%). This is a challenging result as the aim of the project was to encourage businesses to reduce food waste and save money. The qualitative results suggest that implementing the program raised unexpected challenges for some food businesses including realising there were many actions they thought they were doing that they actually weren't. Others found it difficult to get staff engagement on food avoidance behaviours. Other participating food businesses report delivering the program without telling customers because they feared customers would reject the changes. These factors explain some of the changed positions on these key criteria.

Figure 9: Attitudes towards reducing food waste



While only a few responded to the survey, some participating food businesses made changes to reduce food waste because they wanted to save money while others found some tips useful and others wanted to avoid getting in trouble with the authorities.

The qualitative discussions with food business owners and assessors suggest the barriers remain the:

- time needed to focus on this issue to make a real difference
- belief that the likely benefits are minimal, and in some cases could be negative if customers reject the initiatives. However, this factor can also be an opportunity in environmentally conscious suburbs and could be used to encourage participation where the community are more environmentally aware.

Therefore, making it 'easy' for food businesses and reinforcing the 'financial benefits' if they are likely to materialise are powerful motivators.

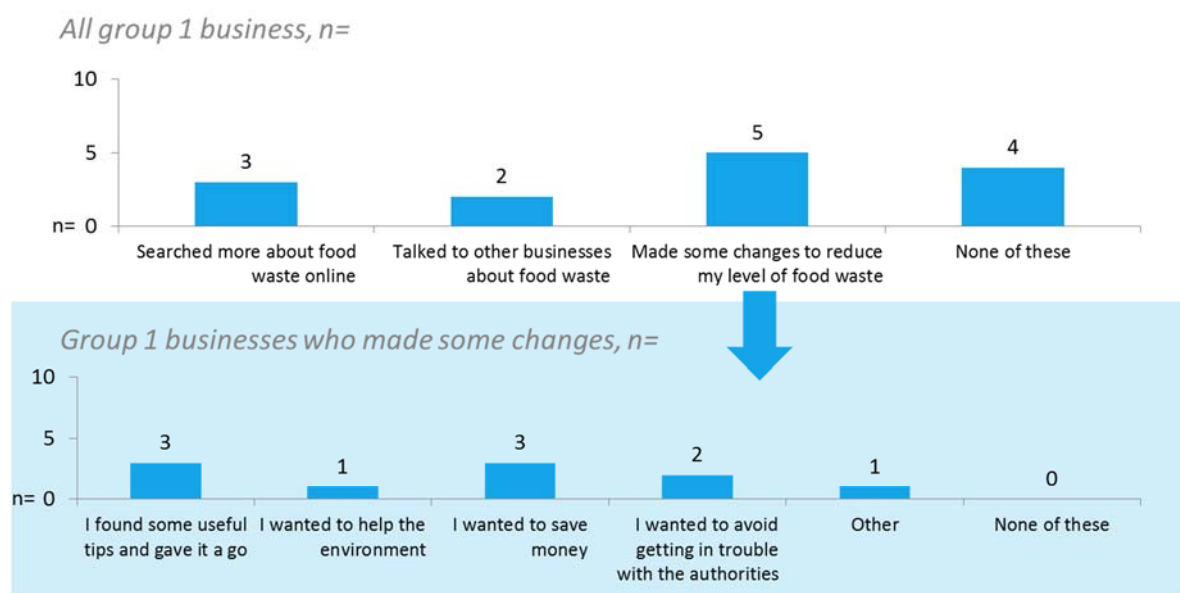
On both these factors the program faces challenges.

- Firstly, it isn't 'easy' to weigh all the waste food and complete the paperwork twice; and
- It's important to ensure that participating food businesses have a food waste issue in order to realise the financial benefits.

Any negative comments raised in the qualitative research about the program were from businesses with little food waste. This highlights the need to qualify the program to participants with a food waste issue. They will respond more positively if there is a significant financial benefit.

Identifying the environmental benefits of involvement may also be very powerful secondary messages for those interested in becoming more sustainable as businesses or with an environmentally aware customer base. The mention of regulatory benefits will also get attention.

Figure 10: Action after learning of food waste problem - Group 1 businesses who received no support nor resources



Q4b. Which if any of the following did you do after learning your business had a food waste problem?
Q4c. What motivated you to make these changes to reduce your level of food waste?
Base: Post-survey Group 1 businesses who received no support nor resources, n=11.

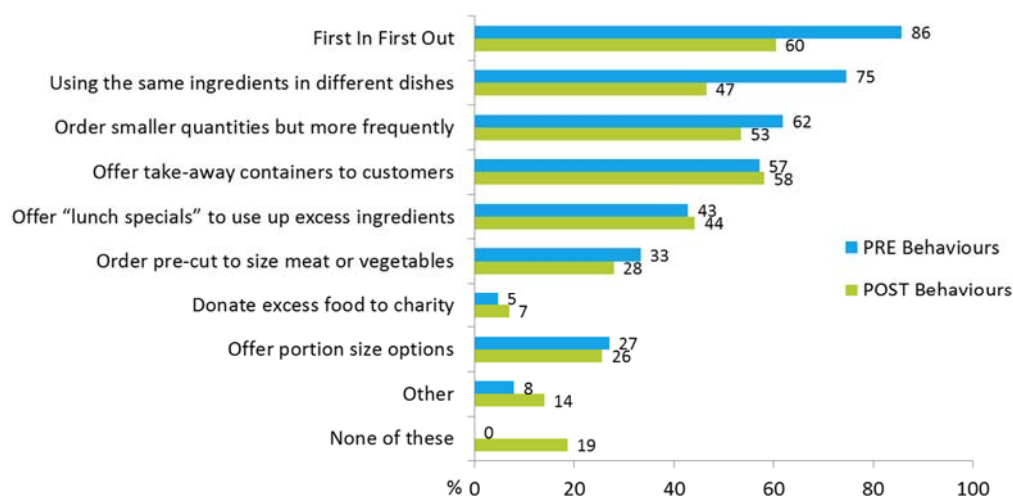
Reported behaviour changes in the post survey reflect the impact of the program. Businesses realised they weren't doing all the things they thought they were or that they were harder than they thought to do. 'First in first out' behaviour fell 26%; using the same ingredients was down 28% and ordering small quantities was down 9%. Results confirm the challenges that implementing the program posed to participating food businesses. Actively managing the process of reducing food waste led to a reappraisal of some of the participating food businesses' food waste behaviours.

The other food waste reduction actions that food businesses reported after participating in this project include:

- Sending compost preparation waste to community gardens

- offering different portion sizes for different age groups
- Advising customers not to order too much
- Offering meals at a discount price at the end of the day
- Offering more seasonal produce on the menu.

