



UNIVERSITY OF  
TECHNOLOGY SYDNEY

INSTITUTE FOR SUSTAINABLE FUTURES



# LEICHHARDT COMMUNITY ENGAGEMENT AND PARTICIPATION PLAN

## FOOD RECYCLING IN MULTI-UNIT DWELLINGS

# 2014

## ABOUT THE AUTHORS

The Institute for Sustainable Futures (ISF) was established by the University of Technology, Sydney in 1996 to work with industry, government and the community to develop sustainable futures through research and consultancy. Our mission is to create change toward sustainable futures that protect and enhance the environment, human well-being and social equity. We seek to adopt an inter-disciplinary approach to our work and engage our partner organisations in a collaborative process that emphasises strategic decision-making.

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Research team: Jade Herriman, Nicholas Mikhailovich, Laura Wynne, Jenni Downes, Thomas Boyle

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## INSTITUTE FOR SUSTAINABLE FUTURES

University of Technology, Sydney

PO Box 123

Broadway, NSW, 2007

[www.isf.uts.edu.au](http://www.isf.uts.edu.au)

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## EXECUTIVE SUMMARY

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Leichhardt Council has had a food recycling program for several years, and is seeking to consolidate learning to ensure that the **program achieves new levels of uptake**; aiming for a 30% increase in tonnage collected in the food recycling service over the next few years. The Community Engagement and Participation Plan (CEPP) outlines a plan of implementation for the program, as well as guidance on the specific materials that will be used to engage with residents.

The research conducted for this project featured a **detailed situation analysis**, including a desktop-review of the service's history and characteristics, a review of the experience of similar services in other jurisdictions (both communication materials and evaluation surveys conducted), the views and experience of residents and stakeholders; and the more general academic literature about tested theories of waste and engagement.

Our approach to the research was to consider not only the communications and engagement opportunities for the service, but **the broader elements of the service itself**: how it is administered, what physical materials and tools are used for the service, how certain key milestones in the service's delivery are triggered and managed. This 'systems approach' was taken to ensure that barriers that may hamper participation would be identified – these barriers need to be addressed irrespective of the design of communications materials, and without being addressed could undermine the benefit of well-designed communication and engagement efforts.

Our research found **strengths** in the current system: it reduces waste to landfill, there is political support and resident interest in the service; and there is a degree of flexibility and responsiveness to residents in the way the service has been implemented.

We also identified **opportunities** relating to the **internal systems** used by Council for administering and managing the service (how decisions are made, which processes are followed, how data is collected and managed), **interface systems** which deal with the various components of the service (such as the bins and bin bags used to store the food materials, and how they are given to residents), **communications materials, communications strategies** (how the materials might be used, other supporting systems that will be needed to use the materials, programs that could be tried), **communications messaging** (text and graphic elements suggested for inclusion in communication materials), and **future directions** (including the extent of the service).

Some of the actions proposed are already part of the service or the service's engagement activities 'on paper'. However discussions with staff, residents and stakeholders have identified some of these as taking place inconsistently. In these cases our recommendations relate to increasing consistency: over time; between staff; and between buildings, in what is actually carried out 'on the ground'. This is both for fairness, for ensuring a quality service, and to assist Council staff in planning and implementing the service.

We recommend that Council carefully **consider the timing of implementation** of these actions – addressing the internal systems changes and development of new materials before embarking on an extensive set of communication actions. These actions will form the foundation on which extended communication and engagement effort can be built.

**This report is structured** with the detailed Plan presented at the front of the document - in Section 2. This includes a table of all proposed actions followed by more detailed discussion of what each action might involve, why this action is important and considerations for implementation. The research process is outlined briefly in Section 3, and the findings of the research are documented in Sections 4 to 9.



## ACRONYMS LIST AND GLOSSARY

**Table 1: List of acronyms**

CEPP	Community Engagement and Participation Plan
FOGO	Food organics and garden organics
ISF	Institute for Sustainable Futures
ISWMG	Inner Sydney Waste Managers Group
LGA	Local Government Area
LMC	Leichhardt Municipal Council
MUD	Multi-unit dwelling – a block of multiple apartments, flats or units
RRWMO	(Leichhardt Council’s) Resource Recovery / Waste Management Officer
SSROC	South Sydney Regional Organisation of Councils

**Table 2: Glossary<sup>1</sup>**

Bench-top bin	The small, aerated lidded bins which Council provides to each participating unit to store food waste inside the home.
Bio bag/ biodegradable bag	Bio bags are the biodegradable bin liners provided to residents to line their bench-top bins.
<i>(Strata Scheme)</i> Executive Committee	The Executive Committee is elected by the Owners’ Corporation at each annual general meeting. The Executive Committee makes many of the day-to-day decisions about running the scheme on behalf of the Owners’ Corporation and must have a chairperson, secretary, and treasurer.
Building Manager / Caretaker	The Owners’ Corporation can engage, under contract, a caretaker/Building Manager to assist it in management of common property including: <ul style="list-style-type: none"> <li>controlling the use of common property by tradespersons &amp; non-residents</li> <li>maintenance and repair of common property.</li> </ul> Final authority and responsibility on any decision lies with the Owners’ Corporation. Building Managers may live within the building or not.
Owners’ Corporation / (‘Body Corporate’)	The Owners’ Corporation is made up of all the owners in the strata scheme. Each lot owner is automatically part of the Owners’ Corporation and has a right to participate in decision making. Owners cannot ‘resign’ from the Owners’ Corporation. The Owners’ Corporation used to be known as the body corporate. The Owners’ Corporation has the responsibility for: <ul style="list-style-type: none"> <li>maintaining and repairing the common property of the strata scheme</li> <li>managing the finances of the strata scheme</li> <li>taking out insurance for the strata scheme</li> <li>keeping records and accounts, administering by-laws</li> <li>employment of a strata managing agent and/or caretaker</li> </ul>
Strata Managing Agent / Strata	A strata managing agent is the employee of the Owners’ Corporation and may carry out some or all of the functions, duties or powers of the Owners’ Corporation.

<sup>1</sup> Definitions taken from [www.greenstrata.com.au/gs-glossary](http://www.greenstrata.com.au/gs-glossary) and [www.fairtrading.nsw.gov.au](http://www.fairtrading.nsw.gov.au)



# 1

## Introduction

# 1 INTRODUCTION

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## 1.1 ABOUT THIS DOCUMENT

This report is comprised of several sections:

- The Community Engagement and Participation Plan (CEPP)
- A report with background information on the process used to develop the Leichhardt food waste recycling in multi-unit dwellings CEPP
- The findings of the research stages, which informed the development of the CEPP.

## 1.2 CONTEXT: CLOSING THE LOOP ON FOOD WASTE

Councils have been working for many years to continually improve waste management: investing in infrastructure, collection services and engagement projects to significantly improve the resource, space and pollution challenges facing them. A key opportunity at the local level is the capture and reuse of organic materials to divert from landfill back into usable resource streams. Leichhardt Council ('Council') has been proactive in supporting waste avoidance and recycling. Council is continuing its leadership in this arena by implementing a food recycling program.

**Recycling organics is important.** Diverting food organics from landfill can achieve great environmental outcomes, alleviate costs of landfill disposal, help avoid carbon price impacts and help conserve valuable resources. It can also create social benefits such as strengthened community, stimulated interest through associated education, community interaction, and community projects such as composting and community gardens (DSEWPaC, 2012:19).

**Recycling organics is a state priority.** The NSW Waste Avoidance and Resource Recovery Strategy 2007 and Reducing Waste: Implementation Strategy 2011-2015 incorporate several focus areas and a number of strategic actions to guide the increased uptake of recycling organics and improved kerbside collection services in NSW councils. The target for waste diversion and recovery for NSW was set at 66% by 2014 (NSW DECCW, 2010). The recently released EPA NSW Strategic Plan 2013 – 2016 includes updated Waste and Recycling Key Performance Indicators – under this Strategy the target for waste diverted from landfill is 75% by 2021–22.

The proportion of municipal food waste currently lost to landfill represents a significant opportunity for recovery and reuse of key nutrients by improving participation in Council's food recycling program.

**Council is committed to improving the sustainability of its community.** Council's vision for the community involves Leichhardt becoming sustainable, liveable and connected. Clear links exist between the food recycling program and advancing the environmental sustainability of the Leichhardt community, providing it with strong alignment to Council's strategic goals and vision.

**This work takes place in a rapidly changing policy, funding and infrastructure environment for waste management and resource recovery.** There are recent developments in state government policy (including in relation to energy from waste), funding arrangements (Waste Less Recycle More funding stream both for the local government sector and for industry to build new infrastructure) and the soon-to-be-established regional coordinators, who will help devise regional approaches to waste and resource recovery through regional strategies.





## 1.3 IMPROVING FOOD RECYCLING IN MULTI-UNIT DWELLINGS FOR LEICHHARDT

Leichhardt Council has been building its food recycling program for several years, and is now seeking to consolidate several years of learning and experience to ensure that the program grows and achieves new levels of uptake.

Previously, Council has not undertaken large scale community engagement or education about the service (after the initiation of the service) as there has been an extended period of uncertainty about the future of the service while waiting to determine whether a regional contract for a food and garden organics combined service would go ahead. During this period, Council has continued to provide the infrastructure (primarily the bins and bags) required to keep the service operating, as well as some communication materials to help support participation, but chose not to go beyond this until it had more information about the likelihood of moving forward with the food / garden collection as service changes would be required.

However, Council has recently set ambitious targets for this program, including the key performance indicator of a 30% increase in tonnage collected in the food recycling service. Over the next few years Council aims to communicate to all stakeholders about the benefits of using the food recycling system, identify key issues that may prevent uptake, develop actions to increase participation in the food recycling service, and develop systems to ensure ease of access.

With this project, Council sought to prepare a Community Engagement and Participation Plan (CEPP) to deliver improved uptake in its food recycling program in multi-unit dwellings (MUDs). The CEPP is a comprehensive strategy for delivering communications and engagement with relevant stakeholders, and includes extensive recommendations for development of communications materials and the resolution of systemic issues relating to the program.

The CEPP outlines a plan of implementation for the program, as well as guidance on the specific materials that will be used to engage with residents.

The comprehensive plan gives consideration to the broad spectrum of demographics involved in the program, and responds to findings regarding barriers to participation. Extensive research and consultation has ensured that the CEPP is founded in evidence, as well as being contextually relevant.

Council will be able to use the CEPP to deliver ongoing communications and engagement regarding this program to residents throughout the LGA. The CEPP reflects Council's priorities as identified in its Community Strategic Plan, its Environmental Sustainability Strategy and its Delivery Plan, and be strongly aligned with Council's vision for a sustainable, liveable and connected community.



# 2

## **Community Engagement and Participation Plan**

## 2 COMMUNITY ENGAGEMENT AND PARTICIPATION PLAN

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This Plan outlines a series of recommended actions, outlines details on how to implement them, includes a section on proposed implementation timelines, and provides detailed guidance on communications messaging.

The research has drawn on the experience and perspectives of users of the service. The authors acknowledge that different users may have different views of the service, and that there may be various views about 'how the system works'. In some instances we have included recommendations which address things which technically are already features of the service, but for whatever reason over time may not be still being implemented, may be perceived by some residents as not being implemented, or may be implemented differently at different times by Leichhardt Council.

### 2.1 RECOMMENDED ACTIONS

The recommendations are summarised in Table 3 and broadly fall into the following categories:

1. The service – internal systems (systemic issues that relate to Council)
2. The service – interface systems (systemic issues that relate to the customer)
3. Communications materials
4. Communications strategies
5. Communications messaging.



**Table 3: Summary of the CEPP**

Category	Strategy	Action
Internal systems	Establish a consistent process for issuing replacement bags and bins	1. Devise one pathway for requesting new kitchen top bins, and replacement bags, including consistent pricing
	Support Council staff	2. Develop Q&A resource for Council customer service staff 3. Encourage customer service staff to “cross-sell” service and advice
	Ensure data is consolidated and integrated regularly	4. Ensure all new kitchen top bins are entered into bin master and this data is accessed periodically 5. Develop more consistent and regular Visual audits to assess participation levels 6. Adjust general 3 yearly audit to include food waste collection service
	Prioritise issues and develop solutions	7. Hold an internal workshop to prioritise systemic issues identified in this CEPP and develop solutions and implementation strategies
Interface systems	Review bench-top bin design	8. Consider smooth bin (rather than basket) to avoid bags tearing
	Review process for obtaining bench-top bins	9. Review process for ordering and collecting a bench-top bin; ensure bench-top bins can be ordered after hours
	Resolve structural issues relating to large bins	10. Consider making large biodegradable bags available for wheelie bins 11. Consider non-vented wheelie bins or some other structural solution for flies in bin rooms 12. Consider offering smaller wheelie bins for low participating or newly participating buildings
Communications materials	Review process for obtaining biodegradable bags	13. Increase frequency of drop-offs throughout the year, with material accompanying delivery of bags 14. Delivery of bags each year to be more consistent 15. Decide on replacement cost – make free if possible
	Create closed loop for material	16. Use compost material from the service in parks or give to residents
	Create clear information for use throughout buildings and on bench-top bins	17. Create and install common areas signage 18. Continue to provide / Place stickers on lids of bench-top bins
	Create clear information for use on and around wheelie bins	19. Place stickers on front and lids of food waste wheelie bins 20. Create and install bin bay signs
	Develop information material for all residents	21. Develop ‘introduction to service’ DL information pamphlet to be distributed to new residents 22. Provide twice yearly update on the service in the form of a newsletter

Communications materials (cont.)	Maintain contacts data bases	23. Create database of Executive Committee 24. Create database of Building Managers 25. Create database of real estate agents managing large MUDs in Leichhardt
Communications strategies	Send information material to all eligible residents	26. Use direct mail to distribute 27. Use rates notices to distribute 28. Deliver 'introduction to service' pamphlet & newsletter with bins and bin bags
	Utilise face-to-face visits and in person education formats	29. Try door knocking using education resources and start-up materials
	Send information to key stakeholders within buildings	30. Keep the Executive Committee up to date with information about the service and ask them to inform other residents about the service 31. Create information fact-sheet/poster for Building Managers
	Engage building champions	32. Brief and support champions to act as conduit to whole building 33. Provide incentives for champions 34. Provide incentives for existing users
	Send information to new residents	35. Have change of ownership trigger a letter and pamphlet from Council
	Engage cleaners	36. Create a briefing sheet for whole building cleaners 37. Create a briefing sheet for individual unit cleaners
	Clarify opt out options	38. Have a clear and consistent process for managing complaints about the service at a whole-of-building level
Communications messaging	Include key details of the service in all communications	39. Make sure information about how to get bins and bags is on all materials 40. Ensure that all information regarding the service is clear about items that can and cannot be placed in the bins
	Use effective messages	41. Ensure that communication material includes key messages
	Use effective images	42. Use consistent, market-tested branding for <b>all</b> materials 43. Use diverse and relevant images and effective graphics

## 2.2 DETAILS ON PARTICULAR ACTIONS

### 2.2.1 Internal systems

#### Establish a consistent process for issuing replacement bags/bins

##### **1. Action: Devise a pathway for requesting new bench-top bins and replacement bags, including consistent pricing**

**Rationale:** Residents reported receiving unclear and inconsistent information about how to obtain bench-top bins and biodegradable bags. It is apparent that due to a lack of internal knowledge about the systems and processes, not all Council staff are currently able to effectively communicate about the service to customers. There is a strong need to develop a single, clear process that will be enacted in response to requests for new bins and bags.

**Suggestions for implementation:** During the internal workshop, a clear process should be suggested, refined and agreed upon. This process should outline the procedure for ordering, purchasing (if a payment is required) and receiving a bench-top bin/replacement roll of bags. This process should be clearly articulated to Customer Service staff members via the Q&A document.

#### Support Council staff

##### **2. Action: Develop a Q&A resource for Council customer service staff**

**Rationale:** Residents who were interviewed reported inconsistencies and a lack of clarity regarding information they had received upon contacting Council regarding the service. The workshop with staff found that not all of Council's own staff clearly understand how the service works, and thus they are not capable of communicating about the service to residents. There is a definite need for clear information regarding the service.

The staff workshop also recommended that Council have a clearer story for non-eligible MUDs about why they can't participate.

**Suggestions for implementation:** It is recommended that Council develop a clear and simple Q&A (no more than 1 page) for use by Council's Customer Service staff. The Q&A should cover issues relating to how to obtain a maroon-lidded bin, how to obtain biodegradable bags and bench-top bins, questions relating to what can and cannot be placed into the bin, who is eligible for the service, the end-use of the waste and any other likely issues.

##### **3. Action: Encourage Customer Service and other staff to "cross-sell" service**

**Rationale:** Customer service staff may get requests from new residents for other items or information. During these interactions, staff could also raise the Food recycling Service and ask if they are interested in getting involved.

In other jurisdictions, councils were able to have a diverse array of staff and elected representatives be 'spokespeople' for the service. Making sure that staff and elected representatives who may be in contact with the public (beyond Customer service staff) can act as advocates for the service will open up opportunities for informal promotion of the service on a case by case basis.



**Suggestions for implementation:** Let staff know about new communications materials when they are complete, and invite them to help spread the word if they work with people who may live in MUDs. Report internally on food volumes collected each quarter. Encourage customer service staff to promote the service to new residents or residents who live in MUDs who may be interested in other waste or sustainability services.

## Ensure data is consolidated and integrated regularly

### **4. Action: Ensure all new kitchen top bins are entered into GarbageMaster and this data is accessed periodically**

**Rationale:** The review of the current system identified that it was hard to ascertain how many individual units within a MUD (or across the whole LGA) are participating in this service. Estimates can be made by the volume of material being collected in wheelie bins, using a rough estimate of an average weekly volume produced by a typical household. However another, possibly more reliable, way to track participation would be to track the number of in-home bench top bins delivered, and where they are delivered to.

**Suggestions for implementation:** If GarbageMaster is a database as well as customer-request management software, it may be useful to get reports generated of the data, at regular periods (e.g. quarterly). This will be especially useful if it could be generated before the communications materials and strategies are updated, as well as during and after. It would be one way to gauge whether participation is increasing compared to the baseline.

### **5. Action: Develop more consistent and regular visual audits to assess participation levels**

**Rationale:** In reviewing the current system we identified that visual audits of the food bins have been conducted periodically by Council waste collection staff, but that the details of the audits may have varied over time. This data is also not stored in such a way as to allow easy tracking of change over time.

**Suggestions for implementation:** Create a simple spread sheet with consistent categories to be addressed. Undertake the audit at least yearly, but ideally twice a year, using a consistent method. For example this audit could identify: volume of food waste in wheelie bins, any visible contamination, whether bin was not out for collection, any flies or odour.

An audit of bin bays is also advisable to ascertain how many buildings have indoor/non-ventilated bin rooms, as well as whether they have appropriate signage about what to put in the bins and what the process is to access bags and bench-top bins.

### **6. Action: Adjust general three-yearly audit to include food waste collection service**

**Rationale:** Detailed data about the type of contamination (if any) in participating MUDs would be useful in tailoring future education messages.

**Suggestions for implementation:** Continue to use the event of Council's periodic waste and recycling audit to better understand participation in the food recycling service. Specifically this involves identifying a sample of MUD dwellings who use the service and examining the bins for an estimate of participation rates (based on volume) and contamination rates and key contaminants. A larger sample of *eligible* MUDs to see how many a) still have a wheelie bin for food waste (and how many bins); b) of those with bins, how many are actively using them, c) what volumes are being put out for collection, and d) what contaminants (if any) are present.



## Prioritise issues and develop solutions

### **7. Action: Hold an internal workshop to prioritise systemic issues identify in this CEPP and develop solutions and implementation strategies**

**Rationale:** An internal staff workshop is needed to identify priority actions and issues for resolution in the initial roll-out of the CEPP. The workshop (ideally facilitated by an external moderator) should seek to identify key issues for resolution, and brainstorm solutions. The input of a range of Council staff will be necessary to reach informed decisions relating to various components of the service.

**Suggestions for implementation:** A ~2 hour workshop with an external facilitator is recommended for the months following the approval of this CEPP. The workshop should involve as many staff members as possible who are involved with delivering, planning and reporting on the service.

## 2.2.2 Interface systems

### Review bench-top bin design

#### **8. Action: Consider smooth bin (rather than basket) to avoid bags tearing**

**Rationale:** Residents interviewed noted that the bags are very thin and tend to rip easily, especially if wet waste sits in the bag for a number of days. They identified the pairing of the flimsy bag with the basket-style bin as being problematic – ‘if the bin was a smooth plastic bin it would probably be easier to manage’ as waste would not drip onto the counter if the bag leaked.

**Suggestions for implementation:** As part of the internal workshop to resolve systemic issues recommended in this CEPP, a range of alternative bench-top bins might be discussed. Costs and benefits of different designs should be considered.

### Review process for obtaining bench-top bins

#### **9. Action: Review process for ordering and collecting a kitchen bench-top bin; Ensure bins can be collected after hours**

**Rationale:** Several residents who were interviewed noted that they had difficulty obtaining a bin from Council. Many were irritated that they would be required to pay for the bin, while others found it difficult to pick up the bins from Council Customer Service Centre, given that they believed they needed to be collected within working hours. Although Council does provide a delivery service of bins to residents, it will be important to check that this is clearly communicated and understood by all parts of Council helping to administer the program. Some other jurisdictions have used libraries as a location for accessing bins and bags for residents, with some reported success. The literature evaluating other services suggests that barriers to participation – such as difficulty accessing a bin for within the home – can be a significant deterrent to participation.

**Suggestions for implementation:** Review provision of bench top bins to ensure access to the bins is easy and simple, and that this step does not present a barrier to participation in the service.

This is an action which may need to be discussed in the internal workshop recommended in this CEPP. A discussion about an appropriate process for ordering (many residents suggested an online/email ordering system would be preferable, as they have difficulty phoning Council within business hours) and collection/delivery of the bins (as many residents cannot collect from the





Customer Service Centre, especially within working hours) is essential for resolving a key barrier to uptake. It is suggested that, if possible, bins be delivered to residents directly to make the initial set-up process as smooth as possible to facilitate easy uptake of the service.

## Resolve structural issues relating to large bins

**10. Action: Consider making large biodegradable bags available for wheelie bins;**

**11. Action: Consider non-vented bins or some other solution for flies in bin rooms**

**Rationale:** Reviews of other programs, stakeholder interviews and resident engagement all revealed that the ‘yuck’ factor – especially associated with the wheelie bins – is a significant barrier to uptake of the service. A review of the wheelie bins may be needed to help manage this. Several suggestions relating to the wheelie bins emerged throughout the research – including the supply of large biodegradable bags for the wheelie bins (to reduce the problem of food waste sticking to the sides of the wheelie bin when bags split) may be a solution to remove lingering smells and flies. Further, a non-vented bin may help contain the smell and make the bin less accessible for flies and other insects such as cockroaches.

**Suggestions for implementation:** Bin design should be reviewed in an internal workshop, to discuss potential issues and benefits from switching to a different bin design or utilising a large biodegradable bag. Involvement of those who at the depot and on the trucks will be necessary to ensure that any potential issues are well understood and managed in the implementation of any changes to bin design.

**12. Action: Consider smaller wheelie bins for low participating or newly participating buildings**

**Rationale:** According to the literature, implementing smaller wheelie bins (80L, 120L or 140L) may also be an affective intervention to help shift perceptions about how much organic waste is appropriate for the building to contribute. This strategy may be effective for buildings that don’t produce enough waste to fill the larger 240L bins, where people can also develop resentment about cleaning large bins that get fouled by smaller volumes of waste. Larger bins that are not full can also reinforce the social norm that not enough people use the service. While unused space in organics bins also increases the prospect for opportunistic contamination when the surrounding garbage bins fill up.

**Suggestions for implementation:** Council should investigate possibilities for providing smaller bins to buildings with a small number of users of the service. If smaller bins are to be provided to buildings, Council should clearly communicate to the body corporate or Building Manager regarding how many regular users each bin size is appropriate for (e.g. 4-5 users depositing 2-3 bags per week in the bin). This will allow buildings to make informed decisions about the bin size they choose.



## Review process for obtaining biodegradable bags

### **13. Action: Increase frequency of drop-offs throughout the year, with material accompanying delivery of bags;**

### **14. Action: Delivery of bags to be more consistent.**

**Rationale:** The major problem identified with the biodegradable bags related to delivery of and access to the bags. Bag delivery methods appeared to differ between buildings and across the year. This inconsistency has made it difficult for existing users to regularly access the number of bags that they need to use the service, and has also made it difficult for new users to become engaged in the service. Irregularity and inconsistency in the timing and method of the bag delivery has made participation in the service somewhat difficult. The staff workshop participants also recommended that Council streamline the provision of compostable bags.

This action reduces contamination of plastic bags from people who run out, limits bag breakage from old liners, and increases opportunity for engagement of existing and new occupants. However, Council may want to have slightly different processes – or an exception rule – for buildings with particularly proactive Building Managers.

**Suggestions for implementation:** It is suggested that the frequency of bag deliveries is increased to 3-4 times per year, in order to ensure consistency of delivery and availability, and also to capture new residents as they move in. Engagement with Building Managers is likely to be a crucial element of the success for this component of the project. A discussion of the bag delivery process is recommended as part of the internal workshop recommended in this CEPP.

Further, it is recommended that bag deliveries be accompanied by information (pamphlets or newsletters) which explain the service to residents and potential new users, including potential benefits, description on how to use the service, and links to further information about the service and obtaining a bench-top bin. Without this information, the purpose of the bags may be unclear to many users.

### **15. Action: Decide on replacement cost – make free if possible**

**Rationale:** Several residents raised the issue of replacement bag cost as an inconvenience. Although the current cost for additional bags is quite low (\$4.00, or no cost if the resident says that they did not receive the bags initially), there may be a resistance to paying to ‘do the right thing’. This action reduces contamination of plastic bags from people who run out, limits bag breakage from old liners, and increases opportunity for engagement of existing and new occupants. The current system also risks having different residents receive different treatment depending on which staff member serves them, which could lead to resentment or reduced trust in Council.

On the other hand, local government often tries to recoup costs through fees and charges, and charging a small fee may be consistent with this approach.

**Suggestions for implementation:** consider the number of replacement / additional bag requests that are received each year and the total cost to Council of providing these at no cost.

If free replacement bags are not offered, then highlighting other low or no cost options could be useful – for example, wrapping food waste in newspaper (the processing facility advises that this is acceptable if the volume of newspaper is incidental compared to the food waste collected).



## Create closed loop for compost material

### **16. Action: Use compost material from the service in parks or give to residents**

**Rationale:** Other jurisdictions report on the benefits to participation of being able to demonstrate that the end products of the recycling process are being used locally. Our research with residents also suggested that the message people felt would be most successful at increasing participation is that ‘the service creates valuable compost that gets used on local parks’.

**Suggestions for implementation:** We understand that Council is currently investigating purchasing a compost product from a company that purchases material from EarthPower (the facility that Leichhardt’s food waste materials go to for processing). This material is being considered either for use in parks or use in homes. Given that the service is restricted to MUD dwellers, it will be critical that such a product if given to homes, is suitable for house plants, and is specifically given to users of and those eligible for the service. Parks application could be accompanied by signage in the parks explaining the use of the product.

## 2.2.3 Communications materials

### Create clear information for use throughout buildings and on bench-top bins

#### **17. Action: Create and install common area signage**

**Rationale:** Residents suggested that people may not necessarily respond to a ‘call to action’ if they are exposed to it when in the bin bay area – this may be late at night or prior to leaving for work in the morning, and thus they may not be in a position to respond to any ‘call to action’ relating to beginning to participate in the service. Signage and posters in common areas of the buildings may be advantageous as they may capture the attention of residents when they are in a better position to respond. Posters also provide an opportunity to capture new residents who may not have heard about the service before.

**Suggestions for implementation:** Signage should include description of how to use the service, a short mention of benefits of the service (returning outputs to the community, and reduction of landfill), and details regarding how to access the bags and bins.

#### **18. Action: Continue to provide / Place stickers on lids of bench-top bins**

**Rationale:** Council currently produces stickers for the bench-top bin lids. These stickers could be applied in advance to ensure they are used, or could be reissued periodically, as evidence from other jurisdictions suggests that they may fade or peel off over time, given the heat and moisture generated in a kitchen environment.

**Suggestions for implementation:** It is recommended that Council budget for replacement stickers and signage at reasonable intervals, to account for damage, fading and peeling over time. Some municipalities also issue a sticker for the underside lid of the bench-top bin (where the bin design is appropriate) to assist in the correct separation of organic wastes in the home. Stickers could be made available periodically with bin bag deliveries.



## Create clear information for use on and around wheelie bins

### 19. Action: Place stickers on front and lids of food waste wheelie bins

**Rationale:** One resident in a poor-performing building noted that the lack of stickers and information on the bins, and the colour of the lid being similar to the general waste bin, meant many residents were unwittingly contaminating the food waste bin. It was noted that distinguishing between the lid colours is particularly difficult if bin bays are located in dark or poorly-lit areas of the site.

**Suggestions for implementation:** Stickers for bins should be created in consistent branding to bin bay signs, posters and other communication materials. The signs should clearly describe what the bin is to be used for in simple terms (items which can and cannot be placed in the bin). Further descriptions of the service should be saved for bin bay signs, posters and pamphlets. Stickers should be placed both on the side of bins and on the lids, to ensure they are clearly marked.

### 20. Action: Create and install bin bay signs

**Rationale:** Residents noted that the lack of stickers and information around the bin bays meant many residents were unaware of the purpose of the maroon-lidded bin. Improved signage around the bin bays may assist in reducing contamination and also draw the attention of new residents to the service.

**Suggestions for implementation:** Signage around bin bays should clearly articulate items that can and cannot be placed in the maroon-lidded bin, in addition to introducing the service. The signs should briefly and clearly explain the purpose of the service (including a brief note relating to benefits), tips on how to use (e.g. mentioning the biodegradable bag) and a note regarding further information.

## Develop information material to send to all residents

### 21. Action: Develop information pamphlet to be sent to new residents

**Rationale:** Stakeholder interviews emphasised the importance of clearly branded materials, that have all essential service information on them, and images that catch the attention of potential users.

This resource could be used when Council is aware that someone is new to the service or is a new tenant. Rather than containing a range of information updating users on the service, and providing ongoing positive reinforcement (like the newsletter), it would be pitched squarely at introducing the service. Resident interviews suggest that some non-users remain unaware of the service. This pamphlet would introduce the service and invite participation.

**Suggestions for implementation:** Simple messages inviting participation could include: 'Do you know we recycle food? Your building is eligible to participate in Council's food collection for composting. Contact us for more information and to get your free start-up kit'. This should be free of all extraneous text and have arresting visual images, such as the visual branding for the service. The reverse side could contain more information such as what they will receive in their free start-up kit, who to call to get replacement items or ask questions, one or two facts about food waste, and emphasising local benefit and giving some examples of what local people say about the service. The reverse could also have pictorial guidance about what goes into the organics bin, or this could be kept for the newsletter, which they will receive as part of their start-up kit.



If the pamphlet triggers interest but the building does not have a wheelie bin (as it has been returned by the Building Manager or residents,) there should be a process for letting the Building Manager know that a resident is interested in participating.

### **Text information**

Update the colour flyer to contain the following information:

- a) Give a simple introduction the service that clearly explains what will happen to the recycled resource (*'Organic material including food scraps put in the green bin are professionally processed into compost-based products'*)
- b) Give a clear overview of the service infrastructure that each household should have *free* access to (bio-bags, kitchen caddy, wheelie bin);
- c) Educate residents about how to use the service (including images relevant to MUD residents)

## **22. Action: Develop twice yearly newsletter**

**Rationale:** a newsletter can provide positive feedback to those participating in the service, share news or successes of the service, and help establish a social norm around participation, especially over the next few years as Council seeks to increase 'sign up' and participation at the household level.

**Suggestions for implementation:** the newsletter would (as Council's previous newsletters have done) include information that would help someone get involved with the service as a first time user, as well as remind people already using the service how to access replacement bins, stickers, bench-top bins or bin-bay or common area signs for their building, and how to use the kitchen-top bin and bags. In addition this could be a vehicle for sharing 'success stories' of other buildings (profile a building that has introduced some innovative ways to increase participation), 'success stories' of the service itself (did tonnage increase last year? Is Council saving money by not sending that food to landfill? Did a local park get a makeover using compost that residents helped make?). It could also contain information about compost giveaways for residents, if this is developed.

The newsletter could occasionally feature an article that focuses on the growing trend towards food recycling in Leichhardt, other local councils, around Australia generally and even overseas. The purpose of this is to keep presenting the service positively, and demonstrate a changing social norm around recycling food for beneficial use. Quotes or stories from farmers who are using a compost product (especially from Council's own waste), especially those who are located in Sydney's immediate surrounds and may be producing food that Leichhardt residents are eating, would be a useful edition. The newsletter could also feature certain food items (see Communications Messaging for more detail).

All of the Communication Messaging recommendations described elsewhere in this section applies to the production of the newsletter.

Note: an extension of this idea, to reduce the resource intensity and increase benefit would be to produce a twice-yearly newsletter that also includes tips for other recycling. It could then sit under a broader banner of "Leichhardt recycles", and provide a limited amount of information about kerbside recycling as well as services offered at drop off centres, whilst the focus could be on food waste recycling. This may help link food recycling to other forms of recycling and demonstrate that it is now expected behaviour, rather than a novel or separate process.



## Maintain contacts databases

### **23. Action: Create database of Executive Committees**

### **24. Action: Create database of Building Managers**

### **25. Action: Create database of real estate agents managing large MUDs in Leichhardt**

**Rationale:** If Council endeavours to keep Executive Committees and Building Managers up to date with news of the service, and to build their capacity to respond to resident queries, then Council will need to know how to contact them. Both can be sent mail addressed generically to the building, however a more targeted approach would be to develop a database with names, titles and email and phone contact details for each.

**Suggestions for implementation:** Given the large number of MUDs within Leichhardt, it may be most feasible to focus on MUDs with 100 or more residents. An initial calculation suggests that this is approximately 49 buildings.

Council has several databases that could be streamlined and built on. Ensuring all key staff involved with the program can easily access the database/s and clarifying who is able or expected to update the database will be a useful addition.

Reviewing/refreshing this database and then periodically updating it will be an important investment in the service, and may be useful to other parts of Council at various times as well.

A process could involve: contact large buildings via the Strata Managing Agent, which in some cases is available as information on the building/ Strata company website. Getting the contact details of both the Building Manager and Executive Committee from the Strata Managing Agent.

Success stories of food recycling in MUDs, or helpful resources could be shared with the Owners' Corporation Network <http://ocn.org.au>, Strata Community Australia [www.stratacommunity.org.au/strata-living/sustainability](http://www.stratacommunity.org.au/strata-living/sustainability) or Green Strata program [www.greenstrata.com.au](http://www.greenstrata.com.au). This is also something a group of councils could effectively undertake if a similar collection program was running across several council areas.

## 2.2.4 Communications strategies

### Send information material to all residents

#### **26. Action: Use direct mail to distribute;**

#### **27. Action: Use rates notices to distribute;**

#### **28. Action: Deliver 'introduction to service' pamphlet with bins and bin bags**

**Rationale:** The success of the Leichhardt service depends on the extent to which clear processes provide new and existing tenants with the information and resources that they need to participate correctly. Residents suggested that direct contacts via mail (addressed to recipients so that it doesn't look like junk mail) or via rates notices might be a more productive means of ensuring greater exposure and higher levels of engagement with the material. It is suggested that the information materials be distributed via a variety of methods in order to reach as many residents (both owners and tenants) as possible. Delivery of information material to accompany



the delivery of biodegradable bags was also noted as an essential element of the communications strategy which is currently missing. All deliveries of bags to buildings should include a number of information pamphlets to ensure that the purpose of the bags is made clear to residents.

**Suggestions for implementation:** If using rates notice, aim to only send material to MUD owners. This may or may not be possible with Council's existing rate notice mailing systems.

## Utilise face-to-face visits or in person education formats

### **29. Action: Try door-knocking using education resources and taking material to enable immediate uptake of the service**

**Rationale:** Staff workshop participants also recommended that Council communicate about the program in new and interesting ways (including through existing events, using school and parent networks, or cultural organisations). Stakeholder interviews reveal that door knocking has been used with some success in other jurisdictions.

**Suggestions for implementation:** Use ID cards showing that staff have authority to doorknock. Send introductory letters about a week in advance, letting residents know that they can expect a visit from people in their area, so that it's not a surprise.

Other face-to-face formats for engagement could include:

- Offering champions specifically or system users generally opportunities to attend a tour of a food waste processing facility.
- Offering workshops for residents about food recycling including hands on demonstration of materials, ways to wrap or store food, examples of food that can be disposed of, and possibly a link to the end product and how it can be applied to houseplants or gardens.

## Send information to key stakeholders within buildings

### **30. Action: Keep the Executive Committee up to date with information and ask them to inform other residents about the service**

**Rationale:** Whilst the Building Manager will likely play the role of distributing materials such as bags, kitchen caddies, or posters, the Executive Committee are key stakeholders and their support for the service is critical to the building's on going participation. They *may* also produce their own newsletters or email updates for owners in the building: these would be a very useful channel to provide occasional reminders about the service and the standard information: how to get bags and bench-top bins, what materials are eligible.

**Suggestions for implementation:** In devising the database of Strata Manager's/ Executive Committee get contact details to send items for the Committees Meetings.

### **31. Action: Create information fact-sheet/poster for Building Managers**

**Rationale:** Engaging Building Managers as the 'eyes and ears on the ground' in buildings, is an important element of a successful program. Developing tailored information for Building Managers that outlines what might be needed from them to support the service, and what information they can pass on to residents will go some way to meeting this need. Outlining the process for how (and when) bags will be delivered each year, and what Council requests in terms of help from the Building Manager will be useful. Using Strata Managers to access Building Managers is one possible pathway for contact.



**Suggestions for implementation:** Drawing on the stakeholder research into what has worked well, the following suggestions for Building Managers that could be included:

- Having bins closer to people, such as on each floor, rather than just in bin bay (in Leichhardt)
- Having the building's cleaners responsible for the bins, who check bins regularly for smell, as well as taking out at appointed time, and then clean them when empty.
- Dropping material directly to front doors where possible (eg small buildings)
- Assisting by checking that the bin room has adequate signage and if not, installing the signage Council provides
- If there are other waste or recycling messages for Building Managers (recycling fluorescent tubes? Recycling smoke alarm batteries? Charities that collect furniture for reuse?) these could be combined into a 'News on waste and recycling for Building Managers in 2014' annual mail out.

The material would need to highlight the benefit to residents of the building and the Building Manager of providing support.

One stakeholder suggested that Leichhardt could identify strata management companies who have a concentration of Strata Managers in one area, ask them to pass information to Building Managers in the Leichhardt LGA. Even liaising directly to the senior staff (Managing Director) of the strata management company to get 'buy-in' is a possibility.

## Engage building champions

### **32. Action: Brief and support champions to act as conduit to the whole building;**

### **33. Action: Provide incentives for champions**

**Rationale:** Interviews with stakeholders and residents identified that there are already a number of particularly engaged 'champions' within the buildings. These residents have taken it upon themselves to manage the bins, place new signs on the bins, distribute biodegradable bags throughout the building, and communicate with other residents about the service. It is suggested that Council utilise this existing enthusiasm and commitment by developing a network of champions amongst buildings.

Champions might include a proactive Building Manager, or a resident volunteer who cleans bins, distributes bags or promotes the service amongst fellow residents.

**Suggestions for implementation:** A process for recruiting and briefing champions should be developed in order to ensure that they are willing participants, that they are capable of communicating about the service and that they know how to handle questions, issues or concerns relating to the service (including who to direct enquiries towards at Council).

Council should also consider providing a prize or 'thank you' notification to champions within better-performing building in recognition of their efforts (where they can be identified). Body corporates and Owners' Corporations could also be recognised publically if they are known to champion the service.





### 34. Action: Provide incentives for existing users

**Rationale:** Residents interviewed for this project noted that a competitive element could encourage more residents to get involved. They noted that being given some sense of how their building was performing relative to others may help spur more positive action. Further, given that residents noted that they enjoyed the feeling that they were doing the ‘right thing’ by using the service, rewards and incentives may help reinforce this notion and actively reward people for their participation.

**Suggestions for implementation:** It is important to acknowledge that prize-based incentives are more commonly implemented for systems that service individual households rather than multi-unit dwellings. Accordingly, this approach would need to be adapted for the multi-unit context. A ‘thank you’ barbecue, ‘well done’ postcards for residents, or a similar write up through local media could be used in a comparable way to incentivise effective use.

A similar incentive campaign could also target food waste volumes, to reward or recognise buildings where more residents actively use the service. Other general comments about incentives to support participation include:

- Clearly communicate the benefits of the service and promote end uses that give something back to the community –e.g. ‘*The professionally prepared compost can be used in local parks to enhance our environment*’;
- Continue rate reductions for buildings that effectively maintain fewer garbage bins/per number of units<sup>2</sup>;
- Promote the fact that kitchen caddies and bio-bags are given to residents at no cost;
- Select a wheelie bin design that is easy to clean and provide ‘how to’ advice;
- Consider providing compostable wheelie bin liners as a participation incentive for buildings that struggle with the bin cleaning or regularly complain about odours.

## Send information to new residents

### 35. Action: Have change of ownership trigger a letter and pamphlet from Council

**Rationale:** Staff workshop recommended that Council engage with new residents (both new owners and new renters) at the time of transition and tell them about the service. Other jurisdictions suggest that a 3-monthly bag and brochure drop off will ensure that new residents are frequently contacted, this is a useful parallel process to maximise the chance that new residents who are owners will hear about the service.

**Suggestions for implementation:** Liaise with Council’s GIS/ Rates staff to establish a process by which change of land title could trigger the mailing of a standard letter and brochure. This may not be a large number of residents each year but would be in addition to the other mechanisms described elsewhere.

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<sup>2</sup> This is already in practice in that residents can pay lower rates for smaller garbage bins. This does not specifically encourage food waste recycling, but links to overall waste avoidance messages.



## Engage cleaners

### 36. Action: Create a briefing sheet for whole-building cleaners

**Rationale:** It has been suggested that in some buildings cleaners play a role in making sure the wheelie bins are cleaned and the bin bay area is tidy. Letting them know how the service runs may be important while food recycling is not a 'universal' norm across municipalities in NSW, and individuals may not be familiar with such a service in their own homes or other places of work.

**Suggestions for implementation:** Provide to the Executive Committee and ask them to brief cleaners on caring for the food waste bin. This action may need testing with some Executive Committees to see if written material is most useful for cleaners. If there are other waste or sustainability messages for cleaners of MUDs these could be combined.

### 37. Action: Create a briefing sheet for individual unit cleaners

**Rationale:** Stakeholder interviews suggest that participating units that have professional cleaners may find food waste disposed of in general waste bins due to the cleaners not being familiar with the service.

**Suggestions for implementation:** A brief (eg DL) flyer that says 'we recycle food waste' and explains to the cleaner where the bench-top bin is to be emptied could help address this problem. Ask tenants to pass on to cleaners so that the bins are emptied correctly from participating units.

A less resource intensive approach to this same issue would be to include 'don't forget to tell your cleaners or houseguests how to recycle food' messages within the newsletter and intro pamphlet, and asking the Building Manager / building champion to remind people to let their cleaners know.

## Clarify opt out options

### 38. Action: Have a clear and consistent process for managing complaints about the service at a whole-of-building level

**Rationale:** If buildings are experiencing difficulty with their bins, a clear and consistent process should be employed to explore other options, and explore removal of the wheelie bin as a last result. This is especially the case if they wish to remove all bins thereby preventing all residents in the building from participating in the service. Early communication as issues arise may mean that a solution other than bin removal is found. It will also be important to gain information about the removal of the bin to further populate a database of which MUDs are and are not using the service.

**Suggestions for implementation:** Each time a request is made to remove a wheelie bin, this could trigger a process where a phone call or site visit is made by a staff member trained in the options available for overcoming issues with the service. For example:

- Do they wish to remove the bin due to contamination or perceived contamination? In this case Council could target the building with reminder materials about using the service, check that bin bay signs are up, engage champions etc.
- Do they have concerns about the size of the food waste wheelie bin and limited space for other bins? In this case offering a smaller bin may assist.
- Do they have concerns about flies in the bin room? In this case trialling a non-vented wheelie bin, trialling a compostable bin bag, encouraging cleaners to rinse bin weekly, or looking at non-toxic or low chemical alternatives to spraying the insects in the bin room could all be explored.