Figure 11: Pre and post-program food waste avoidance behaviours - All behaviours



Q5i. Which of the following is your business currently doing to reduce food waste?

Base: Total pre-survey sample, n=63. Total post-survey sample, n=43.

'First in first out' was recognised as the most effective action (both in the pre and post survey) but not as much as was first thought (it fell 12% in the post survey). Participating businesses reported offering takeaway containers as the most effective in the post survey (up 10% to 17%).

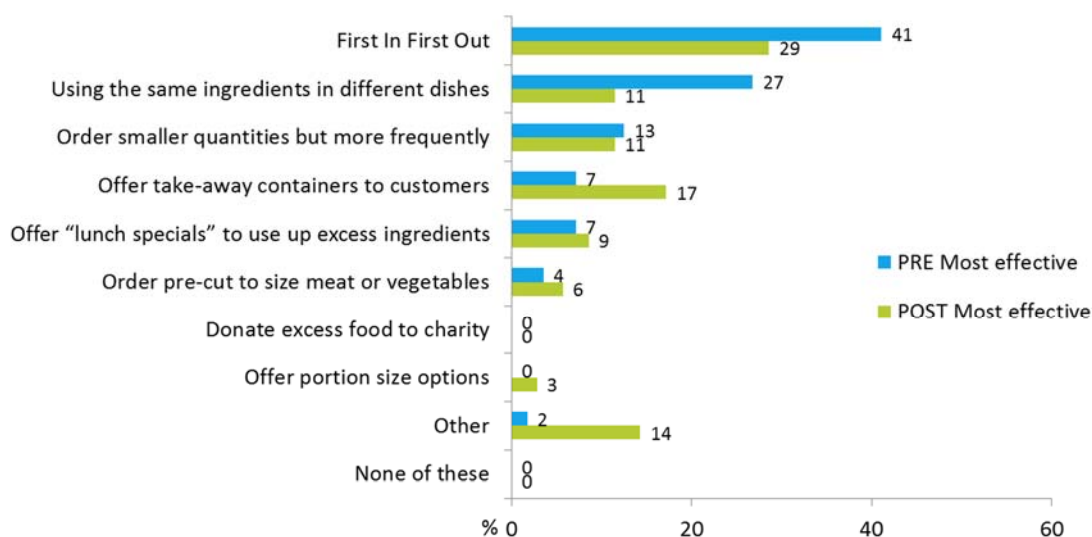
The reasons for taking no action in the post survey included:

- The options suggested in the survey aren't particularly relevant due to the particular type of business (e.g. being a patisserie items are either made to order, or pre-made and sold throughout the day).
- Don't know, not the manager (indicating that not all staff know about the program)
- Did not complete program.

Other actions rated as being most effective in the post survey included:

- Giving away coffee grounds rather than putting them in the general waste bin and using vegetable pulp from juicing to make soups
- Implementing innovative ideas such as fermenting fruits to give cocktails flavour
- Using stickers and posters to help visualise the right recycling regime and
- Avoiding food contaminating the recycling bins.

Figure 12: Pre and post-program food waste avoidance behaviours - Most effective behaviour



Q5ii. Which of the following has been the most effective at reducing food waste at your business?
 Base: Total pre-survey sample, n=63. Total post-survey sample, n=43.

Staff meetings and staff training were the most common way to educate staff about the program. About one in five (21%) food businesses had told customers about their food waste avoidance actions and another 19% had displayed the food waste avoidance messages. In the post-survey, 23% of program participants report taking no action to educate others about food waste. The qualitative phone interviews with participating food businesses suggest this could be the result of some staff ambivalence to the initiative and some customers responding negatively. It is these perceptions of staff and customer responses that limited the use of some of the promotional materials of the program. However, this was a highly variable food business response that appeared to have a lot to do with the 'make-up' of the customer base. In some areas, reducing food waste was highly aspirational, while in others it was not.

In addition, program participation resulted in 'other' actions that included:

- Sending out emails
- Attempting to address the resistance from kitchen staff to participation in this initiative
- Changing the waste service provider to one that can offer weight-based billing
- Making it a tool for the kitchen staff
- Using coasters and stickers to promote the change
- Displaying signs and stickers to avoid food waste contaminating the recycling bin
- Being more diligent during the program about reducing food waste.

Figure 13: Actions undertaken to educate others



Q6. Which of the following things have you done to educate others about food waste?

Base: Total pre-survey sample, n=63. Total post-survey sample, n=43.

57% of participating food businesses in the pre-survey had not sought help to reduce their food waste from any organisation (nett of those who had not sought any information).

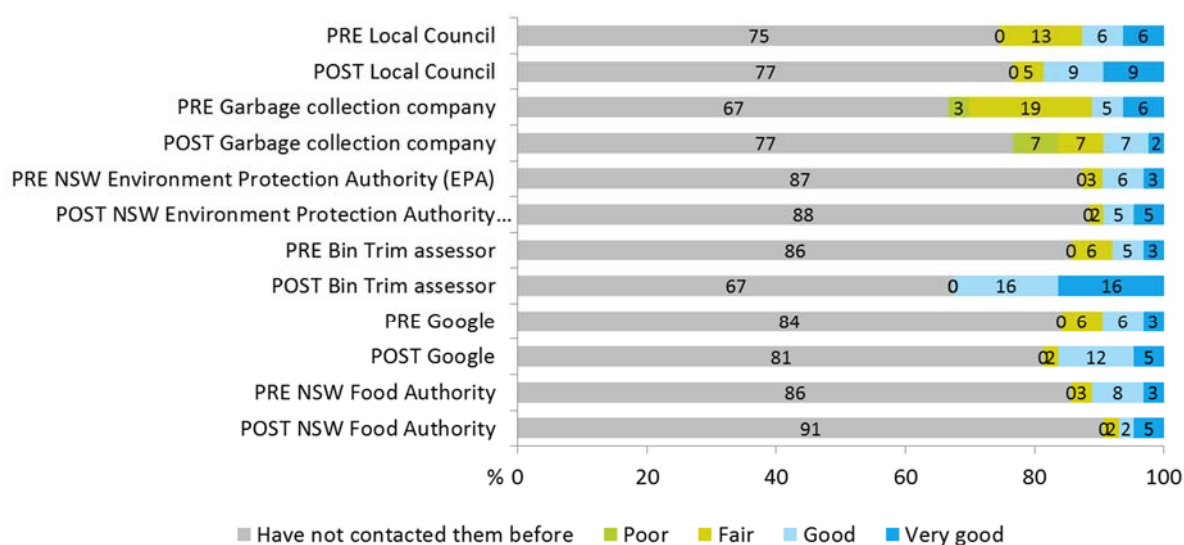
The most common organisation sought out by those participating food businesses seeking help to reduce food waste at the time of the pre-survey were garbage collection agencies. 33% had sought assistance from them. Garbage collection agencies were followed by local councils (25%); with 15% claiming they had undertaken a google information search and 14% had sought information from a Bin Trim Assessor and the same proportion the NSW Food Authority.