Decisions about the best this process to use in this situation could be made at the staff workshop recommended above. The process would need to be described clearly in the Q&A for Customer Service Staff, at least to let them know who will speak with the building. Information about the options available if they are experiencing difficulty could be included on the Building Managers and Executive Committee information.

## 2.2.5 Communications messaging

### Include key details of the service in all communications

#### **39. Action: Make sure information about how to get bins and bags is on all materials**

**Rationale:** Continue to ensure that the process for accessing bins and bags is clear and that information is provided on all printed materials. It would be useful to distinguish between ‘getting started’ which includes receiving the free ‘starter kit’, and ‘topping up supplies’ which involves accessing replacements. The introduction pamphlet should focus mostly on ‘getting started’ whilst the newsletter will contain information about both.

**Suggestions for implementation:** See details below in ‘Use Effective Messages’ section.

#### **40. Action: Ensure that all information regarding the service is clear about items that can and cannot be placed in the bins**

**Rationale:** Interviews with both stakeholders and residents suggest that some participants may be under-utilising the service due to misunderstandings about what materials are acceptable.

**Suggestions for implementation:** In the introductory pamphlet and the newsletter, provide visual information and text about the materials accepted. Consider highlighting a particular ‘misunderstood’ food from time to time in the newsletter – for example an article headed ‘Meat is welcome in our bins!’ which explains how or why the service accepts meat (compared to say home composting), and why it’s important this waste stream get captured. Tips for storage could be included. Other ‘misunderstood’ materials that could be featured include dairy, and soiled kitchen towel or tissues. Some common contaminants (plastic wrap, ties) could also be highlighted from time to time.

### Use effective messages

#### **41. Action: Ensure communication material includes appropriate tone and key messages**

**Rationale:** The information contained within these resources needs to be presented in ‘plain English’, in a tone which is ‘relentlessly upbeat’ and as ‘simple’ and ‘inclusive’ as possible. Research suggests that using a small number of locally appropriate messages is an effective way to appeal to a broader audience. It is important to also tailor information to address key barriers to participation locally.

**Suggestions for implementation:**

Highlight a small number of key service ‘tips’. For example to pre-emptively target:

- **Contamination** – ‘Remember to only use bio-bags or newspaper to line your caddy and never use standard plastic bags’



- **Yuck factor fears** – *‘Try wrapping your meat scraps in newspaper or paper towel, or alternatively freezing them until the collection day during hotter months’, ‘if you prefer, refrigerate your food scraps in a lidded container until bin day.’*
- **Encourage households producing small amounts of organic waste to participate** – *‘Remember that even small contributions are valuable, as it all adds up to make a precious community resource’*
- **Encourage use of all food wastes in the service** - Residents may also be unaware of the wide range of items that can go into the collection service, in particular meat scraps, dairy, used pizza boxes<sup>3</sup>, plate scrapings, tissues, paper towel, citrus peel, tea bags and coffee grounds. One explanation is that many residents already have established mental models around what is appropriate for home composting systems. The community may need regular reminding that the collection service can handle a wider variety of organic matter than simply fruit and vegetable scraps.

Also include messages about expectations, benefits and participants’ own experiences:

- Describe the multiple benefits of the service. Residents responded particularly well to messaging which related to return the benefits of the service back to the Leichhardt community – for example, the use of compost generated via the service on public parks and landscaping.
- Using (anonymous) quotes from interviewed residents about why they use the service:
- There is a strong association between being a food recycler and being committed to recycling more generally. Messaging should aim to convey the idea that food recycling is now also becoming socially-expected behaviour.
- Positive feedback to residents may be beneficial for maintaining good practice. However, caution should also be exercised about providing negative feedback to underperformers, as these messages may discourage participation.

In order, the most popular messages identified by residents we interviewed (from a long list derived from the literature, that we presented to them) were:

1. *The compost can be used in local parks to give something back to the community.*
2. *A great idea as it really does reduce amount of rubbish that goes into landfill.*
3. *I think it is a very good idea for people in units with no backyards where they can’t easily compost at home*

Residents also identified other messages which could be used to encouraged uptake, many of which related to their own personal reasons for using the service. These include (in their own words):

- *It’s a good thing to do for the environment*
- *Landfill is a huge growing problem and the more we can do to reduce it the better*
- *This is used for gardens*
- *It’s just a better way to do it*

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<sup>3</sup> The processing facility advises that this is acceptable if the volume of pizza boxes is incidental compared to the food waste collected – personal communication February 2014.



- *The best thing about it is that you are able to source separate more types of waste from the general waste and landfill*
- *[Using the service] gives you a feeling that you are doing okay*
- *I'm more realistic about my food shopping now, because I can see the waste isolated in a bin*
- *They capture emissions so it doesn't go into the atmosphere*
- *I don't like things going to landfill when it doesn't need to*
- *This is an environmentally safe way to take your food waste and reduce your waste to landfill.*

## Use effective images and graphics

### **42. Action: Use diverse and relevant images;**

**Rationale:** the research suggests that either professional illustrations or carefully selected photographs are an effective way of communicating across cultures and to time poor residents.

**Suggestions for implementation:** Use of imagery – either illustrations or carefully selected photographs. If photographs are used, a) purposefully select generic photographs; or b) presenting photographs of a diverse range of people offering comments about service benefits. Some evaluations also specifically recommend including photographs of children using the service to convey ease of use. Make sure some photos show apartment dwellers and apartment environments to make clear that this is not just for people living in houses. Linking photos with quotes about what actual users say they like about the service / why they use the service could be a powerful communications tool.

### **43. Action: Use consistent, market-tested branding for all materials**

**Rationale:** Many of the services' materials reviewed contained clear and recognisable graphics, which are mirrored across a variety of materials. This might be a logo for the program, a single slogan or catchy title, or even recognisable bold colours and font choice. Many municipalities also attest to the value of 'branding' the service so that all communication materials go out with a consistent name, logo and visual identity that residents come to recognise (e.g. 'City-to-Soil', 'Recycle-Right', 'Wheelie Good Compost').

**Suggestions for implementation:** Engage a graphic designer to create imagery which can be replicated in the bench-top bin, posters, information brochure and bi-annual newsletter. Consider developing branding that can also be adapted in future to accommodate an extended service: that is a service extended to single unit dwellings, and also extended to include garden waste (should a combined organics collection be chosen).



## 2.3 TIMING OF IMPLEMENTATION

This Community Engagement and Participation Plan has outlined the need to address a range of internal/systemic issues in addition to implementing the external-facing actions associated with a new communications strategy. It is suggested that the internal issues identified throughout this plan, and the associated actions, are resolved prior to the roll out of the new communications materials, in order to ensure that barriers to uptake that stem from systemic issues are removed prior to a renewed recruitment push.

A facilitated internal workshop is suggested prior to the implementation of actions to resolve systemic issues. This workshop should aim to identify priority issues and pinpoint strategies for resolving them. A second internal meeting may be needed following the initial roll out of actions to resolve internal issues and prior to the implementation of the communications strategy, in order to evaluate progress on resolution of internal issues.

## 2.4 DECISIONS FOR FUTURE

### ***Service extended to households***

***Rationale:*** An extended service may not only increase the number of participating residents (and collection volumes) but also make it easier to communicate with MUD dwellers. When collection systems are rolled out to dwellings across LGAs (as opposed to multi-unit dwellings alone), the opportunity to have stalls in public spaces and local events evidently increases. This is also true for getting 'bang for buck' in relation to advertising (on the back of buses for example) or for publicising the service through local media (such as radio or community newspapers). It is unlikely that advertising would be a cost-effective tool for engaging with MUDs alone.

### ***Service extended to garden waste and food co-collection***

***Rationale:*** An extended service may have benefits for collection efficiencies. Rather than two separate collections through a suburb – one for food for MUDs and one for garden waste from homes, the material could be collected in the same run. Some people have suggested an odour benefit to a combined service, in warmer weather. This is reliant on a processing facility with the capacity to take the materials, and produce high quality beneficial products (such as energy and a nutrient rich product suitable for horticulture).

### ***A broader sustainability focus in communication with MUDs***

***Rationale:*** Opportunities for combining communication efforts across Council with multi-unit dwellings have not been explored within this project. Broader sustainability issues, such as water and energy may be areas of communication with MUDs from time to time. Although different staff to those who manage the food recycling service will administer these, opportunities for building on existing relationships, and the contacts database should be explored. 'Cross promoting' the food service when in contact with MUDs about other waste or sustainability issues would be useful.



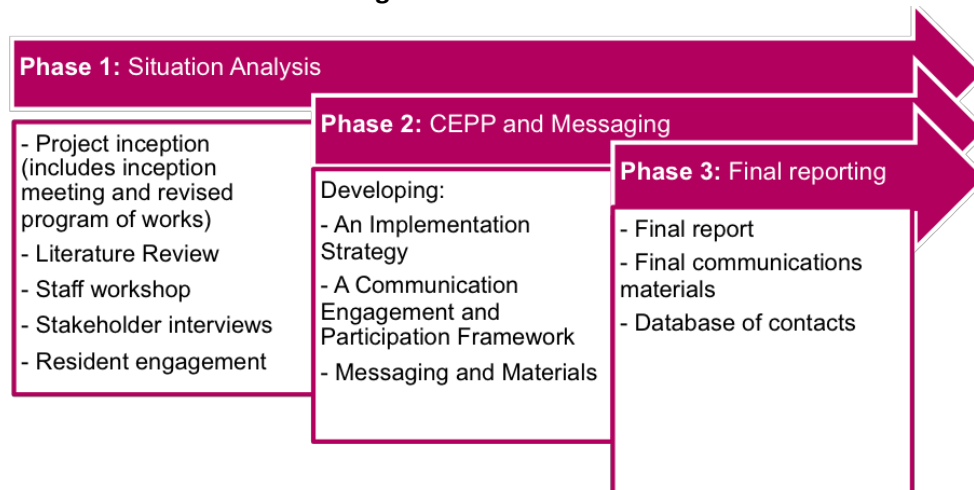
# 3

## Approach to CEPP Development

### 3 APPROACH TO CEPP DEVELOPMENT

The development of a Community Engagement and Participation Plan for Leichhardt Council involved three stages. The key tasks that made up this research stages, and the sequence in which they were undertaken are represented in Figure 1.

**Figure 1: Overview of the research stages**



#### Phase 1: Situation Analysis

The Situation Analysis provided a detailed understanding of the various components of the system, identified stakeholders, and identified possible barriers and opportunities. The findings of the Situation Analysis have informed the development of the messaging and the implementation strategy.

Specific objectives of the Situation Analysis were to:

- Identify all stakeholders involved in the system and understand their role within it;
- Identify key issues that may be preventing uptake of the food recycling service;
- Understand potential motivators and drivers to improve uptake of the service;
- Determine success factors and key performance indicators;
- Understand how such systems have been successfully managed in other jurisdictions, and how similar programs have overcome barriers;
- Understand how Council's processes could be improved to improve access and uptake of the system.

#### Phase 2: CEPP and messaging

Drawing on the Situation Analysis and building on the strengths of the current system including its communication and engagement efforts, the CEPP outlines broad strategies and specific actions.

#### Phase 3: Final Reporting

This stage involves development of the final report (this document), as well as associated materials for Council. It also includes discussions on draft documents and a presentation of the final report, which Council staff and elected representatives were invited to attend.

A detailed diagram outlining components of the research is included as Appendix 1.





# 4

## Leichhardt Food Waste Service

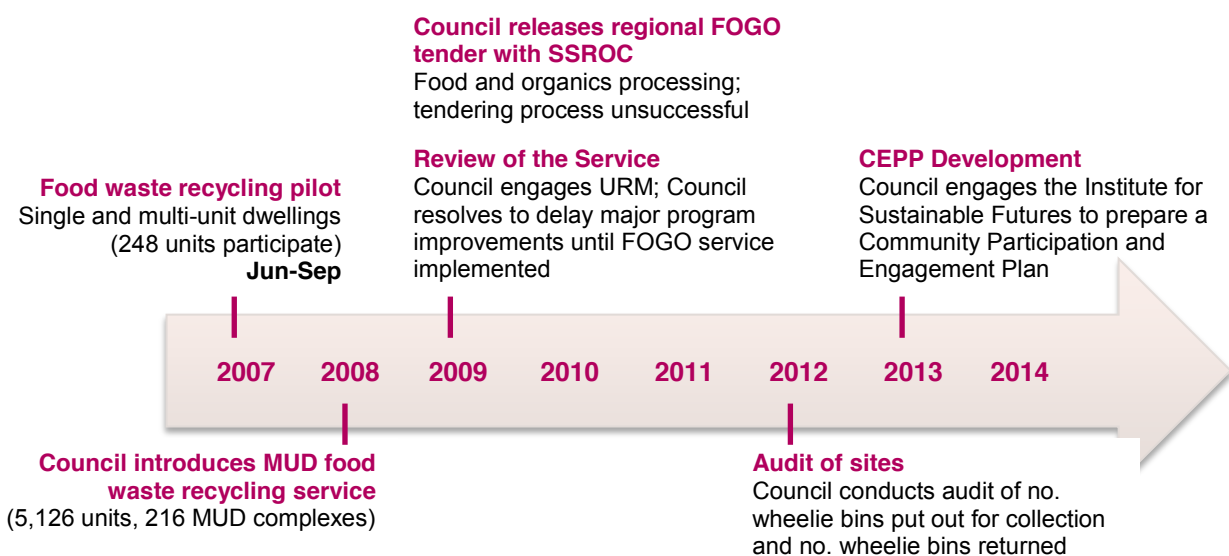
## 4 LEICHHARDT FOOD WASTE SERVICE

Leichhardt Council has been working towards implementing an integrated food and garden organics recycling service since 2004. This section details the history of actions taken by Council, as well as detailing the current approach.

### 4.1 HISTORY OF FOOD RECYCLING PROGRAM

Figure 2 provides an overview of Council activities that concern the implementation and evaluation of the current food recycling service.

**Figure 2: Timeline of events--Council's food recycling service in MUDs**



#### Food recycling pilot (2007)

Responding to its waste management mandate to facilitate and encourage resource recovery and reduce the quantity of waste requiring disposal in landfill, Council resolved to pilot a food recycling service in 2007 (Table 4). The pilot ran over a three-month period and comprised of different collection methods across both single and multi-unit dwellings<sup>4</sup>. Residents were invited to participate in the trial via a postal survey, and were offered an incentive.

The pilot included placing food waste together with garden material in a garden bin (where residents had an existing garden bin) or in a small 46L food only bin if the property did not have an existing garden bin. The food only waste was taken to Earthpower Technologies Pty Ltd. The small amount of combined food and garden materials was separated at Council’s Transfer Station with the food going to Earthpower and the garden material going to WSN Environmental Solutions (previous NSW government owned facility) together with garden material from Council’s garden service for composting.

<sup>4</sup> In terms of housing stock, MUDs comprise around 27% of all housing types in the LGA.



**Table 4: Council's 2007 food recycling pilot (MUD component)**

<b>Timeframe</b>	June to September 2007
<b>Number of MUD participants</b>	248
<b>Waste collection</b>	Kitchen bench-top bins for each unit and communal wheelie bins for each MUD complex
<b>Waste recovery</b>	EarthPower and WSN Environmental Services (2007)
<b>Evaluation</b>	Pre and post survey (postal); two focus groups (mix of MUD and single dwelling occupants, recruited via the surveys); three bin audits.
<b>Results (quantitative)</b>	There was a total of 3,571 kgs diverted (298 kg/week); the equivalent of 1.2 kgs /unit / week (of food diverted) with 248 units participating over 12 weeks. The weight of Mixed Solid Waste (MSW) collected each week during the trial was 35% lower than the average weight of MSW collected each week prior to the start of the trial and 55% lower than the average weight of MSW collected each week after the trial.
<b>Results (qualitative)</b>	<p><i>Pre-survey:</i> Half of the respondents indicated they did not know food cannot be diverted from landfill or used for compost or electricity; majority indicated they thought important for Council to investigate how best to recover all of the food waste in their bins.</p> <p><i>Post-survey:</i> Majority of respondents used the bench-top bins; clear majority rated the system as very easy and convenient to use; there was a variety of food scraps put into the bin, scope for more scraps. A majority of participants in the trial who participated in the evaluation survey could not identify any major disadvantage or inconvenience of using the system. For those who did identify issues, the most common were odour of common bin or bench top bin, while a small number of respondents had issues with not enough food waste (1 person), flies (4 people), leakage (1 person), concerns about possibility of pests or odour (2 people) etc.. Half indicated they would be willing to pay for the system.</p> <p><i>Focus groups:</i> The focus groups are reported to have confirmed or reiterated the issues that arose in the surveys.</p>

### Initial roll-out of service (2008)

Council contacted body corporates and residents via a letter from the Mayor (Appendix 2) to inform them of the impending roll-out of the service and soon after supplied each household with:

- A bench-top bin;
- Biodegradable bags; and
- Education material.

One 240-litre wheelie bin was supplied for every 10 households in each MUD complex. Building Managers were also supplied with a sticker and signage for the communal food waste bin bay. Shortly after the first rounds of food waste collection, Council distributed a follow-up letter to residents congratulating them of their collective food recycling efforts and noting the quantity of food recycled to date. This letter also served to remind people on how to recycle food waste and what could and couldn't be disposed of in the kitchen bench top bins. A poster was also developed for bin bay areas, but may not have been distributed to all participating buildings.

This operation of this service is discussed in more detail in Section 4.2.



## Initial service review (2009)

In 2009, Council engaged waste management consultancy URM to conduct a review of the service. As part of the review URM interviewed six residents/body corporate representatives from 'good' and 'bad' performing MUDs, as identified by Council. A number of recommendations were made concerning communication protocols with residents with access to the service and the program engagement materials. These recommendations can be found in full in Appendix 3.

At this time Council entered into a regional tender process concerning the processing of combined food and garden organics waste (vs. food only) with a combined food and garden service to be considered once the tender process was completed. Therefore Council did not fully progress with the recommendations of the 2009 review as the food service and communication materials would require large scale changes if a combined organics service was introduced in the future.

## Continuous improvement

There was an action plan developed to follow up on the outcomes of the 2009 program. Despite the decision to delay major improvement, some improvements were carried out in response to both the 2009 review and user-feedback:

- Visits to several bin rooms at large unit complexes together with the supplier of the kitchen bench top bins and biodegradable bags to check for any issues, e.g. the reported smell.
- Trial of alternative Organics bin - Some efforts were made to trial a new 240L bin but it was returned without further information about the experience of the users.
- Information re how to use the food service was placed on Council's website including downloads:
  - Brochure
  - Poster
- Whenever Council received feedback from residents about the biodegradable bags this was always sent on to the bag supplier. The supplier would then follow up directly with the resident (as the bag quality was guaranteed). Due to resident feedback about the first bag used Council changed suppliers in 2010. Leichhardt Council's Food Tales Newsletter 2010 documents the changes made to the compostable bags following resident concerns.

## Combined food and garden waste tender process (2009-2013)

Since 2009, Council has led a regional tender process concerning the disposal and processing of combined food and garden organics waste. To date, the tender process has been unsuccessful in awarding a contract, in part due to the tender requiring the establishment of an appropriate processing facility. This lack of critical processing infrastructure has been highlighted in an SSROC letter to the NSW Ministers for Environment, Planning and Infrastructure and Local Government in 2012.

In 2013, as part of its response to the NSW Government 'Waste Less Recycle More' Strategy (see below), Council's Infrastructure and Service Delivery Division recommended '[d]eferring consultation on a combined food and organics service until an appropriate processing facility is established'.



## Updated directions (2013)

In July 2013, Council's Infrastructure and Service Delivery Division sought to respond to the NSW Government 'Waste Less Recycle More' Strategy<sup>5</sup>. This response document provides more background on the history of this tendering process and future directions (Table 5). This update to Council also provides a list of recommendations concerning the future of the food recycling service. The third recommendation led to Council engaging ISF in 2013 to undertake a review of the current food recycling service in MUDs, described in more detail below, and to develop a Community Engagement and Participation Plan (CEPP) for improving participation in the service.

**Table 5: Council's 2013 update on combined food and garden organics (FOGO) recycling<sup>6</sup>**

<i>Recommendations</i>	
1	Deferring consultation on a combined food and organics service until an appropriate processing facility is established.
2	Conducting a feasibility study to investigate longer-term processing options for organics that would include decentralised small-scale/localised technologies as well as innovations in collection and processing.
3	Investigate options to increase participation in the current food recycling service in MUDs.
4	Investigate opportunities for any additional material to be included in the existing garden organics bin.
5	Investigate opportunity to return to EarthPower for the processing of food collected in Council's current food recycling service in MUDs.

## 4.2 FOOD RECYCLING CURRENT SERVICE

### 4.2.1 Overview of the service

MUDs that are eligible for the service are those that have more than ten units in them and which share a common bin area and bins. Council provides large dedicated food collection bins (240-litre wheelie bins) for the MUD complex, for all biodegradable food waste<sup>7</sup>. Small bench-top bins and biodegradable bags to line these bins are also provided for each household within the MUD.

More detail is provided below about how the service was implemented ('rolled-out'), participation levels, volume of material collected, efforts to engage residents, and the data collection systems that support Council's administration of the service.

<sup>5</sup> Leichhardt Municipal Council, 2013, Director's Summary – Organisational Implications: Update – Combined Food and Garden Organics (FOGO) Recycling, July 2013

<sup>6</sup> Leichhardt Municipal Council, 2013, Director's Summary – Organisational Implications: Update – Combined Food and Garden Organics (FOGO) Recycling, July 2013

<sup>7</sup> That is, all foods, and some non food items – such as kitchen towel soiled with food, but not the non-biodegradable plastic or other packaging materials used to store or transport food



**Figure 3: (From left) 240 litre bin bay bin, kitchen bench top bin, educational brochure**



**Table 6: Overview of Council’s current food recycling service**

<b>Timeframe</b>	2008—present (February 2014)
<b>Number of units</b>	The number of individual units (i.e. households with a MUD building) who have access to the service is 5,126 (as of 2008 roll-out). Despite being provided with access to the service, not all units participate in the service, as indicated by the estimated food waste being generated from the households and the actual tonnages collected via the food waste recycling service. The variation in the volume of food waste collected annually suggests the number of households participating in the scheme has likely fluctuated over time. Council maintains records for the number of MUD complexes with access to the service and the number of households whom have been issued with kitchen bench top bins and compostable bags (whether through the program roll-out in 2008 or as requested by new/existing residents)—although there are some challenges with consistency and access of this data see <i>records management</i> below.
<b>Number of MUDs</b>	The number of unit blocks eligible is 216 (as of 2008 roll-out). Since inception, around 12 units (6% of eligible unit blocks) have had their wheelie bin(s) returned, meaning they no longer have access to the service (other MUD complexes have requested one bin to be returned but still have access to a remaining bin(s)).
<b>Engagement materials (inception, 2008)</b>	<p><i>Residents</i></p> <ul style="list-style-type: none"> <li>• Initial letter from Mayor to body corporates and residents (Appendix 2)</li> <li>• 150 biodegradable bags<sup>8</sup></li> <li>• Educational brochure and information sheet (Appendix 2)</li> <li>• Follow up letter after the first collection</li> </ul> <p><i>MUD complex</i></p> <ul style="list-style-type: none"> <li>• One 240-litre wheelie bin for every 10 units, in MUDs with &gt; 10 units</li> </ul> <p><i>Building Managers</i></p> <ul style="list-style-type: none"> <li>• Small strip sticker—intended for the top of the bench-top bin if desired</li> <li>• Signage for the communal area where the 240L bin lives</li> </ul>

<sup>8</sup> Council advises that the total of bags is 150 (but they have been supplied in different ways, i.e. sometimes in 1 x roll of 150 sometimes in 3 x rolls of 50 etc.)



<b>Engagement materials (on-going, 2008-present)</b>	<p><i>For existing residents</i></p> <ul style="list-style-type: none"> <li>• Food Tales annual newsletter (produced and distributed annually)<sup>9</sup></li> <li>• Compostable bags (distributed annually – 150 bags per resident/ year )</li> </ul> <p><i>For new residents</i></p> <ul style="list-style-type: none"> <li>• Online information on Council’s website</li> <li>• Food Tales annual newsletter (produced and distributed annually)</li> </ul>
<b>Records management</b>	<p>Council records information about the service in the following ways:</p> <ul style="list-style-type: none"> <li>• MUD Database—includes information on: <ul style="list-style-type: none"> <li>○ which MUD complexes were introduced to the service in 2008 (i.e. addresses)</li> <li>○ the number of units per MUD complex</li> <li>○ the number of food waste wheelie recycling bins per MUD complex</li> <li>○ which complexes have since requested the food waste recycling bin to be returned<sup>10</sup> (but not when)</li> <li>○ the results from a 2012 audit which sought to identify which MUD complexes has put their bin out for collection on bin collection day.</li> </ul> </li> <li>• GarbageMaster—record management system developed by an external consultant for Council’s waste and recycling service data including the food waste data. It is used to record information about interactions with customers, namely the distribution of compostable bags (i.e. whether a resident had already been sent their quota for the year in question).</li> </ul>
<b>Waste collection and processing</b>	<p>Bench-top bins for each unit and communal wheelie bins (240L) for every 10 units in each MUD complex. Waste processed by EarthPower (2008 to present).</p>

## 4.2.2 Participation and volume collected

According to Council’s records, a total of 5,126 households (units within MUDs) in 216 MUD complexes were introduced to Council’s food recycling service. This represents 24% of all households (single and multi-unit dwellings) in the LGA, and almost 90% of all MUDs.<sup>11</sup> Since the program’s inception, 485 tonnes of food waste have been processed (Figure 4). Figure 4 shows that there has been a decline in the volume of waste processed since the program’s inception in 2008. During this time the number of communal food waste wheelie bins in MUDs has also declined as 12 unit blocks (from the 216 who had bins delivered) have returned all their wheelie bins for the service<sup>12</sup>. These trends are considered in the discussion below. Table 6 provides an overview of the service, elements of which are further discussed throughout this section.

<sup>9</sup> Food tales is delivered to all eligible unit blocks at the time of the compostable bag delivery

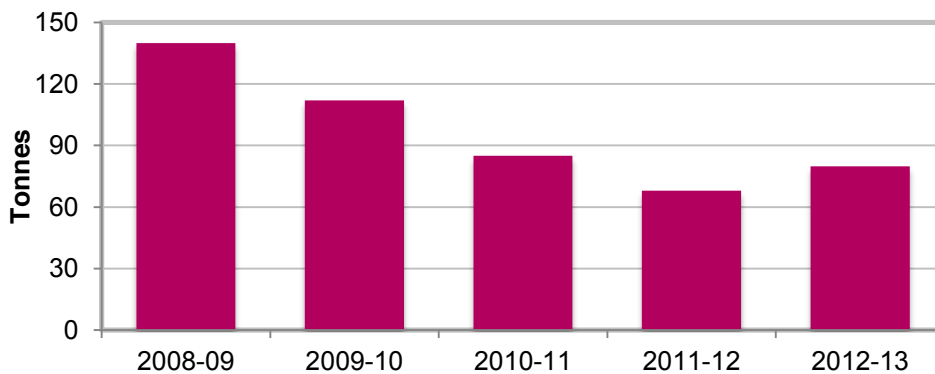
<sup>10</sup> ISF understands that this database of returned bins may not be entirely accurate, as some bins may have been taken at the MUD’s Building Manager’s request, but not recorded on the database

<sup>11</sup> ABS, 2011, Census, Australian Bureau of Statistics, Canberra  
[http://www.censusdata.abs.gov.au/census\\_services/getproduct/census/2011/quickstat/LGA14800?opendocument&navpos=220](http://www.censusdata.abs.gov.au/census_services/getproduct/census/2011/quickstat/LGA14800?opendocument&navpos=220)

<sup>12</sup> The initial number of wheelie bins delivered for use in this service was 463. The total number still in use is not readily available.



**Figure 4: Waste tonnages - Volumes of food waste collected, 2008-present**



### 4.3 RECORDS MANAGEMENT AND ON-GOING ENGAGEMENT PATHWAYS

Council maintains records of the program using a suite of methods—its MUD database, the waste collector audits and GarbageMaster. These are detailed above in Table 6. Some critical engagement pathways are outlined below in text and diagrams.

Council has processes in place for distribution of materials such as newsletters, bins and bags; and also for ordering bins and bags. One of the issues identified by the engagement with staff/residents as part of the research is some inconsistency in practice between Council departments. Therefore an internal workshop is recommended to develop solutions to these issues and ensure clear messages and systems in place across Council - see Section 2 for more details. A snapshot of the current processes and practices are outlined below.

#### A. Annual distribution of compostable bags

In the middle of each year, Council sends out biodegradable bags for the bench-top bins. It is understood these bags are delivered to the Building Manager or equivalent via Council’s waste collection staff, who then makes them available for residents participating in the food recycling service. According to Council’s records, the number of bags distributed to each household has fluctuated since the program began in 2008.

Council has used two different types of compostable bags since the ongoing service due to reported issues of tearing with the first type of bags used.

**Figure 5: Biodegradable bags<sup>13</sup>**



<sup>13</sup> This image is an example of what compostable bags used in kitchen bench top bins look like. This is not necessarily a brand used or endorsed by Council, or referred to in this report. *Source:* [www.goinggreensolutions.com.au](http://www.goinggreensolutions.com.au)





Whenever Council received feedback from residents re the biodegradable bags this was always sent on to the supplier. The supplier would always follow up (as the bag quality was guaranteed).

Due to resident feedback regarding issues with the first bag supply's Council changed suppliers in 2010. The 2010 Food Tales Newsletter 2010 includes the changes made to the compostable bags following resident concerns (Appendix 2).

Council's Resource Recovery/ Waste Management Officer was interviewed to better understand the detail of how the system is implemented, including possible steps in the process that may have an impact on resident engagement. Some excerpts from that discussion are shown in Box 1.

### **Box 1 – Understanding the annual distribution of compostable bags**

#### **Could a situation arise where a new resident is issued with bags but does not have a bench-top bin?**

*Yes it could arise as whilst we try and highlight that the bench top bin / bags are the property of the unit and should stay with tenants moving in and out this is not something easy to manage in practice. Therefore when the bags are delivered each year they may go to units who do not have a bench top bin and haven't previously participated in the service – hence the information sheet / food tales newsletter that is supposed to be delivered with the bags so residents know how to get a bench top bin.*

**Are bags delivered to each unit's front door or left with the Building Manager to distribute?** As we understand it, Council sends out the compostable bags with specific waste collection staff, and they deliver the bags somewhere in the building or directly to the Building Manager. It is then it is up to the Building Manager to inform the residents the bags have arrived and they can each collect them from a centralised point in the building. Is this correct?

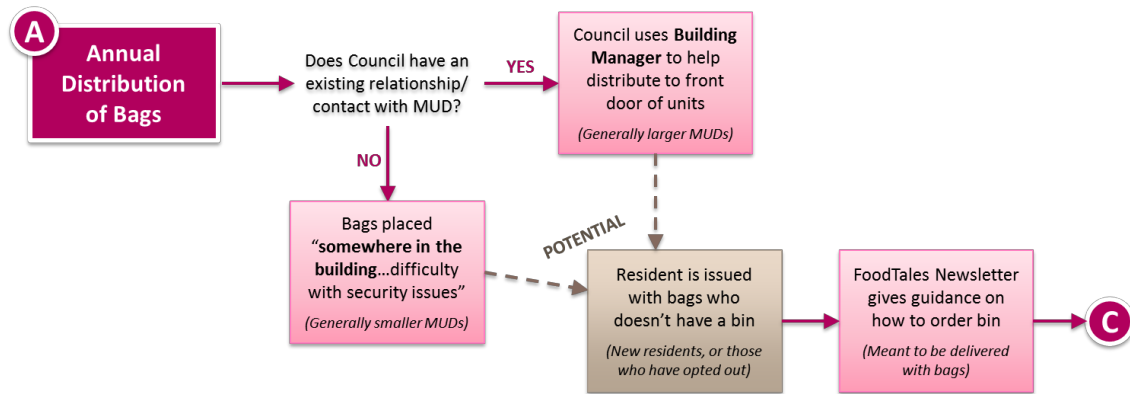
*The preference is to have at least 5-6 staff who do the yearly bag delivery. Due to the time involved in doing the bag delivery, where we have relationships with or contacts for Building Managers – we encourage the Building Managers to assist with the process,, i.e. they either deliver the bags to units / make these available somewhere centrally; and the way this is done will vary across buildings. We mainly have contacts with the larger MUD developments.*

*The initial bag roll out was delivered where possible to the unit door – noting that the kitchen bench top bin would have been delivered at the same time so it was important that all units received them. From then on each year the delivery either was placed somewhere within the building (often units are security blocks which makes delivery difficult) or left with Building Manager where we had the contacts.*

A summary of this is included in Figure 6. Sections 7 – 9 build on this information by outlining the qualitative information gathered from ISF's investigation with Council staff, stakeholders and residents and report on the various practices occurring with regards to bag distribution, and opportunities for improving the service.



**Figure 6: Process for annual distribution of biodegradable bags**



**B. Additional or replacement bag requests**

As described above, Council issues biodegradable bags each year for residents in participating MUDs to use in their bench-top bin. These are designed to hold the food waste securely and make it simple to the food materials to the wheelie bins within the building, without contaminating the recycling service like a plastic bag would.

Council will issue replacement bags for no cost if residents say that the original bags were never received. Otherwise, additional bags are meant to be issued at a small fee. The practice may be varied depending on the pathway that the customer uses to contact Council – as outlined in Figure 8 below.

Council’s information sheet relating to this procedure notes that this process should include Council checking that residents are purchasing the bags for the purposes of food collection only.

Excerpts from discussions with Council’s Resource Recovery / Waste Management Officer are shown in Box 2.

**Box 2 – Understanding how additional or replacement bags are issued**

**We understand that if a resident says they never received a bag, bags are issued for free, if asking for additional bags, \$4 for a roll of 25. Is there any confusion about this process on either Council’s or residents’ part?**

*The issue of free vs. pay for bags etc is ongoing. The official policy is that if a resident says they never received a bag in the yearly drop off, Council will reissue for free, however if they asking for additional bags, it is \$4 for a roll of 25. At the time of the bag delivery residents will often phone to say they have not received bags and it appears there may be different practices within the different departments of Council, i.e. Citizen Services / Waste Coordinator / depot staff etc. There is a longer discussion required on the issuing; delivery; procedures etc. in relation to the bags.*

**How do residents actually get the bags?**

*“In theory”: Resident contacts Citizen Services. Council has a computer system called GarbageMaster. A list of bins / bags is printed every few days by Infrastructure & Service Delivery staff and given to Council’s Waste Coordinator. Waste Coordinator organises for the delivery of the bins and bags to resident address.*

*It may be the case in a few large buildings, i.e. Balmain Shores that we have provided them with a small stock of bins and bags on an ongoing basis and the resident contacts the Building Manager for replacements.*



### C. Bench-top bin request from new/existing residents

Bench-top bins are provided on request for residents who wish to participate in the service, at no charge. Once ordered, bins are delivered to their building by waste collection staff.<sup>14</sup>

**Figure 7: Bench-top bin<sup>15</sup>**



Excerpts from discussions with Council's Resource Recovery / Waste Management Officer are shown in Box 3.

#### **Box 3 – Understanding how bench-top bins are issued**

##### **Record keeping about new bench-top bins**

*There will be some record – but it won't necessarily be accurate. Requests can be made via:*

##### *1. GarbageMaster*

*All addresses who received kitchen bench top bins and bags in the initial roll out were recorded in GarbageMaster. Any requests for additional bins / bags for that address that have been made to Customer Service since then will show in GarbageMaster.*

##### *2. Email directly to our Depot staff*

*In some circumstances requests would go directly to our Depot staff requesting a bin / bag delivery. GarbageMaster may not be updated in these circumstances.*

*Residents may on occasion phone on behalf of their unit block requesting new bins / bags. If this request comes to me as Resource Recovery/ Waste Management Officer I will check if they are a body corporate rep. and will enter under their unit number in GarbageMaster that there was a request for, e.g. 3 kitchen bench top bins.*

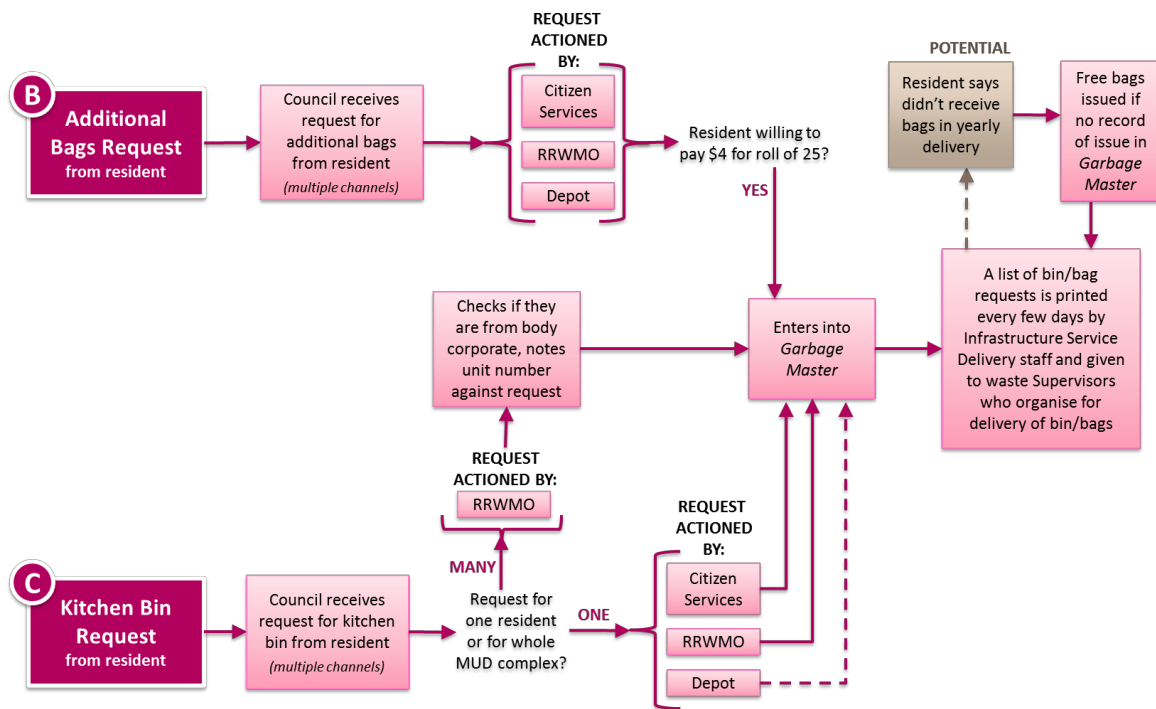
*We can get a record of the number of bins distributed over the years but it won't be entirely accurate because of the reasons noted above.*

<sup>14</sup> The current system is that bench top bins can be delivered to participating buildings once ordered by a resident

<sup>15</sup> This image is an example of what an aerated kitchen bench top bin looks like. This is not necessarily a brand used or endorsed by Council, or referred to in this report. *Source: www.ecoathome.com.au*



**Figure 8: Process for biodegradable bags and bench-top bin requests**



Note: This diagram outlines the ‘official’ process but it may change in practice depending on who the request goes to and their understanding of the process (including for example new staff).

### D. Return of wheelie bins

Since the program’s inception in 2008, 12 MUD complexes have requested for their communal wheelie bins to be returned to Council and swapped back to a garbage bin. Council notes that contamination or low use would generally be the reasons for this. Sections 8 and 9 examine this issue in more detail, drawing on insights generated from stakeholder and resident interviews.

Excerpts from discussions with Council’s Resource Recovery / Waste Management Officer are shown in Box 4.

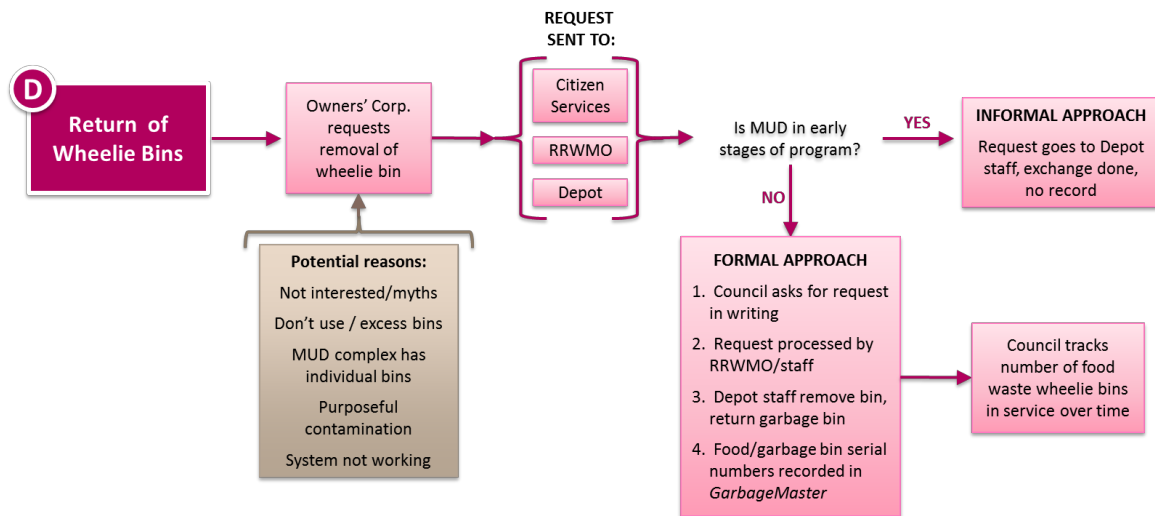
#### Box 4 – Understanding how wheelie bins are returned/ buildings opt out of service

##### How do buildings get a wheelie bin removed?

*Since the initial roll out of the food bin service some unit blocks requested the bins be taken away (i.e. swapped back for a garbage bin). In theory when this happened there was a discussion with the block and a request from Council for written correspondence from the Body Corporate – when the requests came to the RRWMO<sup>16</sup>. Where the above happened, collection staff would record the serial number of the food bin being taken away and of the garbage bin that would be returned and these would be given to ISD admin for entry into the GarbageMaster System. In practice some of the food recycling bins have been removed from blocks without the above actions occurring.*



**Figure 9: Process for return of food waste wheelie bins**



### E. Annual distribution of “Food Tales” newsletter

In addition to the bags, Council also distributes its annual ‘Food Tales’ newsletter, reminding existing residents of the service and introducing the service to new residents (Appendix 2). Residents can also access information about the service on Council’s website, which they are directed to via various Council communication channels (e.g. newsletters, events) when the opportunity arises. It appears that there is an opportunity for Council to be more systematic here.

### F. Wheelie bin requests

In relation to **requests for a new food waste collection** wheelie bin, usually a request for a food bin comes to the RRWMO. If the MUD has shared bins, a discussion should follow between the Body Corporate and residents to advise all residents about the proposal to have a food waste recycling service. Once it has been confirmed that this discussion has taken place, arrangements would be made with the RRWMO to deliver the necessary bins/bags and educational information to the residents of the building.

### G. Contamination notice

Residents may also receive notices from Council reminding them to avoid contaminating the food waste bin with plastics and other non-food waste (see Appendix 2). In the event that a communal wheelie bin is found to have significant contamination issues, Council may place a contamination notice (see Appendix 2) on the bin and refuse collection. In the interviews with Council waste collection staff, the following information was obtained about this process:

- Waste collection staff keep a bundle of rejection notices on-hand
- A visual assessment of contamination within each bin is conducted at the time of collection
- Some cardboard and plastic is permitted, particularly if the bin is located in an area of high pedestrian activity,, i.e. the contamination may not be attributable to the residents
- If the bin is deemed too contaminated, the waste collectors place a sticker on the bin and do not collect. This sticker advises residents to remove contaminated items from the bin and phone Council’s Citizen Services Centre to arrange for collection.