In the case of garbage collection agencies the food businesses only 12% rated the responses they received as being good to very good, 19% fair and 3% poor. Local councils' assistance was rated by 12% as being good and very good, 13% fair and none as poor. Bin Trim Assessors were rated at 8% good and very good; 6% as fair; with none rating them as poor.

In the post-survey, only 42% had not sought help to reduce their food waste from any organisation (nett of those who had not sought any information).

By the time of the post evaluation, 32% of participating businesses had gone to a Bin Trim assessor and all rated the help they received as good to very good. The tailored consulting advice provided by assessors is highly valued as a result of putting the needs of the business first. Local councils were also rated higher in the post survey evaluation with 18% rating them as good or very good and 5% as fair.

Figure 14: Use and rating of organisations they had sought help from



Q7. Have you ever sought help from the below sources to reduce your food waste?

Base: Total pre-survey sample, n=63. Total post-survey sample, n=43.

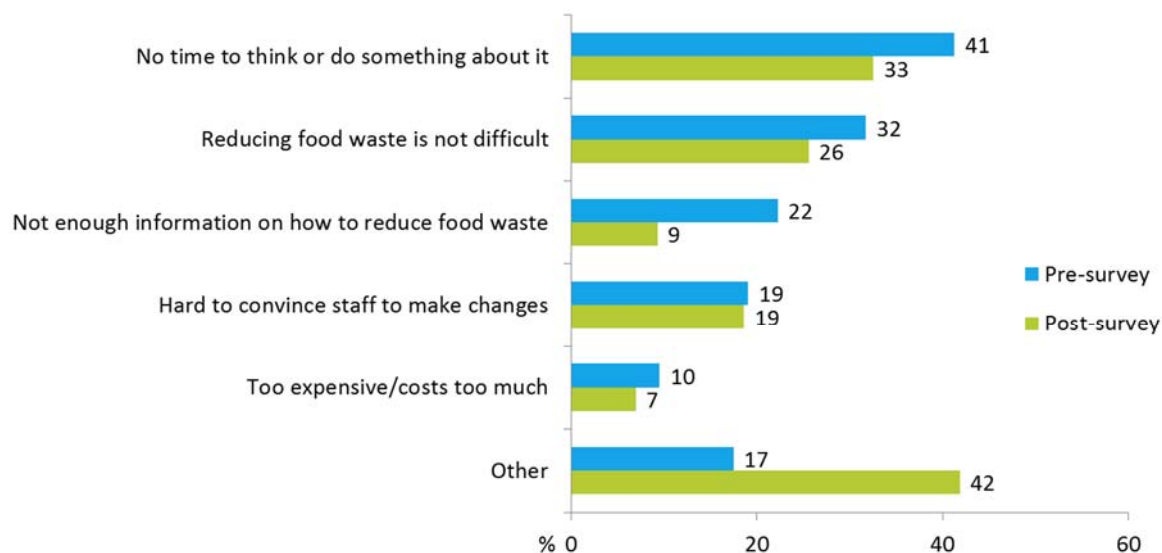
Lack of time to consider or to act was the main reason food businesses gave as reasons for not doing something about food waste. Only 26% said it was not difficult to do something and 19% said it was hard to get staff to make the changes needed. There were some reduction in key barriers. Namely, 'there was no time to think about the issue' (down 8%) and that there was 'not enough information on how to reduce food waste' (down 13%) which highlights the success of the LFHW program in reducing these two key barriers. The facilitation of action on food waste avoidance needs to be even further enhanced if this is possible.

However, other barriers to implementing food reduction strategies emerged from responses in the post-pilot survey. They include:

- Many items are made to order. The only alternate option to reducing food waste would be to have fewer pre-made items available for sale but this would be at the risk of losing profits
- Newer businesses need more encouragement than established businesses to participate, in order to embed good practice from the beginning. There could be an attempt to target start-ups
- Food businesses that offer pre-prepared items may face different challenges in waste avoidance compared to businesses that make food to order, and may believe they do not produce a lot of food waste because they don't see the end result of the consumption process. Some facts might be needed or even the need to ask customers whether the food was all consumed
- Business owners are focused on time and cost. Framing the program as a tool to use time efficiently and save on cost will appeal to business priorities
- Some businesses believe they cannot avoid food waste, citing the size of kitchen as too small to separate the food waste from other waste. The program needs to better communicate that prevention can be incorporated into the running of the business, and space is not necessarily a factor

- Businesses that are well established tend to think they are already doing what is necessary to avoid food waste. Offering the program as an efficient and innovative tool will appeal to those who are stuck in old habits
- Some businesses believe waste avoidance should be chef's responsibility, not the wait staff, so sense of responsibility or having control over the problem is a barrier here
- Lack of awareness of the business's participation in the program internally resulted in limited uptake, showing that communication within businesses is a potential barrier
- Manager / person responsible can sometimes be absent for part of the program for various reasons (sickness, holidays), therefore suggested actions were not enforced. Again, communication and shared responsibility amongst staff is a barrier if it doesn't happen.

Figure 14: Barriers to action



Q8. Which, if any, of the following reasons is why your business finds it hard to do something about food waste?
Base: Total pre-survey sample, n=63. Total post-survey sample, n=43.

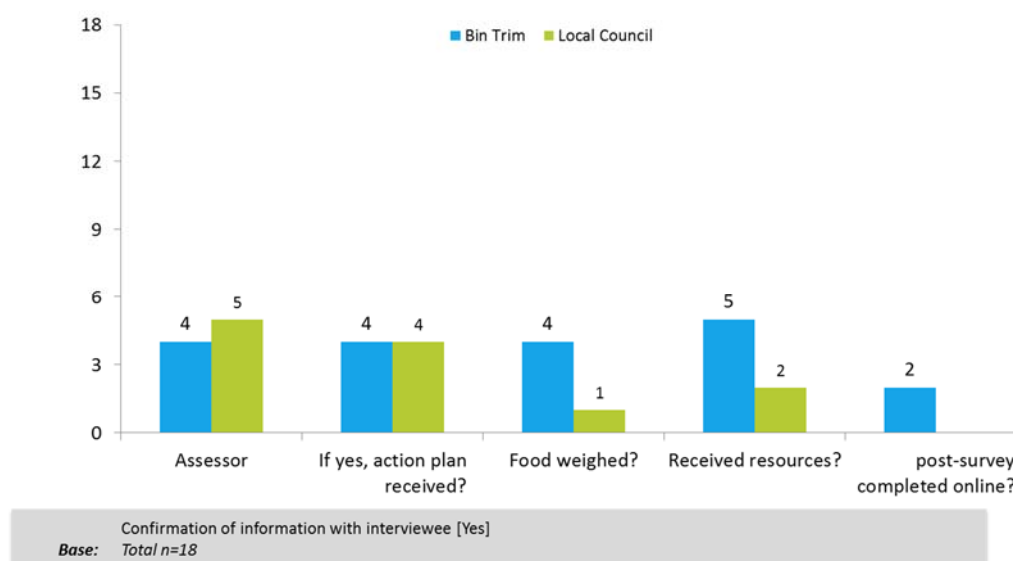
7. Case studies with targeted participating food businesses

To supplement the online surveys, 18 telephone interviews were conducted as follows with a range of program participants to source some qualitative feedback on the pilot LFHW program:

Group	Details	Number on interviews
3	Received LFHW resources + full consultation with Bin Trim	n=5 [INTERVIEW ALL GROUP 3 BUSINESSES]
3	Received LFHW resources + full consultation with Local Council	n=5 [INTERVIEW ALL GROUP 3 BUSINESSES]
2	Received resources only (no consultation with either Bin Trim or Local Council)	n=4
1	No resources and no consultation whatsoever	n= 4
		N=18

As a result of the interviews 11 of the 18 were able to provide feedback on the resources used and the assessors they worked with. The following chart shows that 4 of the participating food businesses interviewed had Bin Trim assessors and 5 had Local Council assessors. Two had completed the post-survey online. Eight could remember the action plan and 5 could remember doing the food weighing. Seven could remember the resources. It is clear that in a busy food business, many struggle to keep food waste and the program ‘top of mind’.

Figure 15: Confirmation of information - By type of assessor



Contact received from assessor

Bin Trim assessor

How was the LFHW program rated?

Half of the 18 follow-up interviews with participating food businesses reported their LFHW experience as 'great overall'. Six were neutral to positive and three were less satisfied.

Only one business felt the advice was difficult to implement and impractical; particularly the use of different bins for different waste. They felt there was insufficient room. This also highlights the fact the action plan appears to have been focused on food recycling rather than avoidance. Two other food businesses felt the advice was irrelevant to them mainly because they produced very little food waste. They each estimated it to be less than 1kg per week. This suggests a need to 'pre-qualify' the participating food businesses for the next stage of the LFHW program to ensure there is substantial food waste issue.

How did they get you involved?

There were a range of ways organisations reported they had become involved in the LFHW program. Most were approached 'cold' by an assessor and it was the personal 'sales' interaction that persuaded them to become involved.

Other paths to engagement mentioned included:

- An invitation to participate when the business decided to change from using a skip bin to a council bin
- Business owner's personal investment in and concern for the business's environmental impact
- The relevance and appeal of the resource kit to some businesses approached.

Most made it clear in the interview that they would have been unlikely to engage with LFHW without the personal interaction.

Were initial expectations met in the pilot program?

Most again stated that their expectations were met and in many cases met well. The majority said that the program had made a significant difference to the quantity of food waste being avoided and this had led to savings.

A few of the food businesses appeared to have focused on recycling and they suggested that it would be a good idea to engage other nearby businesses so that recycling bin space could be pooled. While we were unaware of the action plan details the comments by these food businesses suggest that there was significant emphasis on recycling instead of food waste avoidance. This suggests that more training might be needed by some assessors to ensure the emphasis is placed on food waste avoidance. Potentially, inappropriate food businesses were selected.

Another two or three food businesses said that the program, while serviceable, could go a lot further.

Only one food business reported that their expectations weren't met:

"No, I felt it was a disaster [initially], I was appalled by the action plan and the initial assessor, but the follow-up assessors were good."

Were resources explained to you? Helpful?

There appears to be less use made or connections made over the use of some of the resources. It might be that the participating food businesses took the resources but often didn't feel they were relevant in their business environment. More careful allocation of these resources for participating food businesses who really want them might result in better outcomes.

Usefulness of resources:

- Yes; some found all of the resources very useful and received positive reports from customers and staff
- While some liked all elements of the resources pack and used all the materials; others were discriminating – liking some of the resources and discarding other elements.

Were resources clear enough alone to help reduce waste without help?

- Assessors did a great job at communicating. All food businesses preferred dealing with a person:

"It's amazing to be able to deal with a real human being. We could email asking for materials and they would arrive. They sorted out a way to get left-over coffee grounds into a community garden, etc".

Contact received from assessor

Local Council rep

How was the LFHW program rated?

The five participating food businesses that knew they had council assessors also felt the program went really well, with an occasional qualifier that some aspects of the action plan *"might be harder to implement for a smaller business"*.

The innovative ideas appear to impress participating food businesses, suggesting time constraints on business owners may prevent them from being able to focus on food waste prevention in different ways, which is where the LFHW program is able to fill a gap. One food business learned enough to design a new kitchen *"based on food waste and management from the assessment/program."*

How did they become involved?

In all cases the council assessor 'sold' the program to the food businesses. The personal approach worked for all participating food businesses we spoke with.

Were expectation met?

Again all expectations were met. Those interviewed said that the assistance of the assessors was key in the success and implementation of the program.

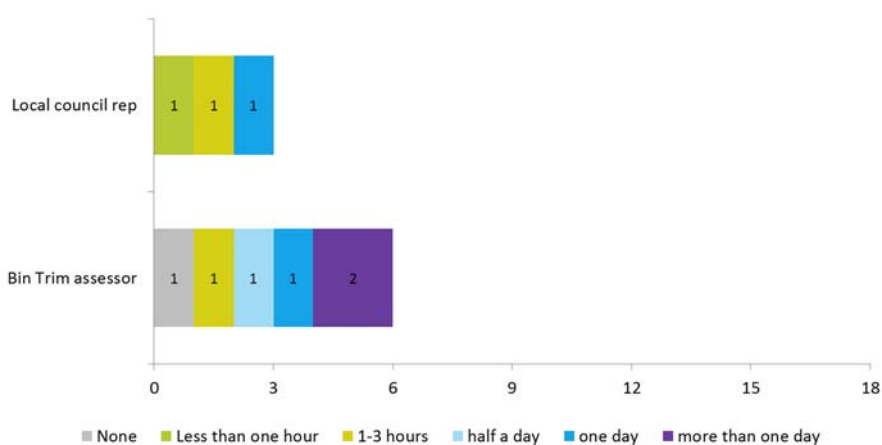
Were resources explained and clear enough?