In addition to the above, there have been some additional resources that have been invested in the service throughout 2008-current period including: changes to biodegradable bench top bin bag; letters to individual blocks encouraging participation or highlighting issues; and mail outs in-between the 'standard' annual newsletter communications.

### **Box 5 – Exploring how the system is administered in practice**

The brief for this project asked for systems to be reviewed as well as the communication practices and materials. For this reason the report outlines the collection service and current engagement activities as the consultants understand them, as informed by the research undertaken for the project.

However it acknowledges that there are areas where the information collected in the research about the system (what happens when, who does what, what is available to whom) doesn't match with the lived experience of some of the research participants. For example, the service is designed such that both bins and bags can be delivered directly to the resident (either their doorstep or their building) - they don't need to come to Council's Customer Service during working hours to collect these items. However at least one resident interviewed cited access to these materials during working hours as a barrier to participation. We can't know exactly what each resident's experience has been, but we take at face value the experiences cited by research participants, and use these experiences to identify areas of the program that may not be operating as designed, all of the time.

Any differences in approaches between individuals or departments to administering the service; or any varied understandings of what the process currently is would be the focus of the internal workshop recommended in Section 2.

Key things that would need to be reviewed in the internal workshop: include the process of ordering food wheelie bins; kitchen bench top bins; compostable bags and the delivery of each of these.



# 5

## Literature Review – Experiences of other jurisdictions

## 5 EXPERIENCES OF OTHER JURISDICTIONS

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This chapter presents findings and recommendations synthesised from non-peer reviewed *evaluation reports*. These studies evaluated existing municipal food recycling services offered to communities in both Australia and the UK.

A number of the key reports are based on methodologies where the consultants surveyed current, lapsed or non-users about their past experiences and perspectives. Although these reports are not peer-reviewed, they offer many important insights for the Leichhardt service, as the sample size for their resident engagement surveys far exceeded our scope for primary data collection. For example, two of the key evaluation studies (Brook Lyndhurst, 2009 and Truscott Research, 2009) – including one of six UK municipalities - involved 4,431 and 4,260 resident interviews respectively. Accordingly, this evidence base has been used strategically to extend the local data collected during our resident engagement phase.

In addition to the evaluation studies presented above, which primarily elicited resident perspectives, other noteworthy reports such as Pamphilon & Chevalier (2011) also included evidence obtained from interviews with a range of relevant stakeholders, while a relevant article by Dilkara (2009) incorporates the reflections and recommendations of a successful community engagement strategist.

Descriptions of some of the studies follows, with a synthesis of the key findings from these and other reviewed programs, presented in Section 5.2.

### 5.1 CASE STUDIES FROM OTHER JURISDICTIONS

This section presents the experiences of three studies in other jurisdictions.

#### 5.1.1 The South Australian Experience – the Zero Waste pilot review

To assist councils, Zero Waste SA produced *Guidelines for communications planning—pilot co-collection of food waste and kerbside organics* in 2008, along with a range of communications materials.

To understand householders' acceptance of the systems used in the pilot, Zero Waste SA commissioned Truscott Research to study a sample of residents in the pilot areas. The survey involved 4260 interviews with participating householders between four and six months after the start of the pilot, from May to July 2009. A follow-up survey was conducted in July 2010 about 18 months after the systems were introduced. This survey targeted individuals who had been interviewed in 2009 and who, at the time of interview, were still using the food recycling system they had been issued.

The people targeted for interview in the second round were not a simple cross section of the population of the survey areas. They were selected on the basis of being continuing users of the food recycling system at the time of interview in 2009. The sample consisted of 758 residents, including both single and multi-unit dwellings.





## Participation findings

Their research provided insight into the various reasons why people became and stayed engaged in the service. These are listed below in Table 7.

**Table 7: Motivating factors influencing the decision to recycle food waste**

Initial triggers (2009)		Ongoing motivations (2010)	
Because council provided the container	48%	Ease of use	38%
Good environmental initiative	42%	Just wanted to help environment	52%
Clean, efficient way to dispose of food waste	18%	Just formed a habit	21%

They also explored people's awareness of the types of foods that were eligible in the service. While 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%

## Communications findings

One of the key findings from the research was that providing simple ongoing communication to householders to increase participation, maximise the capture of waste and minimise contamination because feedback to residents about the pilot's progress will help to maintain engagement and participation offering a range of sizes for the bio basket to enhance convenience and householder commitment, an issue that emerged from informal discussions with users.

### 5.1.2 The UK Experience – the WRAP trials

In the UK, research under the UK Department for Environment, Food and Rural Affairs' *Waste and Resources Evidence Programme* (WREP) investigated consumer behaviour with respect to food waste collection schemes, in six of the 79 local authorities operating such a scheme. Each of these six jurisdictions has a minimum of 10,000 to 15,000 participating households.

Information about the food collection service in each authority was collated through desk research, visits to the authorities and follow-up contact with them. This was followed by two qualitative focus groups with residents in each area and quantitative interviews with 4,431 residents across the six authorities. The sample for the quantitative survey was drawn so as to be representative of the local population in each area, however residences were excluded where food waste collection was not provided by the local authority.



## Participation findings

Participation levels reported in studies from the UK generally vary from between 30% to 50%. A few authorities have reported a fall-off in participation after a 'honeymoon' period, but more evidence is required to substantiate whether this happens more widely and why (e.g. true drop-out or increase in home composting).

UK and overseas experience suggests that participation may be higher for mixed food and garden waste schemes than food-only collections, but the amount of food waste recovered may be greater in collections where food is collected separately. This is because mixed organics collections may be used by residents mainly for garden waste.

Some authorities suggested that residents may perceive the scheme more favourably if garden waste is collected as well, since this is a service residents generally want and it compensates them for the extra effort of separating food waste. Others argued that, since people are used to using the collection anyway, they might find it easy to add in food as well if the option is available. One study also speculated that mixed FOGO collections protect participation in the summer because the mix may be less smelly than in food-only bins (though odour wasn't measured).

The main (unprompted) reasons why users have chosen to participate are:

- Feelings around the idea that waste is wrong – including beliefs that recycling is better for the environment, that people should 'do their bit', and/or landfill space is running out;
- That it is simply something they should do – because it is expected of them and/or they feel they should be matching the council's efforts on recycling.

Both the quantitative and qualitative research revealed a clear hierarchy of frequently recycled foods. In descending order, they are:

- Anything fruit or vegetable plus tea bags;
- Cooked/prepared items that are not obviously 'meaty';
- Meat, take-away scraps and runny foods.

In another study, most non-participants felt they don't have enough food waste (Mills & Andrews 2009). This maybe because they do not prepare much fresh food or that food is not wasted through using up leftovers. However the 'Food We Waste' research<sup>17</sup> found that all sectors of a community produce food waste so this opinion maybe based on perception not reality.

## Communications findings

All authorities mentioned in case studies (and most of the others interviewed) stressed the importance of intensive public engagement before and immediately after the scheme is introduced, especially where it is one element of a new service.

One jurisdiction benefited from a supportive councillor writing a weekly column in a local newspaper, while others had used advertorial in local newspapers or secured radio coverage. Hackney advertised on town centre banners, bus backs and cyclists' jackets.

The use of bin stickers is especially valued and supports a perception that the service is easy to use. Principal thoughts about stickers revolve around:

- Having a sticker for the indoor caddy, or a laminated recipe style card for the kitchen, since this is where separation happens.
- Providing replacement stickers from time to time because moisture in the kitchen or outside means they eventually become unstuck.

<sup>17</sup> [http://www.wrap.org.uk/local\\_authorities/research\\_guidance/food\\_waste/](http://www.wrap.org.uk/local_authorities/research_guidance/food_waste/)



### 5.1.3 The NSW Experience – City to Soil source separation

The *City to Soil* collection process began in 2004 with a pilot program in Queanbeyan, NSW, and was then trialled in 2 further locations in rural NSW (Condobolin and Goulburn/Marulan) from late 2007 to March 2011, with approximately 10,500 participation households. An evaluation study was then completed on these two locations. The evaluation included annual kerbside audits for three years and interviews with both stakeholders and the community.

#### Participation findings

Motivations for participation varied: some people cared about farmers getting a good product, some people did not want to be wasteful, and others wanted an easy way to discard unwanted organics. Importantly, at the final stage of the project, people had become proud of their own environmental action and that of their community. The Groundswell project demonstrates the holism of the adage ‘think globally, act locally, respond personally’ but suggests it should be presented in reverse order, focusing on ‘respond personally’.

#### Communications findings

Following the lessons from the trial period, the Goulburn Mulwaree team made direct one-on-one contact with the community, taking the bins out to people. School visits engaged children, teachers and parents, yielding ‘cute pictures’ in newspapers and flyers that are still being used.

Media strategies included getting farmers on board, showcasing stories about farmers to show people the outcome of the process on the farms. Prizes were given as incentives but the presentation of prizes was always linked to a farmer story. Staff noted that ‘prize winners did not talk about messages but about farmers!’

The motivators were found to be: help address climate change; reduce waste to landfill; reduce waste costs; improve agricultural soils; support local farmers; and win prizes (Dilkara 2010). The researchers state: *by consciously using combinations of all six motivators in media releases, article and letters, we are able to reach the whole community. For example, someone who has no interest in climate change may be motivated by the prospect of reduced waste costs or reduced waste to landfill* (Dilkara 2010).

### 5.1.4 The NSW Experience – Recycling in NSW Multi-unit Dwellings

The Better Practice Guide for Waste Management in Multi-unit Dwellings (NSW EPA 2013) looks at a range of waste management behaviours including recycling, but not solely food or organics recycling. It was been developed to assist council staff, architects, residential developers and building management incorporate better practice in the design and ongoing management of waste services in residential multi-unit dwellings. The original Better Practice Guide for Waste Management in Multi-unit Dwellings was produced in 2002, and was reviewed by stakeholder workshops prior to the new guide being developed. Social research (DECC 2008) using interviews, surveys and focus groups, was carried out to inform the guide.

Better practice encourages appropriate resident behaviour in relation to waste management and improves the amenity and ease of use of waste systems, environmental performance and the reputation of developments with well-managed facilities. Better practice waste management also establishes and maintains services and infrastructure that enables garbage, recycling, organics and bulky waste services to be delivered in the best way possible in a particular situation to improve resource recovery.



## Communications findings

### Variety of methods

City of Sydney's work with Housing NSW and the Northcott MUD Building is one of the case studies. In this case a high-rise MUD with little-to-no recycling had new infrastructure fitted and a suite of communications and engagement methods were used:

- Workshops for residents about recycling held before the facilities were made available for use.
- Self nominated champions who were invited to attend a tour of a recycling facility.
- Inclusion of recycling information in the resident's bimonthly newsletter 'The Tattler'.
- Attendance by the City of Sydney Council at local community events. Northcott hosts an annual community event, '3 days at Northcott', which was attended by the Council. The Council provided a free BBQ, reusable recycling bags and recycling brochures to help promote the new Northcott recycling service.
- A Chinese bilingual educator was also engaged to speak with the local Chinese community.

Some of these elements: such as workshops, recycling facility tours and involvement of stakeholders in decision making, could be relevant to the Leichhardt food waste recycling service.

**Recycling as an issue** - The social research conducted for DECC (2009) suggest that while recycling used to be seen as an important issue, it may no longer so the case (p52). Recycling has become 'somewhat of a routine activity for many' however the reasons for recycling may not be understood by many, and the issue of resource recovery possibly receives less attention in the media than other environmental issues: "recycling is not something people tend to think about in the same way" (as those issues).

**Need for information** - The same study concluded that while many people have adopted recycling as a routine behaviour there is still need to learn more about the details of what can and can't be recycled – that in a focus group or discussion setting people became more open to finding out more, and discussing their practices.

## 5.2 SYNTHESISING FINDINGS FROM OTHER JURISDICTIONS

This section presents the synthesised findings and recommendations from the full range of non-peer reviewed evaluation reports described above.

### 5.2.1 Barriers to resident participation

This section of the chapter presents the common barriers to widespread resident participation that emerged from the evaluation literature (Brook Lyndhurst, 2009; Coffs Harbour City Council, 2004; Freeman and Skumatz, 2011; Pamphilon & Chevalier, 2011; Truscott Research, 2006; Truscott Research, 2009; WRAP, 2009; Zero Waste SA, 2010). The findings below cover both psychological barriers (attitudes and perceptions) and *systemic challenges* (structural or service delivery issues).

The barriers described below are important to reflect upon as they can help to explain why some residents don't participate or why others choose to opt out over time. However, not all of the



barriers identified here may be equally as prevalent across the Leichhardt system. In other words it is important to determine which particular issues are more of a concern in Leichhardt. For this reason the resident engagement phase of the project has incorporated questions designed to highlight any specific local concerns. For strategic reasons, buildings where particular structural challenges are more prevalent (such as those with non-ventilated bin bays for example) should also be identified through future audits.

## Psychological barriers

**Perceived ‘yuck factor’** - Although food waste collection services may experience genuine issues associated with odour, vermin and insects, such as fruit fly or maggots, the literature suggests that non-users often assume food recycling services to be ‘yuckier’ than regular users experience them to be. In other words, non-users or lapsed users often harbour perceptions that the service is too ‘*yucky, dirty or smelly*’ to use. As a consequence, it is important to investigate whether these squeamish feelings have surfaced from tangible unpleasant experiences, or are rather based on subjective perceptions about ‘*yuckiness*’. It is necessary to ascertain whether the physical system needs to be looked at for ways to further improve hygiene and reduce odours (in the bin bays for example), or whether emotive perceptions and fears are inhibiting participation, in which case education and awareness raising campaigns may be the appropriate intervention.

The literature also suggests that younger residents may experience greater perceptions of the ‘*yuck factor*’ than older residents, particularly when it comes to dealing with food wastes in the home. This can specifically include handling wet plate scrapings or food that has ‘*gone off*’. Campaigns can be developed to target these practices with tips and strategies for minimising squeamishness in the home. For example, by providing directions for disposing of meat and dairy scraps in ways that reduce the ‘*yuck factor*’, such as freezing the items or wrapping them in paper towels and regularly emptying the food waste caddy.

**‘Not wasting enough food’** - Another barrier emerging from the evaluation surveys was a belief among many non-users that they did not produce enough food waste to participate. Unlike the ‘*yuck factor*’ which was more prevalent among younger people, ‘*not wasting enough food*’ was a more common response for older and retired residents, as well as people living alone. It has been said that households producing small amounts of organic waste may feel that making the effort to take the biodegradable bags out to the wheelie bin regularly (before the food starts to break down in the kitchen) is not justified by the amount of food waste that they produce. Other people rationalised non-participation by explaining that they regularly eat out or purchase take-away food.

In order to address these perceptions, households should be targeted with educational campaigns to inform the residents that even small volumes of organics make valuable contributions to the system. Residents may also be unaware of the wide range of items that can go into the collection service, in particular meat scraps, dairy, used pizza boxes, plate scrapings, tissues, paper towel, citrus peel, tea bags and coffee grounds. One explanation is that many residents already have established mental models around what is appropriate for home composting systems. The community may need regular reminding that the collection service can handle a wider variety of organic matter than simply fruit and vegetable scraps.

According to the literature, implementing smaller wheelie bins (80L, 120L or 140L) may also be an affective intervention to help shift perceptions about how much organic waste is appropriate for the building to contribute. This strategy may be effective for buildings that don’t produce enough waste to fill the larger 240L bins, where people can also develop resentment about cleaning large bins that get fouled by smaller volumes of waste. Larger bins that are not full can also reinforce the social norm that not enough people use the service. Unused space in organics bins also



increases the prospect for opportunistic contamination when the surrounding garbage bins fill up, so smaller bins may eliminate this issue.

**Apathy and disinterest** - Another important attitudinal barrier to reflect upon is the proportion of non-users who admitted through evaluation surveys that they simply weren't interested in participating. This group of respondents commonly understood what they were being asked to do but believed that it was not in their interest to be involved. These non-users gave reasons such as they couldn't be bothered, that the service was inconvenient, an added hassle, or that they didn't want to make the effort because they were too busy.

A proportion of this disinterested group is known to include residents who are going through particular demographic '*life stages*', which can mean they are more difficult to engage with. For example, young tenants can be more difficult to engage in the years when they are learning to live independently and endeavouring to balance workloads with study and social activities. Young families experiencing the sharp learning curve associated with early child rearing are another group that can be more challenging to engage. People experiencing chronic health conditions (of which there is known to be a statistically higher proportion within the public housing system) are another such group who face participation constraints. More generally, people living in units – and specifically renters living in units – can be harder to involve, due to the inherent difficulty of engaging a transient population, with a high degree of anonymity, yet more shared responsibility than single dwelling occupants.

Although engaging disinterested tenants is a challenging barrier, and the likelihood of bringing all residents into the system should be reflected upon realistically, it is important to remember that normalising paper and hard recycling has been a long and ongoing process, and the same is likely to be true for food organics collection services. Certain measures can be taken to achieve wider participation rates, such as ensuring that the service is easy to use and that the necessary infrastructure is readily accessible. Sharing information about the wider benefits of being involved may also be valuable so that individuals have tangible reasons to participate. For example, there is often a lack of knowledge about the beneficial end uses of recycled organics within the community.

## Systemic challenges

**Structural barriers** - As mentioned above, it is important to determine what participation barriers are largely psychological, where improvement may require further education and awareness-raising interventions to shift attitudes, and where participation barriers involve structural problems with the system, where usability may be improved by changing the way the service is delivered. The following is a list of common structural barriers that have surfaced from the evaluation literature:

- Residents reported that they stopped using the service when they ran out of bags
- Some of these residents were not aware how to obtain more bags; while others were deterred by costs
- A number of people reported that the new bags did not fit well and made their installation fussy and off-putting
- Some residents were unhappy with the thickness of the bio bags, reporting that they split easily
- Some residents found fortnightly collections not frequent enough



- The absence of a bin when new residents moved into a property contributed to non-participation, especially in private-rented accommodation (the absence of a bin could include either the bench-top bin or a communal wheelie bin)
- In some instances, new residents were unaware that the service existed
- Other residents reported legitimate concerns about odour, vermin and insects (predominantly in the bin bay area, although some people reported an aversion to smells from the bench-top bin)
- Some of the above concerns with smells and insects related to not having an outdoor/ventilated space for storing the wheelie bins
- A further consequence of not having an outside/ventilated space to store the bins included not having room to clean bins properly in some instances
- Some residents living in units with very small kitchens reported difficulties finding space for the bench-top bin
- Many single-dwelling residents already composted at home (however this was not a common factor for residents of multi-unit dwellings).

The list of common structural issues forms a narrative around the importance of providing residents with the appropriate tools (bench-top bins; wheelie bins of an appropriate size and design; and bags of the correct size and quality), through a clear delivery process, where the resident does not have to pay directly to access the necessary infrastructure.

## 5.2.2 Communicating with residents

This section presents successful approaches for *resident engagement and communications*, as synthesised from existing evaluation literature (Brook Lyndhurst, 2009; Coffs Harbour City Council, 2004; Dilkara, 2009; Pamphilon & Chevalier, 2011; WRAP, 2009; Zero Waste SA, 2010). The approaches are presented below under the following three sub-headings: *communication strategies*; *motivating messages*; and *incentives*.

### Communication strategies

Subject to the budget allocated for resident engagement activities, most municipalities that roll out residential food recycling services commission a mix of text/graphic based communication resources (see Figure 9 - Figure 15 for example). Broadly speaking, this suite of communication tools may include:

- A welcome letter to new residents
- A colour information brochure or leaflet
- A calendar listing the collection dates
- Bin stickers (wheelie bin; bench-top bin)
- Signage for bin bays (only applicable for MUDs)
- A magnetised fridge card to remind residents what goes into the service
- Positive feedback delivered to residents through newsletters, media releases, postcards, or existing council mail-outs such as rate notices
- Web-based communications that reflect print messages (blog; council webpage)
- Show cards to assess community awareness/teach people what materials go into the organic waste bin (for use during face-to-face engagement activities).



Regardless of the specific mix selected, all of the information contained within these resources should be presented in ‘plain English’, avoiding jargon and excessively long explanations. Other general suggestions from the evaluation literature include keeping the information ‘relentlessly upbeat’ and as ‘simple’ and ‘inclusive’ as possible. This may include translating key communication materials into other languages if they are known to be widely spoken in the area. Many municipalities also attest to the value of ‘branding’ the service so that all communication materials go out with a consistent name, logo and visual identity that residents come to recognise (e.g. ‘City-to-Soil’, ‘Recycle-Right’, ‘Wheelie Good Compost’).

The follow sub-sections provide detailed information about recommendations for developing communications materials.

### Information brochure

A colour brochure or leaflet (reproduced online in Portable Document Format) is one of the most common communication resources that local governments commission to inform residents about organic recycling services. A study of the literature suggests that this communication tool should aim to achieve a number of objectives including:

- a) Give a simple introduction the service that clearly explains what will happen to the recycled resource (*‘Organic material including food scraps put in the green bin are professionally processed into compost-based products’*)
- b) Give a clear overview of the service infrastructure that each household should have free access to (bio-bags, bench-top bin, wheelie bin)
- c) Educate resident about how to use the service (including clear pictorial guidance about what goes into the organics bin)
- d) Explain the established processes to access replacement bio-bags and report faults
- e) Raise awareness about the multiple benefits of the service using easy to understand language (to give people clear reasons to participate)
- f) Highlight a small number of key service ‘tips’. For example to pre-emptively target:
  - **Contamination** – *‘Remember to only use bio-bags or newspaper to line your bench-top bin and never use standard plastic bags’*
  - **Yuck factor fears** – *‘Try wrapping your meat scraps in newspaper or paper towel, or alternatively freezing them until the collection day during hotter months’*
  - **Encourage households producing small amounts of organic waste to participate** – *‘Remember that even small contributions are valuable, as it all adds up to make a precious community resource’.*

### Visual imagery

In general, the colour brochure should communicate information in a way that is easy to understand and make clever use of imagery to educate residents (as graphics are more inclusive of non-English speakers and other people experiencing literacy barriers) – see, for example, the garbage bin image Figure 13 showing items that people don’t usually consider can go in the bin. Choosing iconography rather than photography may also help to reduce the ‘yuck factor’ that some residents associate with images of food waste. Some successful engagement campaigns exclusively use professional illustration rather than photographs – see, for example, Figure 15.

If photographs are used, the models and setting should be considered carefully, as pictures of specific residents and kitchens may unintentionally alienate certain people who have difficulty relating to the lifestyle presented. Alternate strategies for campaigns where professionally-





designed illustrations are not an option can include: a) purposefully selecting non-descript photographs; or b) presenting photographs of a diverse range of people offering comments about service benefits. In this case, the models could be photographed in a local park or common streetscape. Some evaluations also specifically recommend including photographs of children using the service to convey ease of use – see for example, Figure 12.

The important lessons presented here about the need to use visual imagery effectively should apply to all forms of text/graphic communication.

**Bin stickers and bin bay signage**

Wheelie bin stickers and bin bay signage should effectively communicate what does and does not go into the organic-recycling bin. Like other text/graphic resources, these communication tools should also incorporate pictorial instructions in an attempt to minimise language and literacy barriers – see, for example, Figure 10. It is recommended that local governments budget for replacement stickers and signage at reasonable intervals, to account for damage, fading and peeling over time. As running out of bio-bags is a known contributor to service dropouts, the signage and bin stickers should also include a number to call for replacement bags. Some municipalities also issue a sticker for the underside lid of the bench-top bin (where the bin design is appropriate) to assist in the correct separation of organic wastes in the home.

**Figure 10: South Australian bin sticker**



**Figure 11: Bankstown Council closed-loop sign**



Figure 12: South Australian food waste fact sheet



Zero Waste SA

# KNOWFOOD

Fact Sheet

### Composting food waste through your council

**Food waste is a problem**

People often think putting food waste in the 'general' bin is OK because it's biodegradable. However, it's definitely not OK. The food waste ends up in landfill where it creates methane, a greenhouse gas which has 21 times the warming potential of carbon dioxide (CO<sub>2</sub>).

Throwing food scraps away also wastes the energy, water, money and resources used to produce, process, store and transport the food. It's much better to recycle – or compost – the scraps and reuse some of those resources.

**The problem is big**

The Australia Institute demonstrates that Australians dump \$5.2 billion worth of food every year. That's more than it costs to run the Australian Army, more than we spend on digital equipment like flat screen TVs and enough to meet the shortfall in the United Nations' Emergency Relief Fund .

**What's the solution?**

There are two ways you can help:

- composting through your council
- home composting

**“ If 70 per cent of metropolitan Adelaide councils took up food waste recycling schemes and approximately 70 per cent of the households in those council areas participated, there is potential to remove an estimated 30,000 tonnes of food waste from landfill. This is equivalent to 3000 truckloads of waste (each year). ”**

**Paul Calca**  
Environment and Conservation Minister  
Ministerial Media Release, 6 July 2010

**Compost with your council**

In 2009-2010 Zero Waste SA and 10 local councils made it possible for 17,000 South Australian households to recycle food waste. During the 12-month-pilot, 589 tonnes of food waste were collected for processing, preventing an equivalent of 60 metric tonnes of CO<sub>2</sub> emissions .



**Government of South Australia**  
Zero Waste SA

AVOID • REDUCE • REUSE • RECYCLE



Figure 13: South Australian information flyer

# GET TO KNOW WHAT'S GOOD TO GO

**Don't let your food go to waste. Put it in the green organics bin to be composted.**



Organic material including food scraps put in the green bin are professionally processed into compost-based products such as soil conditioners, mulches, garden soils, top dressing soils and potting mixes.

- FRUIT + VEG** Peelings, fruit (including citrus) and vegetable scraps.
- EGGSHELLS + DAIRY** Including cheese and yoghurt.
- MEAT + BONES** Cooked or raw meat scraps and bones.
- SEAFOOD** Including bones and shells.
- TISSUES + PAPER TOWELS** Other card and paper products such as pizza boxes with food remains and soggy newspapers can **GO** in the green bin. Pizza boxes with no food scraps can go in the recycling bin.

**There are many ways to recycle food scraps, tissues and paper towels through your green organics bin:**

- BAG 'EM** IN YOUR COMPOSTABLE BAGS AND KITCHEN CADDY
- WRAP 'EM** IN NEWSPAPER
- PLACE 'EM** LOOSE IN THE GREEN ORGANICS BIN

UNSURE ABOUT WHICH BIN A SPECIFIC WASTE ITEM SHOULD GO INTO? Visit [zerowaste.sa.gov.au/recycle-right](http://zerowaste.sa.gov.au/recycle-right) or call the Recycle Right hotline on 1300 137 118.




Government of South Australia  
Zero Waste SA

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## GREEN ORGANICS BINS →

allow us to DISPOSE OF ORGANIC MATERIAL and FOOD SCRAPS WITH LITTLE EFFORT.



### What happens to food scraps in waste bins?

These food scraps will go to landfill and the valuable nutrients within the organic material is lost.

Around 90% of greenhouse gas emissions from landfills are a result of decomposing organic material.

### What happens to food scraps in green bins?

Placing garden organics and food scraps in the green bin diverts organic matter from landfill.

Green organics and food scraps in the green bin are professionally processed into compost-based products such as soil conditioners, mulches, garden soils, top dressing soils and potting mixes.

### I already compost at home, should I stop?

No – please keep composting at home and use the nutrients in your garden. However, for organic materials you may not choose to compost at home such as bones, cheese, meat and seafood, you can use your green organics bin.

**There are many ways to recycle your food scraps at home:**

- Feed 'em** TO YOUR WORM FARM, CHICKENS OR PETS
- Turn 'em** INTO YOUR HOME COMPOST

### Can I put food scraps in the green bin?

All metropolitan councils (except Onkaparinga) and the regional councils of Light Regional, Mount Barker, Loxton Waikerie, Mallala, Wattle Range and Whyalla allow food scraps to be placed in the green organics bin. For more details about food waste recycling, contact your local council.

### Why can a commercial composter compost materials I can't at home?

It's all about the composting temperature.

Microbes generate heat as they breakdown organic matter. A temperature of 40–50°C will result in a home compost from materials that contain adequate nitrogen, carbon and moisture but maintaining this temperature is difficult. If the temperature in the compost is not maintained long enough it will not kill weed seeds, plant diseases or breakdown some organic materials.

These organics are better placed in your kerbside green organics bin and sent to a commercial composter where they scientifically monitor the composting process and often achieve temperatures well above those you can achieve at home.

### Compostable bags

If you are using compostable bags please ensure they are **compostable**. Biodegradable and degradable bags are not always compostable.

Compostable bags are designed to break down in a commercial composting facility with high temperatures so may take longer to decompose in a home composting system.

### Odours and pests

Research conducted during the food scraps recycling trials showed that odours created by food scraps in the green organics bin were similar to those in the waste bin.

You can reduce odours by simply placing green organics such as lawn clippings and leaves or even shredded paper on top of the food scraps.

Freezing food with strong odours until the night of your bin collection will also help reduce odours.

UNSURE ABOUT WHICH BIN A SPECIFIC WASTE ITEM SHOULD GO INTO? Visit [zerowaste.sa.gov.au/recycle-right](http://zerowaste.sa.gov.au/recycle-right) or call the Recycle Right hotline on 1300 137 118.



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Figure 14: City to Soil information flyer

help the environment support local farmers reduce waste costs win prizes! improve agricultural soils keep organics out of landfill

**If your City to Soil bin contains only things that it should, and nothing that it shouldn't - you could win a prize!**



We will be checking your bin to make sure there are no contaminants that could damage our machinery, make a mess on a farmer's property or ruin the compost. Remember, this product will be handled by staff during the composting process.



For further information about City to Soil, contact:  
**Armidale Dumaresq City Council**  
 135 Rusden Street, Armidale NSW 2350  
 Phone: (02) 6770 3600 Fax: (02) 6772 9275  
 Web: www.armidale.nsw.gov.au Email: xxxxxxxxxxxxxxxxxxxxxxxxx  
 or visit the Groundswell blogsite:  
[www.groundswellproject.blogspot.com](http://www.groundswellproject.blogspot.com)



**become part of the solution**

The City to Soil program has been implemented or will be trialed by the following NSW Councils:  
 Goulburn Mulwaree, Lachlan, Palerang, Queanbeyan, Harden

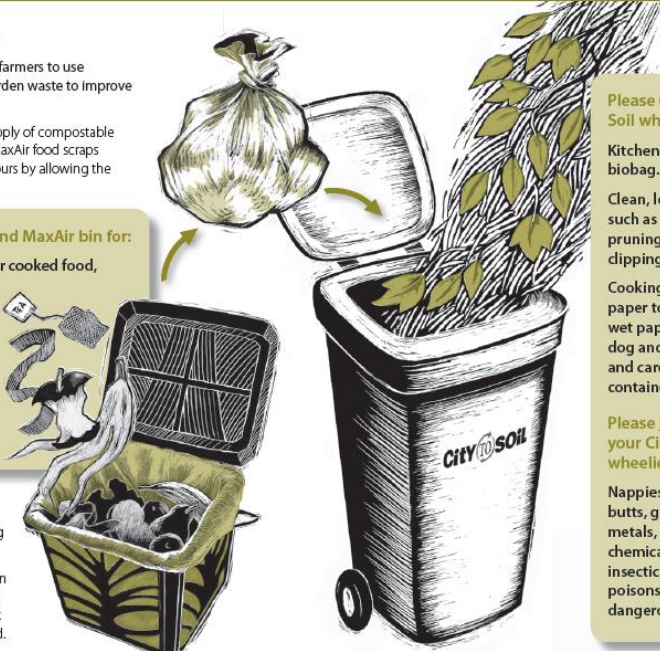
win prizes! improve agricultural soils keep organics out of landfill help the environment support local farmers reduce waste costs

help the environment support local farmers reduce waste costs win prizes! improve agricultural soils keep organics out of landfill

**How to use your MaxAir bin**

Your council is working with local farmers to use composted kitchen scraps and garden waste to improve agricultural soils.

You have been given a one year supply of compostable biobags. Please use these in your MaxAir food scraps bin. The bags and bin minimise odours by allowing the contents to breathe.



**Please use your biobags and MaxAir bin for:**  
**KITCHEN WASTE** – any raw or cooked food, tea bags, coffee grounds, fruit and vegetables, peelings, leftovers, paper towels, meat and fish.

**We CANNOT compost:**  
 Bottle tops, glass, plastics, metals, medicines or chemicals.

When the bag is full, simply tie the corners together and place it into your green waste wheelie bin, along with your garden waste.

**Please do not use plastic bags** as an alternative, even if they are labelled 'bio-degradable'. They will not break down with our composting method.

**Please use your City to Soil wheelie bin for:**  
 Kitchen waste in your biobag.  
 Clean, loose green waste such as leaves, branches, prunings and grass clippings.  
 Cooking oil, used tissues, paper towels, soiled, wet paper, pizza boxes, dog and cat litter, paper and cardboard takeaway containers.

**Please DO NOT use your City to Soil wheelie bin for:**  
 Nappies, cigarette butts, glass, plastics, metals, gardening tools, chemicals, fertilisers, insecticides, weed poisons, or any toxic or dangerous substances.

win prizes! improve agricultural soils keep organics out of landfill help the environment support local farmers reduce waste costs

Figure 15: UK information flyer – Merton Council

### 4 Frequently Asked Questions

**Q** Will the food in my caddy/communal bank smell?

**A** Not if you empty your kitchen food caddy regularly into the communal food waste bank and tie up the starch liners. Your communal food bank will have a sealable lid which will stop smells getting out and pests/vermin getting in.

**Q** How do I get additional liners?

**A** **Liner stockists:**

Retailer	Name of bag
Libraries	• Compostable liners
Morrison's	• Landsaver 100% compostable caddy liners
Sainsbury's	• Sainsbury's home compostable liners
Tesco's	• Tesco compostable caddy bin liners
Waitrose	• Poly-Line compostable caddy liners

For current prices of compostable liners visit [www.merton.gov.uk/foodwaste](http://www.merton.gov.uk/foodwaste)

- You can buy extra liners from many shops and Merton libraries
- Only use compostable liners showing the symbol to the right



### 5 Tips for recycling food waste

**LOVE FOOD hate waste** For practical advice on how to reduce food waste and save up to £50 per month on your food bill, visit [www.lovefoodhatewaste.com](http://www.lovefoodhatewaste.com)

Tie your starch liner to keep your communal food waste bank clean. Remember to keep good hygiene by washing hands, caddies and surfaces with soap and hot water.

Allow your caddy to dry before using a starch liner.

We have supplied you with 6 months supply of liners. Use only compostable liners. Do not use any other type of bag or liner as we cannot recycle them. For additional liners, see stockists on page 4.

If you need this in large print, braille, audiotape or your own language please call 020 8274 4902

**Contact Merton**  
**020 8274 4902**  
[www.merton.gov.uk/foodwaste](http://www.merton.gov.uk/foodwaste)  
[esenquiries@merton.gov.uk](mailto:esenquiries@merton.gov.uk)

100% recycled

MERTON COUNCIL

**Food Waste Recycling for flats**

How to use your new collection service



Recycling - It's never been easier

[www.merton.gov.uk/foodwaste](http://www.merton.gov.uk/foodwaste)

**recycle for London**

merton

### 1 Why are we making changes?

We are making changes to the way your food waste is collected so that you can recycle more and we can process it in a more environmentally friendly way.

- Around 20% of the waste in an average household bin is food waste.
- When food rots in a landfill site it generates methane, a greenhouse gas around 21 times more potent than carbon dioxide.
- Using this service you will help the council and its residents save money.

**You have received:**




1 Kitchen food caddy    2 Starch liners

If you have not received these items please call: 020 8274 4902 or email [esenquiries@merton.gov.uk](mailto:esenquiries@merton.gov.uk)

**What will happen to your food waste?**

Once we have collected your food waste, it is taken to a special processing facility where it is recycled, through the South London Waste Partnership. As the food breaks down, the temperature is carefully controlled to ensure that the finished product is completely sterile. The compost produced is ploughed in to the soil by the farming community.



### 2 How do I use my food caddy?





1 Line your caddy with a starch liner and fill it with food waste. Do not use plastic bags.





2 When it is full, tie the liner and put it in your communal food waste bank. This will be emptied weekly.

3 The outside food waste bank is located near your recycling bin.

### 3 What can I put in my caddy?

**Yes Please**

You can put any raw or cooked food in your caddy. You can even scrape uneaten food straight into your caddy.

- Meat and fish - raw and cooked including bones.
- All dairy products such as eggs and cheese.
- Fruit and vegetables - raw and cooked.
- Bread, cakes and pastries.
- Rice, pasta and beans.
- Uneaten food from your plates and dishes.
- Tea and coffee grounds.









**No Thanks**

Please do not put any of these materials in your caddy.

- Packaging of any sort.
- Plastic bags.
- Liquids.
- Oil or liquid fat.
- Newspaper or kitchen roll.



**recycle for London**



## Face-to-face engagement

For strategic reasons, many municipalities choose to implement a combination of different communication approaches, including both distributing print/graphic resources and conducting face-to-face engagement activities. Common forms of face-to-face contact include:

- One-to-one delivery of bench-top bins
- Road shows and events
- Door knocking.

Direct contact is commonly included as a means to better explain the intended purpose of the service to the community, with the core aim being to improve participation rates. Face-to-face contact is also valued as a process that can allow a dialogue to emerge between the community and the council about the service. For example, certain municipalities use show cards during door knocking to gauge residents' awareness about what goes into the food recycling bin. A discussion can then follow (where necessary) about what other items can go into the service. This process also allows the council to receive feedback about system faults, monitor participation rates, and develop an appreciation for how successful existing print/graphic campaigns have been to date.

Door knocking can also specifically target low-participation areas to encourage non-participating households to 'have another go'. It is advisable that council representatives take spare bench-top bins, bio-bags and information brochures with them when they visit the community, to give new tenants or lapsed users the resources they need to begin using the service immediately if they desire to do so. This is also true for road show stalls, which could for example take place on a Saturday morning outside of a targeted multi-unit dwelling, as an alternative or complementary strategy to door knocking.

Finally, although, strictly-speaking it is not face-to-face engagement, some municipalities establish a hotline that residents can call to report faults, ask questions or request replacement bio bags. This can include an answering machine service to take requests for bio bags after hours. If a dedicated line is not feasible, it is advisable that general customer service staff are familiar with crucial system processes, and that residents can be directed to a waste engagement officer for more challenging enquiries.

## Motivating messages

The statements shown below in Table 8 have been collated from the evaluation literature (Brook Lyndhurst, 2009; Coffs Harbour City Council, 2004; Freeman and Skumatz, 2011; Pamphilon & Chevalier, 2011; Truscott Research, 2006; Truscott Research, 2009; WRAP, 2009; Zero Waste SA, 2010) to show the diverse range of positive messages that have emerged about food recycling services. The majority of these positive messages come directly from residents, as they have explained 'what they like about the service' or 'what the wider benefits are'. These statements represent different kinds of messaging that could be used to try and motivate households to use the service (by giving residents a positive reason to be involved). The messages are grouped into the following four categories: *Environmental Benefits*; *Community Benefits*; *Personal Benefits*; *Ease of Use Benefits*.

Although some studies suggest that using multiple messages can be advantageous to appeal to a wide range of people, the literature also indicates that awareness-raising campaigns should be appropriately scoped to fit their local context. As a consequence awareness raising campaigns should focus on a handful of locally resonant messages at most. To determine which messages resonate with the Leichhardt community, the following list of was presented to participants during the resident engagement phase of the research:



**Table 8: Positive statements that residents in other locations have made about similar food waste recycling systems.**

#### Environmental Benefits

- *'It's a great idea as it really does reduce amount of rubbish that goes into landfill'*
- *'It helps to address climate change by avoiding food waste reaching landfill'*
- *'It can go back into the earth rather than be thrown out at the tip'*
- *'It's wrong to waste it. Recycling food is simply better for the environment'*

#### Community Benefits

- *'The compost can be used in local parks to give something back to the community'*
- *'It's not right to waste food grown by Australian farmers. It just makes sense put unused food waste to a good use'*
- *'It can reduce the cost of sending waste to landfill for the community'*
- *'It's good to teach children the importance of recycling whenever possible'*

#### Personal Benefits

- *'I feel better recycling things rather than throwing them out'*
- *'We had a chance to win prizes for low contamination rates'*
- *'I think it's great, as it has cut down on our normal garbage. I've noticed how empty my rubbish bin was once I used the system'*
- *'I think it is a very good idea for people in units with no backyards where they can't easily compost at home'*

#### Ease of use

- *'I think it is a very good idea as the basket is very well designed and there is no odour'*
- *'It was easy for me to save my veggie scraps with the bench top bin. It's just so easy'*
- *'I think the basket is fantastic and whoever came up with idea did a great job: compact, neat – easily fits into the cupboard under the sink or on the bench top'*

A number of additional relevant comments about messaging also included:

- The messages should attempt to tap into known local motivators, rather than try to change people's values.
- By consciously using combinations of messages in media releases, article and letters, you are more likely to motivate a wider range of people.
- Ensure that contradictory messages are not conveyed through different booklets or leaflets, especially if guidance on what to do changes over time and people are still referring to out-of-date literature.
- Messaging should have a focus on 'local returns for the region' – people generally recognise that it's good to divert waste away from landfill and respond to the idea that nutrients can come back into improve the local environment.



- There is a strong association between being a food recycler and being committed to recycling more generally. Messaging should aim to convey the idea that food recycling is now also becoming socially-expected behaviour.
- One study advocated strongly for the use of the term ‘food recycling’ over both ‘food composting’ or ‘kitchen waste’.
- Finally, community education and awareness raising messages need to be both ‘timely and ongoing’.

### 5.2.3 Incentives & champions

A number of the evaluation studies (Brook Lyndhurst, 2009; Pamphilon, & Chevalier, 2011) also discussed using incentives to help motivate residents. There was a general theme throughout this literature that ‘carrots’ should be used more often than ‘sticks’. For example, although many services react to bin contamination with notification stickers and (potentially) non-collection, the evaluation literature suggests that more positive incentives can also be trialled. Positive campaigns such as these are particularly relevant for ‘opt in’ services, as buildings or households that receive bin rejection notifications regularly have been known to simply cease participation over time.

One such approach involves awarding prizes for non-contaminated bins after service audits, with all better performing households going into the draw to win a prize. Another approach simply involves selecting a non-contaminated bin at random during weekly collections. Winning householders selected through either approach can also receive a write up through local media (giving a quote, a service tip, or with a photograph if appropriate) to further raise awareness about the campaign.

Social research commissioned by DECC (2008) to inform the Better Practice Guidance suggested that:

*Generally, many found it difficult to imagine how this concept (of incentives) would actually work. While some liked the idea, it did not seem practical. While it was thought a financial incentive was likely to gain attention and encourage compliance among some who currently do not recycle correctly, others felt this wasn’t the right way to go about things (i.e., that people should be recycling ‘for the right reasons’).*

This suggests that programs using incentives need to be thought through very carefully, and potential impacts such as alienation or disengagement with the service, weighed up.

In this same social research, exploring the hypothetical idea of champions (DECC 2008) found a majority supported the idea of champions:

*Overall, just under seven in ten respondents (68%) supported the ‘champion’ concept, whereby a resident in each building or development is encouraged to be a main contact who provides information and answers questions from residents regarding recycling and what it can and can’t do.*

The reported support for this was slightly higher among Department of Housing respondents (73%), with half (50%) agreeing ‘strongly’ and particularly high support registered among CALD respondents (79%) and females (74%) (DECC 2008).