Again, all participating food businesses felt the Local council representative had done enough to assist them and in many cases they reported "had gone out of their way to assist" and was central to the success of the program. In addition, some found the pamphlets helpful.

Businesses who already had waste prevention practices in place found new ideas and systems through the program, and were able to make use of different resources like paper bins and stickers to implement and manage new behaviours to prevent food waste.

The success of the assessors came as a result of hard work with considerable time invested in making the connection with participating food businesses and selling the program idea. All participating food businesses interviewed reported the time spent was valuable and not wasted and contributed to the success for the program in their business.

Figure 16: How many hours did the assessor spend with you? - By type of assessor



How many hours (estimation) did they spend in helping you with the food waste issue on your premises? [total]
 Base: Total n=9 – those who could rate assessor.

Contact received from assessor

Bin Trim assessor

Were action plans discussed?

Action plans were agreed jointly; assessors would go through the action plan with the business owner or manager, talk about different avenues and then decide together on the best approach through a consultative process. This approach actively takes into account the needs and perspectives of the business, ensuring maximum chances of uptake and follow-through.

Only one participating food business complained about the initial action plan they received, believing the initial plan was completely unsuited to their business. The key reason for the rejection of the initial proposed action plan was that it did not seem to understand the operational needs or the practical aspects of running a restaurant. However this assessor was replaced and the subsequent action plan was deemed acceptable.

Easier to implement 3-step action plans only for food waste than for all waste?

Everyone agreed: *“It’s better to target one thing at a time; get it right then move on to something else.”*

Informing businesses of their success at food waste avoidance and keeping them in the loop where they have successful was also endorsed and virtually everyone interviewed agreed with this strategy. This allows the new systems to become well-embedded before moving on to implementing something new. However the weighing of the food which provides this feedback is considered onerous. This is a difficult issue to resolve. On the one hand feedback embeds change, while on the other getting that information is costly in time. This reinforces the need to qualify food businesses for the program that do have a food waste issue.

Agree with suggested actions?

Most of the participating food businesses interviewed felt they were in control of the actions taken to reduce or avoid food waste.

- Consultation with assessors helped businesses feel involved and responsible for the implementation of the plan. It positions the assessor as a source of support, rather than an outsider

Two of those interviewed complained about the action plans for the following reasons:

- Suggestions were seen as ‘useless’ or ‘irrelevant’, though this was improved by a second assessor

- The business had comprehensive waste prevention practices in place and should not be recruited to this pilot project.

Was enough time spent with you? Follow up support?

All the participating food businesses interviewed felt the assessor was supportive enough and invested adequate time. Some positive feedback include:

- The assessor has come to know the business well, so the business owner looks forward to seeing them
- The assessor is efficient and effective in addressing the business's needs
- The assessor spends as much time as needed in order to help implement a system, before moving on
- The assessors are able to suggest ways to move things along quicker, providing a different perspective for the business to work with
- The program has sufficiently helped the business reduce waste through prevention, and further consultation is wanted only if even more prevention is possible, i.e. eliminating packaging from food
- Assessors are seen as a good resource to find out more about waste services.

Prefer Bin Trim or Council rep?

All bar one participating food business liked the assessor that had worked with them and really didn't have a preference for an alternative because they didn't know what that alternative would be like.

Participating food businesses recognise that the Bin Trim assessors' core focus is on waste reduction, so they are valued for their unbiased contribution, whereas council representatives are seen as having additional motives.

Overall were you supported well?

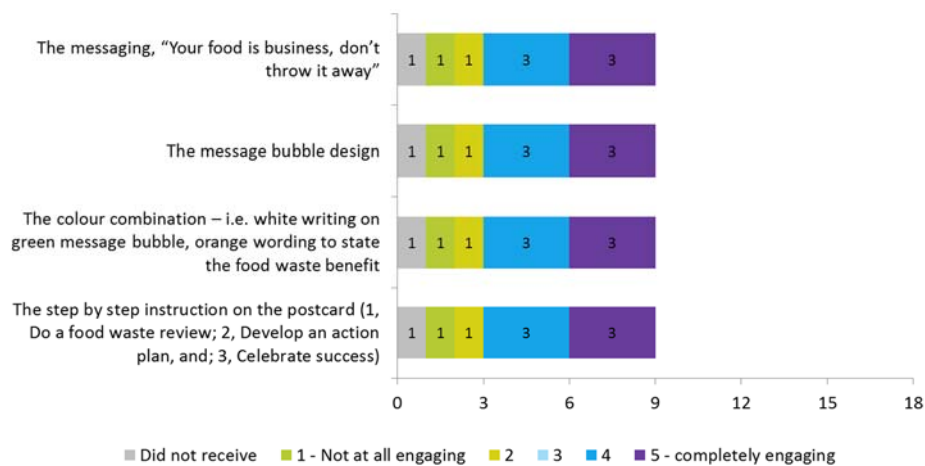
Most participating food businesses felt very well supported.

Two or three felt it could be better mostly because the advice was too late as they were already doing what they were supposed to be doing to prevent and reduce food waste.

Impact of messaging

There were mixed views on the resources provided with the Love Food Hate Waste program. About two thirds rated the messaging as highly to completely engaging while one third felt they were not engaging.

Figure 17: How engaging are the resources?



Regarding the pack, how engaging would you rate the following on a scale of 1 to 5, where 1 is "not at all engaging" and 5 is "completely engaging"....?
Base: Total n=9 who could rate resources.

Resources received - by type of assessor

The sticker signs and bins were seen by participating food businesses as the most useful and easy to understand resources. Some of the participating food businesses did not like the printouts, as it seemed contradictory to the program’s aims – they would prefer these resources to be available online with the option to print. However, the pamphlets were seen as useful for distributing among staff.

There were also mixed views on the booklet provided with the Love Food Hate Waste program. Five of those interviewed rated it as engaging while 4 participants felt it was not engaging.

Figure 18: Evaluation of resources - Food waste avoidance booklet



Now I'd like to ask you to rate each resource you used on the following measures on a scale of 1 to 5, where 1 is "not at all" and 5 is "completely". How would you rate [resource] on the following...?
Base: Total n=9 who could rate resources.

There were also mixed views on the review form provided with the Love Food Hate Waste program. Five of those interviewed rated it as engaging while 3 participants felt it was not engaging.

Figure 19: Evaluation of resources - Food waste review form



Now I'd like to ask you to rate each resource you used on the following measures on a scale of 1 to 5, where 1 is "not at all" and 5 is "completely". How would you rate [resource] on the following...?
Base: Total n=9 who could rate resources.