# 5

## Literature Review – Academic Literature

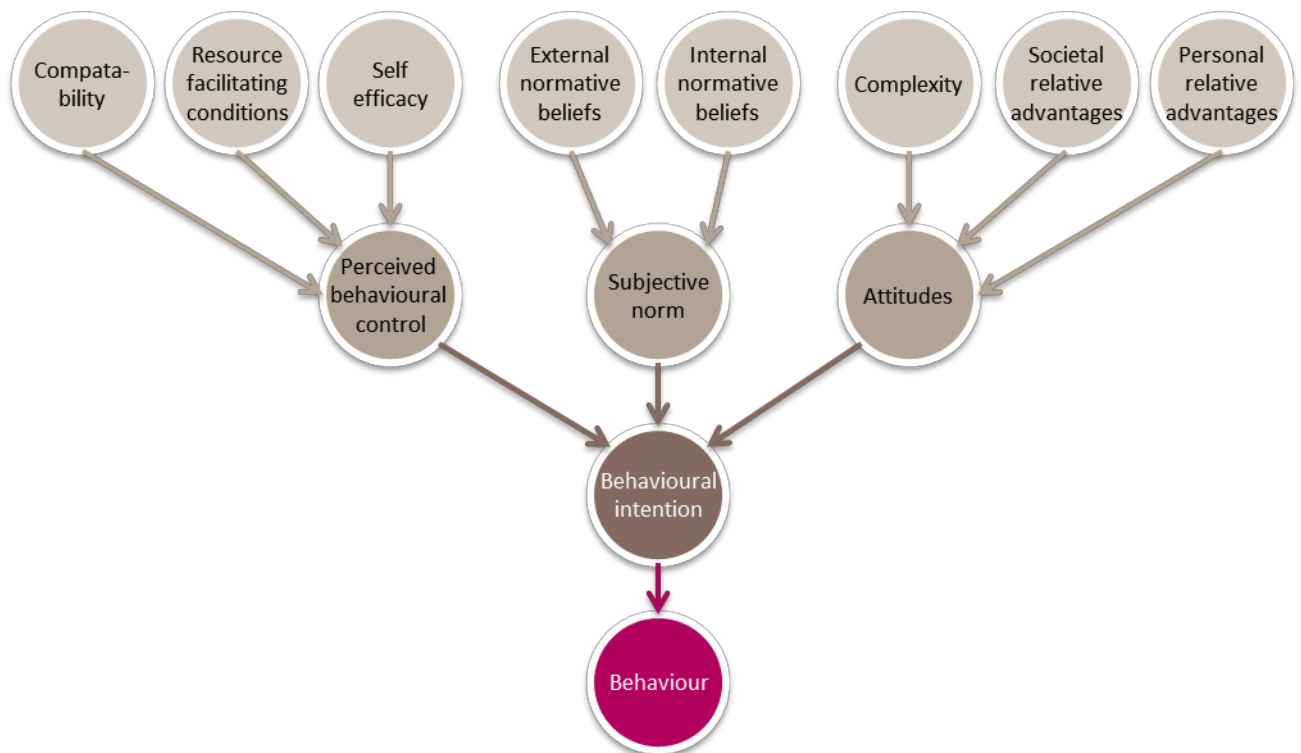
## 6 ACADEMIC LITERATURE

The following section presents findings from peer-reviewed behaviour change studies, which empirically tested factors that influence participation in food waste collection systems.

### 6.1 THE INTEGRATED WASTE MANAGEMENT MODEL

The 'integrated waste management model' (pictured in Figure 16 below) is a predictive model of human behaviour, which has been tested in a number of rigorous studies (Taylor & Todd, 1995; 1997) to highlight psychological factors that influence peoples' intention to participate in compost collection systems.

**Figure 16: The Integrated Waste Management Model**



The model is based on the theory of planned behaviour (Ajzen, 1985; 1991), which states that an individual's 'behavioural intention' is informed by three psychological precepts. Firstly, intention is influenced by the individual's attitude, which reflects favourable or unfavourable feelings towards the activity. Secondly, intention is influenced by subjective social norms, or the extent to which the individual is influenced by the perceived attitudes and behaviours of the people around them. Thirdly, behavioural intention is influenced by *perceived behavioural control*, or the degree to which the individual feels that they have control over factors that may impede or facilitate their participation.



## Attitudes

The results of these rigorous studies into the psychological determinants of food recycling behaviour (Taylor & Todd, 1995; 1997) show that ‘attitude was a key determinant of behavioural intention’. Supportive attitudes were more likely to occur when the perceived advantages of participation were high and the perceived complexity involved with participation was low. In terms of the perceived advantages, people were more strongly motivated to use the systems when they could justify their participation for altruistic reasons, such as supporting the community by doing the right thing. In the words of the Taylor & Todd (2007), these results indicate that:

*‘Policymakers should stress societal benefits in trying to promote waste management behaviour. As appeals to personal benefits may be less effective and, in fact our results suggest, may negatively influence attitude toward the behaviour. This may occur if the perception of such personal considerations detracts from the satisfaction derived from engaging in an altruistic behaviour’.*

Ease of use (low system complexity) on the other hand is important for reinforcing persistence, as initial user experiences can quickly establish attitudes that are maintained over time (Tucker & Speirs, 2003). This finding indicates that people cannot simply be convinced that the system is easy to use, but rather they must also experience ease of use in order to maintain a supportive attitude. In the words of Tucker & Speirs (2003):

*‘A distinction can be made between motivating attitudes that need to be stimulated before behavioural change occurs; and the reinforcing attitudes that are formed mainly through experience’.*

## Subjective social norms

It is well documented that the influence of friends, family members and neighbours can be important determinants for normalising recycling behaviour (Taylor & Todd, 1995; 1997). For example, an individual’s intention to participate may be stronger when they perceive their peers conducting the same practice, or believe that their peers want them to undertake the practice. This is due to a common desire to conform or ‘fit-in’ to the communities around us, judging our behaviour off the standards maintained by our peers.

Interestingly, relative to the other major strands within the integrated waste management model, subjective norms were not seen to be a strong determinant of participation for residential compost collection schemes (Taylor & Todd, 1995; 1997). This finding is supported by additional studies including Edgerton et al. (2008) who add that social norms tend to have a greater effect on more observable/public recycling behaviours.

As composting is predominantly a household activity, internal family norms appear to be more influential than those of external role models. In general, the results show that social norms are less influential for maintaining participation, relative to sustaining supportive attitudes about the altruistic benefits of participating and ease of use.

## Perceived Behavioural Control

Findings show that individuals’ perceive that they have more control over participating when the collection scheme is ‘compatible with their daily routines and values’ (Taylor & Todd 1995). As composting systems require some level of knowledge to participate, education initiatives can be beneficial to build wider self-efficacy within the community (Taylor & Todd 1997). However, it appears to be equally as important that residents understand that they don’t have to significantly change their lifestyles or values to participate. The less compatible the system is with an



individual's lifestyle, and the less accessible composting is perceived to be: the less control the individual feels over their decision to participate. In the words of the authors:

*'Policymakers should focus their efforts on making the necessary resources available for consumers to engage in waste management behaviours and on ensuring that these activities are not perceived as taking too much time and effort on the part of individuals'.*

## Providing feedback

Nomura et al. (2011) tested the efficacy of providing residents with postal feedback as a means to increase the uptake and continued use of a food waste collection system. The hypothesis of the Nomura study was that providing ongoing performance feedback might influence recycling norms over time:

*'Leading to a general rise in pro-social behaviour by letting people know that the prevalence [of use] among their peers is higher than they thought'.*

Each household in the treatment group was delivered postcards providing feedback on how their street performed compared to the average for their neighbourhood. Depending on whether the street was performing above or below average, the postcard also featured a 'happy' or 'sad' smiley face alongside the figures. The inclusion of this imagery was designed to also invoke 'injunctive norms' and influence peoples' perception about what is approved or disapproved of within society (Reno *et al.*, 1993). It was envisioned that people living on streets with good performance would be encouraged to maintain their practice, while people living on streets with poor performance would be stimulated to improve their practice, in an effort to emulate neighbourhood norms.

The study only saw a marginal rise in participation rates after the postal feedback was reiterated multiple times. Crucially, the normative reinforcement was seen to support well performing streets to maintain their performance. However while certain low performing streets shifted to become better performers, other poor performing streets went backwards when being provided with messages illuminating their underperformance. This reinforces the findings of others such as Schultz (2007) who point out that social norms commonly effect behaviour in the same direction as the perceived norm, or in other words:

*'If you tell people that no one is doing it, they could be less likely to do it themselves'.*

These findings are valuable as they suggest that providing positive feedback to residents may be beneficial for maintaining good practice. Caution should also be exercised about providing negative feedback to underperformers, as these messages may discourage participation.

## Education campaigns

According to Shultz (2007), there can be a tendency for policymakers to focus on developing the hard, technical aspects of recycling schemes, with inadequate attention given to the crucial 'people' aspect of these systems. Yet it is crucial that policymakers understand that human behaviour is central to the success of recycling programs. Shultz goes on to make a useful distinction between education campaigns and awareness raising campaigns from a behaviour change perspective. Both of which are important for different reasons, as the following two sections will explain.

Firstly, education campaigns deliver information based on the assumption that a lack of participation stems from a lack of knowledge about what to do and how to do it. As Taylor & Todd (1997) have already pointed out, educating people about how to use the system is valuable as it can increase their perceived behavioural control, which facilitates participation. Shultz (2007) lists the situations where education campaigns can be effective:



- 1) *When a substantial change is made to an existing program (such as change in collection days or types of materials that are collected);*
- 2) *When the program is being introduced for the first time; or*
- 3) *When no marketing materials have been provided in a long time, and there is evidence to substantiate the fact the people are unaware of the program.*

Unfortunately, campaigns targeting behaviour change often fail to understand what motivates people to participate, and mistakenly believe that behavioural shifts are the direct result of people knowing more about how to carry out the activity. Although education campaigns are important, they may need to be a part of a wider behaviour change methodology that also targets peoples' attitudes.

### Awareness-raising campaigns

Shultz (2007) defines *awareness-raising campaigns* as an engagement approach intended to give people a '*reason to take action*', which goes beyond simply telling them what to do and how to do it. For example, in an attempt to motivate people to participate awareness raising campaigns may introduce people to the seriousness of a particular issue; disseminate knowledge about the wider social benefits of participating; or communicate what other people are doing in an effort to influence recycling norms. The active messages coming out of these campaigns should be specific and relate directly back to the activity in question:

*"Broad or diffuse messages such as "do your bit, compost it" or "be a super recycler" are too vague and do not give a specific action. Such messages can promote positive attitudes and awareness of the program, but they do not provide people with an action — what exactly do you want people to do?"*

Effective social marketing campaigns often deliver appropriate educational resources alongside awareness raising messages, to provide residents with the skills and motivations necessary to participate. On a deeper level, community-based social marketing seeks to develop behaviour change interventions that also address context specific barriers to change. This approach aims to ensure that legitimate community concerns are addressed and that the system also functions effectively.

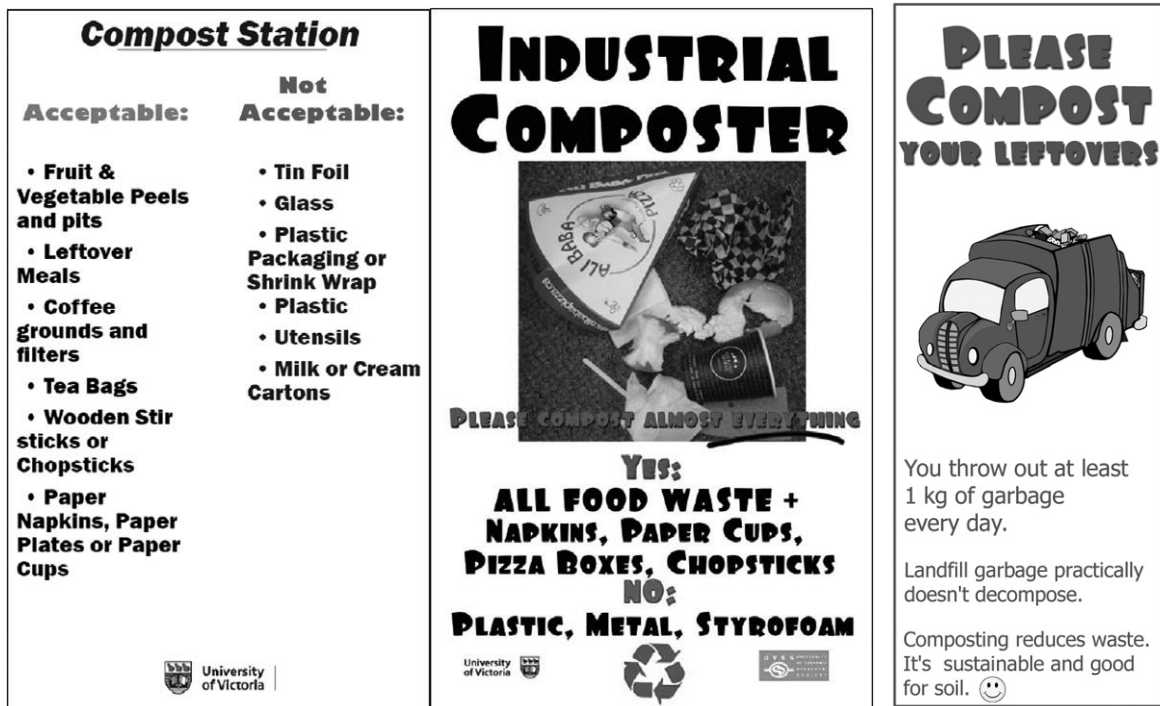
### Signage

Applied social psychology experiments such as that of Sussman et al. (2013) show empirically that signage designed to promote the correct use of food recycling systems can have an observable effect on participation. Although the study in question occurred in a cafeteria environment, there are still a number of lessons that can be transferred to the residential context. According to Sussman et al. (2013):

*'The addition of signs on tables in the [space], and a more persuasive and informative sign over the compost bin itself significantly increased the percentage of ideal composting'.*

A key success factor was how '*salient*' the signage was, with visually appealing messaging (combining educational and awareness raising messages) increasing the prevalence of ideal composting over both '*no signage*' and basic '*what to compost messaging*'. While the improved signage was not the work of professional designers and does not represent best practice examples of engagement materials, it did empirically demonstrate the concept in action. A selection of professionally-designed materials are reviewed later in the document.

Figure 17 - Standard (left) and upgraded (middle) sign over compost bin; table top sign (right)



Five characteristics of effective visual prompts have been described as:

- 1) *The target behaviour is relatively convenient to engage in;*
- 2) *The desirable or undesirable behaviour is specified in precise terms;*
- 3) *Convenient alternative desirable behaviours are indicated when avoidance of an undesired behaviour is targeted (e.g., disposing of bottles in a recycling bin rather than the garbage);*
- 4) *The message is delivered in close proximity to opportunities for engaging in the target behaviour (e.g., as in point-of-purchase advertising); and*
- 5) *The message is stated in polite language that does not threaten an individual's perceived freedom. (Geller, Winett & Everett, 1982)*

## 6.2 KEY FINDINGS FROM ACADEMIC LITERATURE

Key findings that have come out of the academic literature include:

- 1) Resident attitudes are a key determinant of participation; and a distinction can be made between the motivating attitudes that initiate participation and reinforcing attitudes that are formed mainly through experience
- 2) Policymakers should stress societal benefits when trying to motivate people to use compost collection systems, as appeals to personal benefits can be less effective
- 3) As initial user experiences can quickly establish attitudes that are maintained over time, systems that are easy to use reinforce positive attitudes
- 4) As composting is predominantly a household activity, internal family norms appear to be more influential than those of external role models
- 5) Relative to the other major strands within the integrated waste management model, subjective social norms were not seen to be a strong determinant of participation for residential compost collection schemes
- 6) Individuals perceive that they have more control over participating when the collection scheme is compatible with their daily routines and values;
- 7) Policymakers should focus their efforts on making the necessary resources available for consumers to engage in waste management behaviours and on ensuring that these activities are not perceived as taking too much time and effort on the part of individuals
- 8) Providing positive feedback to residents may be beneficial for maintaining good practice, however caution should be exercised when providing performance feedback to underperforming communities, as it may discourage their participation
- 9) Educating people about how to use the system is valuable as it can increase their perceived behavioural control, which supports participation, however education messaging may need to be a part of a wider behaviour change methodology that also targets motivating attitudes
- 10) Effective social marketing campaigns deliver educational resources alongside appropriate awareness raising messages, to provide residents with both the skills and the motivations necessary to participate.



# 7

## Council Staff Workshop



## 7 COUNCIL STAFF WORKSHOP

The Council Staff Workshop was held on the 8<sup>th</sup> November 2013. The aim of the workshop was to inform the development of the CEPP by tapping into Leichhardt Council's staff knowledge and ideas for improving its food waste recycling in MUDs program. Ten invited staff members from across Council attended (Table 9).

Specifically, the Workshop explored:

- Barriers to uptake
- Success factors
- How the program fits in with Council's overall strategic and community planning
- Identifying stakeholders for further engagement
- The aims, objectives and design of the resident engagement process used to further inform the CEPP development

**Table 9: Participants in Council staff workshop**

Roles
Manager, Works & Waste Services
Resource Recovery & Waste Management Officer
Leichhardt Depot, Acting Waste Services Co-coordinator
Administration– Infrastructure and Service Delivery
Media & Communications Coordinator - Mon-Wed
GIS - Map production/databases
Team Leader, Community & Cultural Planning
Team Leader, Environmental Strategy
Sustainability Engagement Officer
Customer Service Representative

The outcomes of the workshop are summarised below.

### 7.1 WORKSHOP PROCESS

The workshop began with ISF staff presenting some contextual information: a project overview, a workshop overview, a quick update on what the food recycling system is comprised of and its history and a snapshot of the literature review findings to date. This was followed by interactive activities, in pairs, followed by reporting back to the group and some general discussion.

There were three main activities covered in the 90-minute workshop:

**Question 1: "MAP your system...How well does the system work? What are all the parts that work well? Which parts work less well?"** (Findings summarised in Table 10 below).

HINT: Consider your perspectives/residents' perspective 'bits' of the system that are hard – equipment etc, and 'soft' processes, attitudes etc. This is a big picture view.

**Question 2: “What do you think, from your experience, works well to communicate and engage residents in this local government area?”** (Findings summarised in Table 10 below).

Taking an appreciative enquiry approach to thinking about what might work well. What engagement has worked well with this community previously? (this might be other collection services, pilot, this service). Think of specific examples and tell us – WHAT and WHY they worked.

**Question 3: “Who else might have insight into this issue?”**

- Possible stakeholders for ISF to interview
- Recruiting residents for resident engagement in the social research

## 7.2 WORKSHOP FINDINGS

**Table 10: Understanding the current system**

### Working well

- Some participation
- People using it really like it
- Some larger complexes have good model
- GarbageMaster system – ISF, CS
- Customer service take orders from resident then ISD Admin process bin list report each day for the delivery by Waste Coordinator to the resident. The Waste Supervisor picks up the report and deliver bins etc. This system is used for all bin orders, i.e. other waste/recycling etc.
- Bags are important and people are using them
- Newish service – five years
- Commitment from Council and State Government
- Weekly collection
- Interest from MUDs for composting/sustainable services
- Eliminates waste to landfill
- May increase resident participation in other recycling
- Annual rollout bags for kitchen bench top bin takes place
- Kodak building – good participation/low contamination – we could gain info on why it works.

### Not working

- Reduced or plateaued participation
- Smell of bins - 240L bin insert hard to clean
- Getting bins/ bags to residents – Some don't receive the bio bags
- Some confusion over whether residents need to pay/not pay for bins/bags
- Understanding of what the service is or where food goes
- Turnover large number of residents and new residents getting information
- Existing tenants getting annoyed by new tenants not 'following the rules'
- Brochures alone may not be effective to engage households not using the system
- Blocks with <10 units would like to participate
- Need ongoing education to encourage participation
- Perceptions of health issues/storing of kitchen bench top bin
- Need for a champion in each MUD building
- Better visual education/strategically placed signs/bin service
- Review age demographic for LGA – target strategies
- Making internal staff more familiar with the system.



About strengths of the current system, people talked about **commitment** and **environmental benefits** as well as **education opportunities** for further sustainable behaviours:

*‘There is commitment from council and government’*

*‘There is interest’*

*‘It eliminates waste to landfill’*

*‘May increase other sustainable behaviour’*

*‘GarbageMaster system is working well. Appears to be working well.’*

In terms of weaknesses people identified a range of issues including those related to **bins**:

*‘Can’t identify cause of contamination’*

*‘Might need to look at possible bin change as there are some complaints about smell’*

Issues with **bio bags**:

*‘Not enough bench-top bags based on customer service experience, people do run out. They don’t want to pay for new bags’*

*‘Pay for or not pay for bags is not clear for customer service.’*

The need for key stakeholders such as **council staff**, **new tenants** and **local real estate agents** to be informed about the service and become more aware of the details:

*‘New tenants are contaminating the bin because they don’t understand the system, they need more education, other tenants are getting annoyed’*

*‘Think of ways to capture the new tenants. We currently don’t have any ways to capture new tenants.’*

*‘Setting up an email notification in the system, but who gets the welcome pack and who does the sending, issues with new people coming in.’*

*‘Need to capture the real estate agents.’*

**Table 11: Strategies used successfully elsewhere in Council to communicate and engage**

What worked?	Why?
Signage seen about recycling in France	No language barrier, clarity, lack clear signage is unnerving, people want to recycle, symbols, big, colour, visual
Resident engagement through proactive Building Manager	Key contact for building and Council
Awards for reconciliation	Pauline McLeod awards for reconciliation.. Local schools participate – kids create art work on reconciliation theme Children’s art exhibition and prizes
Children’s engagement, drawing comp	Creative and fun, Input of a group that don’t usually participate – children. Leichhardt is experiencing a baby boom
Linked-in group	Used with Lake Macquarie Council, Interactive – updates questions. Large group connected virtually not physically Connecting people, Matches working-professionals demographic of Leichhardt Council (time poor) Urban professionals, share tricks and tips, create a network.
Workshops run by Sustainability Team at Council	Practical and fun, Broad approach to sustainability, Simple, clear focus
EcoFestival very successful	High attendance and engagement. Practical workshops

Welcome to Leichhardt pack (new residents)	Info on local area, Received at a point when people are receptive to info – clearly not junk mail
Direct door-knock engagement	Culturally appropriate
Face-to-face community engagement	To introduce the new garbage scheme and recycling pick up schedule (once a week)
Sending brochure/information material	Calendar pick-up, free organic waste bags from mailbox when the tenant just moved in
At Park openings/playground	Incentives, e.g. BBQ. They get a “say” as to what goes into park (requires clear guidelines as to outcome)
Strata 20/25	Council Strategic Plan; Lots of advertising limited response; Conceptual.
Rate rise – current consultation	Prompted people to do online survey, available to do straight away – had around 700 responses
LPAC survey	Incentive, i.e. prizes/pass to concert, pool
Treading Lightly workshops	Topical/free/interest specific
Ludwig Leichhardt	Schools (curriculum fit)/generates people, i.e. parents
Love Your Lane	Kids make tiles which get laid in laneway
Sustainability workshop	Hands on/teaching skills to participants. Participants are generally interested/and may implement and champion
E-waste service	Free – people generally want to do the right thing The service is easy to follow.
Recycling service (2005)	Affected everyone and they had to participate in some way: <ul style="list-style-type: none"> <li>- shopping centre info stalls</li> <li>- mail-outs to every resident/owner</li> <li>- precinct meeting – info sessions</li> <li>- markets</li> </ul>
Events/festivals	Residents attend for other reason/interest But may then go to food/sustainability stalls and then learn/gain knowledge

When describing what worked well in other contexts people said:

- *Face-to-face community when we introduced the recycling, markets, corners, banks, show people, the parking meters. We have to make them feel important, our residents are individuals. Make them feel important and that they have a say they will do what we say.*
- *I got a pack in the mail when I arrived [in Penrith]. How did they find out that I moved? We need to know how new residents moved in. Not addressed to name.*
- *We should offer a prize or an incentive.*
- *Council often puts on events to commemorate things. It can be hard to get people to involved, we can do some work with the schools with prizes, then you are more likely to get kids parents, captive audience, as long as it's aligned.*
- *Online survey is having a good impact as long as it's simple and easy to do.*
- *Saw recent example of waste and recycling signage at conference, very clear, huge colourful sign, language not an issue, visually very clear.*



- *At events and festivals, they might go for a specific thing, but then they may go to another stall to learn about sustainability, a good way to access a broader audience. There is nearly a special event every week.*
- *Free e-waste drop off, we can incorporate some of that strategy.*

**Question 3 – suggestions for ISF next steps in research: stakeholders and resident engagement (social research)**

- *Interviews worked better than focus groups for older residents, from strata residents*
- *Door knocking can work*
- *We don't have the names of all of the Building Managers (this might also be an issue for the program)*
- *Online survey has had good results.*
- *City of Sydney strata dwellings research could be good to contact*

### Summary of findings from Council Workshop

Our workshop with staff found that Council staff members agree that there are clear **strengths** in the current system: it reduces waste to landfill, there is political support and resident interest in the service; and internally, the GarbageMaster system for managing bin and bench-top bin orders is working well.