There were also mixed views on the action plan provided with the Your Business is Food program. Six of those interviewed rated it as engaging while three participants felt it was not engaging.

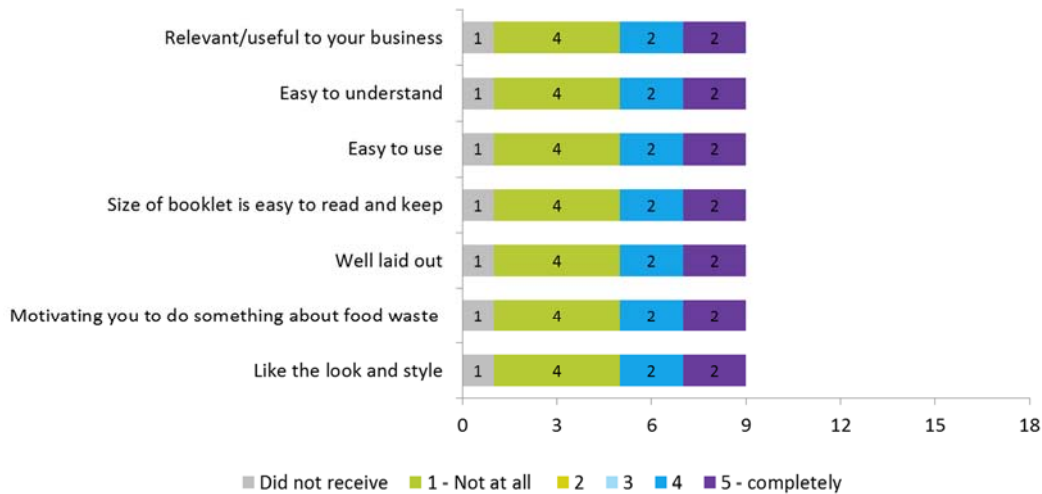
Figure 20: Evaluation of resources - Food waste action plan



Now I'd like to ask you to rate each resource you used on the following measures on a scale of 1 to 5, where 1 is "not at all" and 5 is "completely". How would you rate [resource] on the following...?
Base: Total n=9 who could rate resources.

There were also mixed views on the 6 ways to reduce food poster provided with the Love Food Hate Waste program. Only four of those interviewed rated it as engaging while 5 participants felt it was not engaging.

Figure 21: Evaluation of resources - 6 ways to reduce food waste poster



Now I'd like to ask you to rate each resource you used on the following measures on a scale of 1 to 5, where 1 is "not at all" and 5 is "completely". How would you rate [resource] on the following...?
Base: Total n=9 who could rate resources.

There were also mixed views on the Smart order poster provided with the Your Business is Food program. Four of those interviewed rated it as engaging while five participants felt it was not engaging.

Figure 22: Evaluation of resources- Smart order and savvy storage poster



Now I'd like to ask you to rate each resource you used on the following measures on a scale of 1 to 5, where 1 is "not at all" and 5 is "completely". How would you rate [resource] on the following...?
Base: Total n=9 who could rate resources.

There were also mixed views on the takeaway container stickers provided with the Love Food Hate Waste program. Six of those interviewed rated it as engaging while three participants felt it was not engaging.

Figure 23: Evaluation of resources - Takeaway container stickers



Now I'd like to ask you to rate each resource you used on the following measures on a scale of 1 to 5, where 1 is "not at all" and 5 is "completely". How would you rate [resource] on the following...?
Base: Total n=xn=9 who could rate resources.

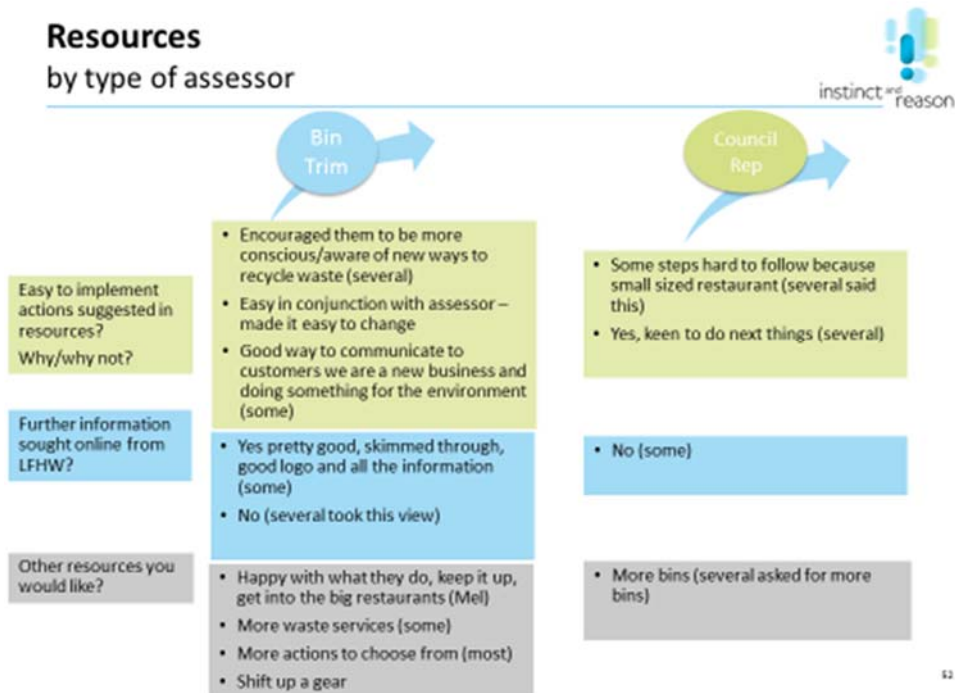
There were also mixed views on the drink coaster provided with the Love Food Hate Waste program.

Figure 24: Evaluation of resources - Drink coasters



Now I'd like to ask you to rate the coasters you used overall on the following measures on a scale of 1 to 5, where 1 is "not at all" and 5 is "completely"...?
 Base: Total n=9 who could rate resources.

Resources - by type of assessor



Education of Staff

Many food businesses reported positive impacts of the Love Food Hate Waste program on staff:

Methods of education included:

- Colour-coding bins
- Used online staff discussion board to circulate information on new systems and practices
- Had face-to-face conversations with staff about new systems and practices
- Provided examples of waste prevention to relevant staff, e.g. using tomato ends for soup
- Provided examples of consequences of food waste

Reactions from staff:

- Results were very good overall. However some food businesses reported that staff did not engage. This was not attributed to the LFHW program simply that staff were not engaged in their job and any change was resisted
- Some staff implemented many of the food avoidance methods like suggesting and /or providing takeaway containers for leftovers
- Some staff gained a new appreciation for waste prevention, and tended to be more aware of waste in general
- Most staff very willing to help and some reportedly have taken on some of the food waste avoidance methods at home.

Continued engagement of staff included:

- Constantly teaching and reminding staff of methods of prevention (needed in most businesses)
- Regular discussion of waste prevention at staff meetings (some did this but more should be encouraged)
- Encouraging staff to contribute their own suggestions and opinions on further waste prevention (this should be made as a suggestion to food businesses as it was reported to increase engagement in LFHW)
- New initiatives communicated through weekly management meetings (again this was a strategy that resulted in a more effective LFHW program outcome reportedly)
- One or two participating food businesses reported finding it difficult to keep staff engaged and motivated on this issue (suggestions as to how to create engagement would be of value to some participating businesses).

Customer feedback

Some reported positive impacts of the Love Food Hate Waste program on customers including:

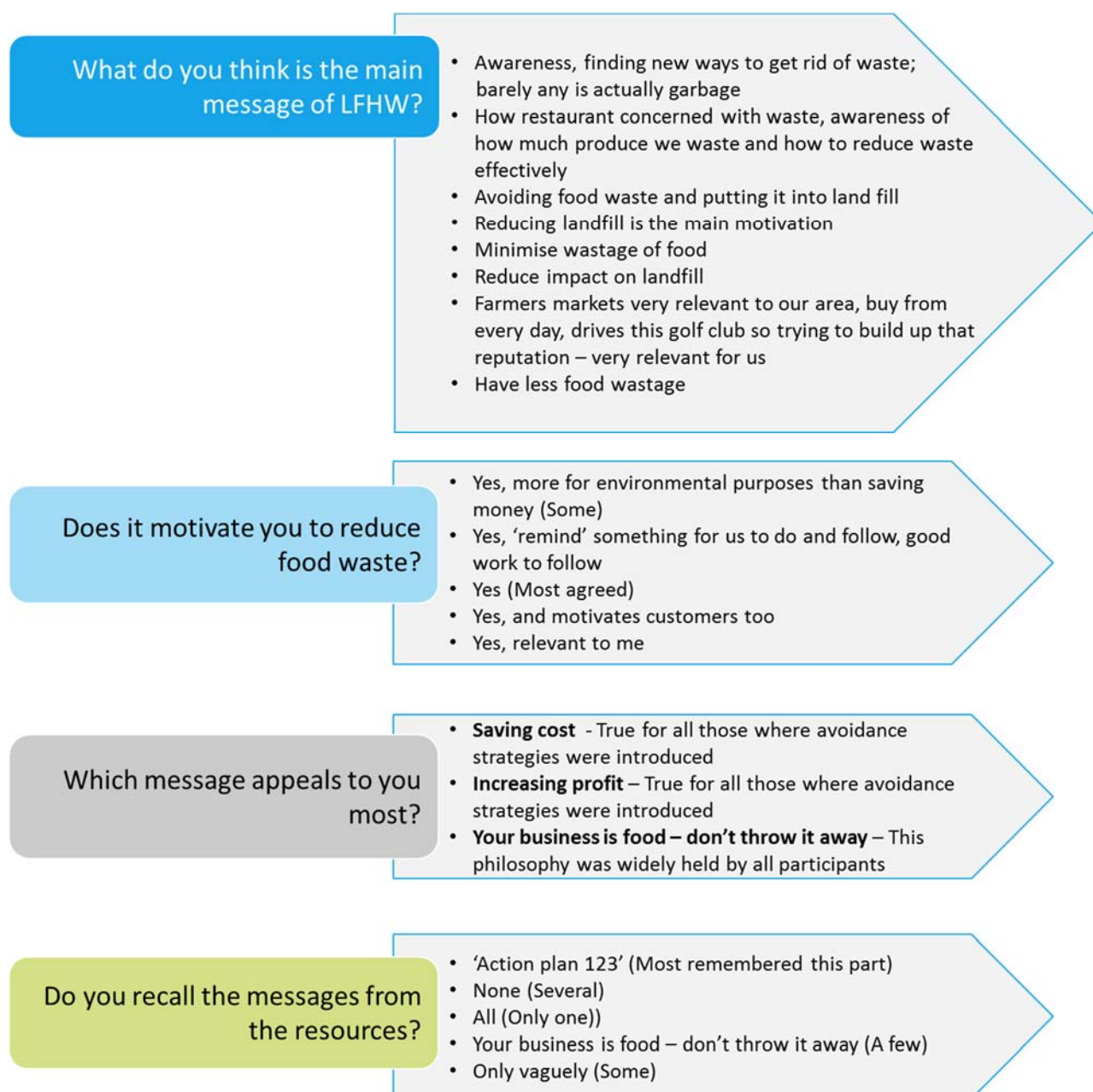
- Where businesses were already using biodegradable/cardboard takeaway containers, asking customers if they needed a lid for coffee or not.

- Started asking about portion sizes/lunch specials. People appeared to appreciate being asked.

However many did not take action in the ‘customer domain,’ concerned that their efforts would be misconstrued as seeking to reduce the food quantities being provided. Whether or not participating food businesses communicated their food waste avoidance actions depended on whether or not they believed their customer base was environmentally friendly.

Are the messages powerful enough?

Many reported positive impacts of the messages of the Love Food Hate Waste program on staff:



Final thoughts on the Your Business is Food program?



8. The discussion with stakeholders

Following the presentation of results on 9 September 2016, there was a discussion with a range of stakeholders who were present.

The overall results were endorsed by the stakeholders present as being reflective of the challenges faced by assessors and the waste service providers when dealing with small business, in particular the restaurant trade regarding food waste avoidance.

There were a number of key issues raised in the general discussion that followed:

Recruitment and engagement of businesses

- The main motivator for participating food businesses appears to be the desire to reduce costs. The bottom line drives interest, yet those with a strong bottom line motivation often have already acted to reduce waste and increase recycling. Providing further incentives, such as innovative and cost-efficient initiatives, could encourage more uptake.
- The avoidance approach is more difficult for participating food businesses and so the focus for them is much more on recycling better rather than food waste avoidance. Incorporating this aspect into the program might be a possible expansion.
- Getting to the owner is a crucial success factor for assessors. Managers and employees are not the decision makers and only the owner can authorise the changes that are needed.
- Assessors reiterated the difficulty in recruiting food businesses for the program. The recruitment process has to be face-to-face with many follow-up contacts needed to succeed. “We had to be customers and eat at the restaurant to get a hearing” – Bin Trim assessor. Other Bin Trim assessors report buying product to start the conversation. This is not the case generally for Council assessors.
- The single biggest obstacle is the need to separate, weigh the food and complete the documentation. Participating food businesses found it tedious, yet it is crucial to the program. “They have more work to do to even think about this program let alone do the weighing and recording tasks ... twice!” Finding a way to make this a more efficient process might prevent businesses from being deterred from participating

Future directions

- Future Love Food Hate Waste programs should ensure assessors or representative is clear that the primary focus is food waste prevention/ avoidance message, not recycling or composting, as this was not as clear based on feedback from the pilot
- Any future program needs assessors as the pull factor, but a future program should include a push factor as well. Several ideas were mentioned, such as using celebrity or well respected chef as an ambassador for Love Food Hate Waste business program.
- The question was raised as to whether the community itself could be leveraged to drive uptake; or whether staff could drive uptake. These were thought to only be possible sources of assistance.

- Messaging can be tapped into the cultural appreciation towards food waste prevention can be bonus. For example, some assessors thought it was easier to target some ethnic family restaurants, like Chinese or Indian, because they see food as a blessing and wasting food is not an acceptable behaviour although “culture of generosity” is a key factor of food waste.
- Some businesses got involved with Love Food Hate Waste because other businesses did – this could be used to encourage uptake as a community-oriented initiative. This might also create healthy competition and the ability to pool resources and maximise the chance that someone might be highly innovative.
- TAFE represents an opportunity to get chefs thinking about Love Food Hate Waste while they are learning, and is a good entry point to imparting principles of food waste prevention

The Resources

- A resource pack is an important part of the program
- Eliminating a compulsory second weighing would minimise red tape
- The resources pack should be ordered – allowing participating food businesses to order materials that suit their needs
- Reduce confusion over the two sign up forms
- Food waste service is expensive – can costs be reduced for shared resources?
- Identify and produce a list of preferred waste suppliers that can contribute to food waste prevention
- Make sure all resources are explained

Assessor Support

- Every additional assessor contact led to further engagement by the participating business; this practice is key in preventing drop-out
- Because of assessor support, even the most reluctant participant said they were doing something new as a result of the activities, showing that sustained support and consultation leads to results
- It is critical to give participants a schedule at the first meeting to manage both assessors’ and participating businesses’ time efficiently. This also respects the time constraints faced by business owners.

Appendix: Rating of resource materials

There were very few responses to the online survey asking for rating of the resource materials. The results are recorded below for review but little can be gleaned as a result of the small sample.

Figure 25: Food waste avoidance booklet, n=1

Helpfulness	n=1	Usefulness	n=1
Extremely helpful	-	It's not relevant to my business	-
Very helpful	-	It is useful to reduce my food waste	1
Somewhat helpful	1	I tried it but it didn't seem to help my food waste issue	-
Not very helpful	-	I wasn't sure how to use it	-
Not at all helpful	-	It's too hard to understand	-
		I couldn't be bothered to try the suggested actions	-
		I don't have time for the suggested actions	-

Ratings	Not at all	Slightly	Moderately	Very	Completely
Relevant to my business	-	-	-	-	1
Easy to understand	-	-	-	1	-
Easy to use	-	-	-	1	-
Well laid out	-	-	-	1	-
Motivating	-	-	1	-	-
Attractive look and style	-	-	1	-	-

Figure 26: Food waste review form, n=3

"We don't have a food waste issue to resolve"
-Restaurant owner

Helpfulness	n=3
Extremely helpful	-
Very helpful	-
Somewhat helpful	2
Not very helpful	-
Not at all helpful	1

Usefulness	n=3
It's not relevant to my business	1
It is useful to reduce my food waste	1
I tried it but it didn't seem to help my food waste issue	1
I wasn't sure how to use it	-
It's too hard to understand	-
I couldn't be bothered to try the suggested actions	-
I don't have time for the suggested actions	-

Ratings	Not at all	Slightly	Moderately	Very	Completely
Relevant to my business	1	-	-	2	-
Easy to understand	-	1	-	2	-
Easy to use	-	-	1	2	-
Well laid out	-	1	-	2	-
Motivating	1	-	2	-	-
Attractive look and style	1	-	1	1	-

Figure 27: 6 ways to reduce food waste poster, n=1

Helpfulness	n=1
Extremely helpful	-
Very helpful	-
Somewhat helpful	1
Not very helpful	-
Not at all helpful	-

Usefulness	n=1
It's not relevant to my business	-
It is useful to reduce my food waste	1
I tried it but it didn't seem to help my food waste issue	-
I wasn't sure how to use it	-
It's too hard to understand	-
I couldn't be bothered to try the suggested actions	-
I don't have time for the suggested actions	-

Ratings	Not at all	Slightly	Moderately	Very	Completely
Relevant to my business	-	-	-	1	-
Easy to understand	-	-	-	1	-
Easy to use	-	-	-	1	-
Well laid out	-	-	-	1	-
Motivating	-	-	1	-	-
Attractive look and style	-	-	1	-	-

Figure 28: Smart order and savvy storage poster, n=2

Helpfulness		n=2
Extremely helpful	-	
Very helpful	-	
Somewhat helpful	2	
Not very helpful	-	
Not at all helpful	-	

Usefulness		n=2
It's not relevant to my business	-	
It is useful to reduce my food waste	2	
I tried it but it didn't seem to help my food waste issue	-	
I wasn't sure how to use it	-	
It's too hard to understand	-	
I couldn't be bothered to try the suggested actions	-	
I don't have time for the suggested actions	-	

Ratings	Not at all	Slightly	Moderately	Very	Completely
Relevant to my business	-	-	2	-	-
Easy to understand	-	-	1	1	-
Easy to use	-	-	1	1	-
Well laid out	-	-	1	1	-
Motivating	-	1	1	-	-
Attractive look and style	-	-	2	-	-

Figure 29: Takeaway container) stickers, n=2

Helpfulness		n=2
Extremely helpful	1	
Very helpful	1	
Somewhat helpful	-	
Not very helpful	-	
Not at all helpful	-	

Usefulness		n=2
It's not relevant to my business	-	
It is useful to reduce my food waste	2	
I tried it but it didn't seem to help my food waste issue	-	
I wasn't sure how to use it	-	
It's too hard to understand	-	
I couldn't be bothered to try the suggested actions	-	
I don't have time for the suggested actions	-	

Ratings	Not at all	Slightly	Moderately	Very	Completely
Relevant to my business	-	-	-	1	1
Easy to understand	-	-	-	2	-
Easy to use	-	-	-	2	-
Well laid out	-	-	1	1	-
Motivating	-	-	-	2	-
Attractive look and style	-	-	1	1	-