Council staff also identified **opportunities**: to streamline the provision of compostable bags, to have a clearer story for non-eligible MUDs about why they can't participate, to engage with new residents (both new owners and new renters) at the time of transition and tell them about the service, to communicate about the program in new and interesting ways (including through existing events, using school and parent networks, and cultural organisations).

Another finding of the workshop was that not all of Council's own staff understand how the service works – a benefit of the workshop was staff leaving with a better understanding and appreciation of the service. The opportunity to build staff capacity (to act as conduits of information to the community) is reflected in the final CEPP.



# 8

## Stakeholder Interviews

## 8 STAKEHOLDER INTERVIEWS

### 8.1 METHOD

ISF undertook nine interviews with relevant stakeholders and experienced agencies (Table 12) to provide in-depth understanding of some of the issues identified throughout the literature review. Interviewees included people experienced in sustainability and waste engagement programs, in addition to body corporates, Strata Managers and Building Managers.

The specific focus of these interviews varied upon the participants, but sought to provide detailed information regarding:

1. Recommended strategies for engaging with residents to understand barriers to uptake
2. Past experiences and previous programs dealing with food waste collection or sustainability programs in multi-unit complexes
3. Key considerations for message development
4. The roles of various stakeholders within the system, and their ability to influence behaviour change.

The organisations which were represented in the stakeholder interviews were:

**Table 12: Stakeholders interviewed**

Name	Position	Organisation
Amanda Bombaci Aisha Poole	Waste Education office Acting Waste Management & Contracts Coordinator	Penrith City Council
Christine Byrne	Founder	Green Strata Australia
Darren Beetson	Food recycling driver	Leichhardt Municipal Council
David Eckstein	P&C Representative	Secondary colleges in Leichhardt
John Brooker	Building Manager	Colgate/Palmolive Building
Margaux Park	Resource Recovery Education Officer	Bankstown Council
Melinda Dewsnap	Program Engagement, Smart Green Apartments	City of Sydney
Natalie Fitzgerald	Strata Manager	Colgate/Palmolive Building
Peter Natrass	Sustainability Advisor	Adelaide City Council

The following section summarises the issues raised by the stakeholders.



## 8.2 KEY LESSONS FROM STAKEHOLDERS

This section sets out some of the key lessons gathered from stakeholders within and outside Leichhardt Council who have experience in providing food waste services generally to both individual households and to multi-unity dwellings, or in other types of services specifically for multi-unit dwellings.

### 8.2.1 Providing the service

#### What has worked for service providers?

- **Regular delivery of the right number of bio bags** along with information brochure (too many bags can cause issues relating to storing bags too long and degrading/breaking).
- **Bags made available for free** from Council offices and all libraries.
- **Closed loop programs** help people reconnect.
- **Waste audits processes** have involved the building residents in devising suggestions for fixing issues. Encouraging engaged champions and buildings to focus on multiple waste streams so it is holistic
- **Waiting for proactive Building Managers to contact Council** requesting information/bin liners, to save time/waste from regularly dropping off unnecessary material (in Leichhardt)
- **Buildings with longevity** amongst community members, rather than fast turnover or residents.

#### What has not worked for service providers?

- **Lack of information:** Lack of regular and reliable information for Building Managers (e.g. when one Building Manager came into the role, he didn't know where the bin bags came from, and still doesn't know if they'll come if he doesn't call first).
- **Low or sporadic usage**, for example if only 1-2 residents using the service in a whole unit, or units are only using it sporadically:
 

*“Even [in] the buildings that put the bins out all of the time, there might only be one or two bags in them. That means that only one resident in the building is using the service. That's a regular occurrence when you do the collection you know. In a flat of 30 residents there might only be one person using it.”*

*“[Even if some buildings don't regularly put a bin out] I still have to drive around the route... There was one building that I drove past last week where the bin hadn't been out for a year. I thought, bloody hell, what's that doing out?!”*
- **Contamination by residents:** in the Leichhardt LGA, contamination of food waste bins occurs because general rubbish bins are full or people run out of compostable bin bags and use plastic bags

*“One of the issues is that people have so much rubbish. If the garbage bin is full they just look for somewhere else to dump the rest. I think, without a doubt, the volumes of garbage are increasing and getting heavier and heavier... If they go out with a*





*rubbish bag and the bins are full and they see room in a bin they just chuck it in, even if it's the food scrap bin."*

*"[W]hen people run out of bio bags they just put the scraps into plastic bags, they don't realise."*

- **Contamination of wheelie bins because cleaners line them with large garbage bags** to make them easier to clean:

*"Some buildings have been lining the wheelie bins with big plastic bags to make them easier to clean. I tried to explain to the cleaners that they should not be using the plastic. It was hard to communicate as they were Chinese and English was their second language. So in the end we had to empty out the food scrap bags from the black bags every week and then put the black bag into the garbage bin. Their bins were always clean, but it had a liner that wasn't supposed to be in there."*

- **Council or residents having to manually sort contamination** because there's no way to hold one person responsible in a MUD

*"[I]f I didn't sort some of the contamination out myself then nothing would get through. I don't really like going through bags though because you never know what's going to be in them. You could get syringes or anything."*

- **Wheelie bins with vents in them** tend to be problematic for cleaning.

*"Well I think that the residents prefer the bins without the vents because things get stuck in the venting system and they are harder to clean. The vents were put in at the start to help them breathe and help the food start to break down... But they get picked up once a week so they don't need to start breaking down. So I think that the bins without the vents are better as they are easier to clean."*

### Stakeholders' Recommendations and Ideas for future - Providing the service

- Getting the right people to engage Building Managers

*"[O]ne [Building Manager] has said that they don't want to receive the bags anymore because nobody uses it. They have just put it in the too hard basket. They are the ones that need to be talked to. Ron [Council Waste Staff] might go down and have a chat but he is focused on getting the contamination sorted out. They might need someone who can go out and have a chat who is more focused on advertising side of things to go out and push it."*

- Collect more detailed data from the Council waste collection staff

*"I could sit down and write everyone down. I could easily go out and do it when I do the run next week as well, just take another audit sheet and mark which buildings haven't put a bin out or are contaminated."*

- Increasing frequency of collecting of green waste bin (at least in summer) and including food waste in it

*"If they were to have food waste included with the green organics collections then they would probably also have to increase the frequency of the collection to be weekly in the summer."*



## 8.2.2 Using the service in a participating building

### What has worked for participants using the service?

- **Having bins closer to people**, such as on each floor, rather than just in bin bay (in Leichhardt)

*“Buildings [that] have a garbage chute... if there weren’t [food waste] bins on each floor ...residents might think it’s easier to just throw it in with the garbage.”*

- **Tying up and taking bio bag out daily** to wheelie bin
- **Having cleaners responsible for the bins**, who check bins regularly for smell and remove “to keep it nice”, as well as taking out at appointed time, and then clean them when empty (in Leichhardt’s buildings)
- **Targeted, door-knocking education campaign** in units (e.g. Recycle Right campaign in Bankstown)

*Do a doorknock of a whole complex with aim to reach 75% of residents in a block to talk about how to use the service. We find it relatively successful. Always have a male and female team, introduce themselves, why they’re there, helping them to do the right thing with the bin services. They have a sheet listing translated key words into community languages. Also have a flash card system of pictures of things that can and can’t go in the bin. At the end of the visit, ‘Cool you seem to have it down, we just want to show you a few things...’ and test if they know which items go in which bins. Also get people to sign pledges to do the right things with their bin services. They have a carbon book where household takes original and council keeps copy and marks it down on record so they can refer back to that if the bin seems to have high levels of contamination. They don’t contact strata before going out to a building. Instead have ID cards showing that they have authority to doorknock. For security complexes just keep buzzing until they get let into the building. Found it better when they started sending introductory letters about a week before hand, saying you can expect a visit from people in your area, so that it’s not a surprise. Otherwise people can be reluctant to answer the door if they’re not expecting someone.*

### What has not worked for participants using the service?<sup>18</sup>

- **Fly/maggot problem:** One jurisdiction talked about bench top bins bags staying on counter tops for too long, particularly in summer
- **Smell (wheelie bin):** Another jurisdiction used old garbage bins with new lids, they were already dirty, had holes in them where flies could get in and smell could get out. Also people not generating enough waste, not putting their wheelie bin out for collection “because it isn’t full” so waste sitting and rotting in wheelie bin for weeks at a time.
- **‘Yuck factor’ of bench top bin, particularly following fridge cleanouts:** ‘Yuck factor’ leads to either increased contamination or food waste going into general bin, because people don’t want to take food waste out of the packaging it came in.

<sup>18</sup> In Leichhardt Council and elsewhere



*“Fridge cleanouts you get a lot more of that yuk factor...mouldy zucchini in the cling wrap in the bottom of the crisper...talking about leftovers that you’ve only cooked an hour ago it’s not considered as gross.”*

- **Bio bags degrading:** People don’t realise bio bags have a shelf-life and hang onto their bags too long (particularly when they were getting more than they needed, they were using the most frequently delivered ones first) and also do not store their bins in an appropriate cool, dry place.
- **Anonymity of users in units:** The shared nature of bins in a communal space raises its own challenges:
 

*“People only take responsibility of what happens within their four walls. But anonymity allows people to take the easy way out.”*
- **Contamination:** Contamination or mess from other residents upsets others who are using it, or the people responsible (in Leichhardt)
- **Lack of involvement of cleaners:** Cleaners of individual units not receiving the right instructions for unit occupants (in Leichhardt)
 

*“Many units have their own internal cleaners, so the cleaners often will take the compost bags out once a week... [One] problem is new tenants who... haven’t briefed the[ir] new cleaner.”*

## 8.2.3 Communication and Engagement

### What has worked to communicate food waste recycling services?

- **Frequent delivery of bio bags** with accompanying information brochure, always results in a spike of higher engagement (e.g. lower contamination, more phone calls asking for or about service)<sup>19</sup>

*“[W]hen the bags get delivered the participation rates are up for the next two weeks... I think they receive enough bags, but they should receive them more often. The education/motivation material should go out alongside this to raise awareness. So less bags delivered more often.”*
- **Proactive posting of bio bags to identified or potential new occupants** identified by change (e.g. residents who call to say they’re leaving, real estate agents who call to change from weekly back to fortnightly service because of change in tenants, or less often just advising of new tenants, spotting of ‘for lease’ signs, etc.)
- **Council staff engaged:** Well-trained council customer service staff, who are knowledgeable about the different issues that residents might call about and the solutions to those issues (e.g. when people call to give up, or to request weekly general waste service, identifying what the problem is and giving advice that results in continued use of the service) are crucial for successful delivery. Staff who also very proactive at “cross-selling” and identifying food-waste related information from other contexts, are also helpful for improving a service’s success.

<sup>19</sup> This was also suggested as something that has worked in Leichhardt



- **Face to face education:** Comprehensive face-to-face formal and informal education to community, taking account of all opportunities to weave in food waste message, particularly as part of general Council presence at community events (e.g. festivals, fetes, etc.) allows contact with residents who wouldn't otherwise contact Council, and allows Council to raise awareness, provide advice/solve problems and get feedback.
- **Bin Stickers:** Stickers on lid of general bins (not just food waste bins) that are in weekly service advising about the food waste service, particularly if inspection reveals food waste in general bin.
- **Linking to beneficial local use and personal benefits:** Install signs at places that use compost (e.g. parks, sporting fields) saying "treated with your recycled organic waste". (AB/AP, Penrith Council).
- **Providing feedback on performance** (e.g. using bin tags similar to the Bankstown Recycle Right tags for wheelie bins, particularly smiley faces following improvement in performance) as well as incentives (e.g. providing random rewards, in this case fruit baskets and Westfield vouchers, to households doing the right thing) has reportedly produced good outcomes.
- **Focus on the benefit to residents:** Particularly, costs savings on waste charges because of less expense in composting food compared to sending to landfill
- **A variety of messages:** Include a mix of messages in communication materials. A mix of logistical (when/how things happen, etc), educational (what can and can't go in the bin, how to keep it nice, hygiene issues, etc) and end use (where it goes) messages.  
*"We keep going back to what happens to it, because residents regularly say, doesn't it just go to landfill anyway?"*
- **Clear branding:** Branding and creative promotion is important – professional design of logos (e.g. Recycle Right and Wheelie Good Bin) and use in EVERYTHING (including on bin bags); use of slogans (e.g. in contamination management campaign, they have "Do the right bin"), personas (e.g. the "green bin bloke" representing bin inspectors, used to convey friendly/helpful nature of bin inspectors and counter anxiety/aggression surrounding bin inspections) and other creative communications (e.g. comics in the local newspaper talking about food waste).

## What has worked to communicate food waste recycling services to MUD residents specifically?

- **Working with building champions and existing relationships:** Identifying interested/engaged Building Managers or (in buildings without Building Managers) 1-2 champions is helpful. Also, identifying buildings that already have a sense of community with people talking to each other and regular events. Working out how to tie it into existing processes (e.g. one Building Manager includes flyer and verbal instructions on food waste service as part of general welcome to new occupant/tenant).  
*"Definitely need the Building Manager on board... for anything like that to work... and not all Building Managers are good ones."*
- **Knowing which buildings have building information systems** that allow communications with owners.



- **Contact through the Strata Manager or Owners' Corporation** to discuss the service in the Executive Committee meeting, so that all discussions get minuted and distributed to all owners and you can get signed commitments. Then it gets passed onto the Building Manager to implement. Also in-person presentations at Committee meetings

*"[If the Executive Committee] can show that it is doing something helpful to improve the building then they might be interested in doing it."*

- **Tailoring the message to unit dwellers**

*"They turn off if it looks like it's about houses."*

*"[T]his is just what we do here... and we'd like you to be part of this too."*

- **Simple messages on signs** (not detailed info) in multiple languages

*"I'm a vegetarian compost bin."*

- **Providing case-studies of success** in other buildings so people can get ideas on how to problem-solve/value add
- **Use letter box drops** are the only way to directly engage residents.

## What has not worked to communicate

- **Organising an event at a unit block** (e.g. pizza evening) – this involves a lot of work for lower levels of success
- **Promoting it through schools** – this was seen as *not being* an effective channel for communicating about the service. The reason for this is that the catchment of schools in the Leichhardt area is broader than the Leichhardt LGA (especially high schools - kids from inner city and inner east also attend). Only a very small proportion of students are likely to live in MUDs that are eligible for the program. Thus, there is too much potential for mixed messages in communicating about the service when most of the students will not be eligible for it.
- **Trying to engage individual Strata Managers** who don't care results in low levels of success, because there's no incentive for them. Strata Managers deal with administration, compliance and legal while Building Manager is in charge of the physical building
- **Trying to engage real estate property managers** (usually not committed long term to role because they're looking to rise above property management). (Theoretically, real estate agents are meant to let the strata know when there are new tenants).

*"Apathy is the greatest drama in any strata building."*



## Stakeholders' Recommendations and Ideas for future - Communications and engagement

- Rather than asking what they have to gain through standing up, frame it in terms of what they have to lose. How will *not* getting involved affect them? Lost opportunities relating to health, saving money, better infrastructure, etc.
- Get people who are currently using the service to share testimonials and become advocates [within their own building and between buildings]
- Get the message into the face of occupants more often (e.g. flyers to put under the door of units)  
*"They do get a pamphlet with the box of bags once a year, but it should be in their face more often."*
- Incentives for good performance in MUD could be free holistic waste audit, or cross-fertilisation to other services like an energy audit
- Sending letters from Council to non/poor-participating buildings, 'care of the Building Manager', asking the Building Manager to contact Council
- Identify strata management companies who have a concentration of small number of Strata Managers in one area, ask them to pass information to Building Managers in the Leichhardt LGA. Even go directly to the MD of the strata management company to get buy-in.
- Direct mail to residents
- Try putting postcards in letterboxes based on collective feedback for the building.
- Fix the problems of buildings currently using it, to show that you can, before promoting it more broadly
- Workshops are a great idea, even if you only get one person out of every five buildings (ISF suggestion: Council could use workshops to try to share problem solving strategies, turn interested people into advocates, arm them with case studies, etc.)
- Put notices on rates to owners of units in strata buildings.



# 9

## Resident Engagement

## 9 RESIDENT ENGAGEMENT

In order to supplement the findings of the Council Staff Workshop and stakeholder interviews, ISF conducted an engagement process with Leichhardt residents to provide context-specific information and input into the project. Direct engagement with residents sought to ensure that the real (and not perceived) barriers to uptake or motivators for involvement were identified and considered for the development of the CEPP.

### 9.1 METHOD

The following 12 buildings (Table 13) were selected by consulting the food waste collection vehicle operator. This stakeholder has an intimate knowledge of the service as he has been collecting the waste since the scheme's inception. The driver was presented with the 2012 snapshot audit in a spreadsheet format and asked to select four buildings that best fit into each category. The research team could have made selections for these categories based on the snapshot audit alone, however the collection driver was asked to assist in making these selections as he is an expert on long term collection trends. For example, one of the poorer performers was not contaminated on the day of the 2012 snapshot audit, but is known to be a long term poor performer.

**Table 13: Buildings selected for inviting residents to interview**

Category	Selected MUDs
<b>Better performing buildings:</b> higher uptake/lower contamination rates	Buildings approached in Balmain, Annandale, Leichhardt and Balmain East
<b>Poorer performing buildings:</b> lower uptake/higher contamination rates	Buildings approached in Lilyfield, Rozelle, Annandale
<b>Eligible but not participating:</b> returned bin/bin not used	Buildings approached in Balmain, Leichhardt and Annandale
<b>TOTAL HOUSEHOLDS INVITED TO PARTICIPATE</b>	<b>388 Units</b>

The process for contacting buildings and selecting interview participants is shown in Appendix 4. In total, seven people were interviewed, representing six buildings.

### 9.2 RESULTS

This section discusses the findings of the interviews conducted with residents, grouped in two key themes – using the service, and communication and engagement.





## 9.2.1 Using the system

Around half of the residents engaged through this process were previous users of the system, while the remainder classified themselves as 'occasional users' (though many of these used it as often as twice per week).

Half of those interviewed utilised the bench-top bin provided by Council, though one interviewee used the bags provided without using the bin and another two had purchased their own bins. All but one of the residents using the bin lined it with bio bags provided by Council, and another resident used green potato husk bags purchased themselves.

Most respondents emptied their bin every two to three days. Frequency of disposal tended to relate strongly to the ease of access to the bins.

Generally, all respondents were reluctant to place fish (cooked/uncooked), meat (cooked/uncooked) or dairy in the bin. For some residents, this tended to relate to issues with smell and hygiene at two stages – both while in the kitchen tidy (which might remain on the counter for 2-3 days) and while in the communal bin, which is only emptied once per week. However, several interviewees indicated that they were not aware that they were able to place meat, fish and dairy products in the bin, suggesting a need for further information regarding exactly which food items can and cannot be placed in the bin. Respondents also tended not to dispose of paper waste or tissues in the organics bin, and some avoided out of date food due to potential unpleasantness.

### What is and is not working

Several respondents were regular users of the service prior to it being discontinued in their building due to low uptake or issues with the service.

Key problems with the service related to the rate of use, contamination, smells and the biodegradable bags.

#### Rate of use

Several respondents (previous users) had been the sole users of the service in their building and – as a result of low use – the 240L bins were taken away. It was suggested that a lack of awareness about the service and some confusion about what can be placed in them might be responsible for the lack of uptake. Several also indicated that the resident or Building Manager responsible for the bins was frustrated with incorrect use or contamination, and requested that residents did not use the bin to avoid continual problems.

Respondents noted that other residents were often unaware of the service and how to use it. A lack of signage around the bins and bin bays, coupled with infrequent delivery of bio bags or information, meant that many residents – especially new residents – remain uninformed about the service.

Several respondents identified that there is a lack of space in their bin room/bay, and that the low use of the maroon bin meant that it was swapped for another recycling or general waste bin which would have higher rates of use.

#### Contamination

Many respondents identified that contamination was an issue with the 240L bins, and several of the previous users noted that this was a key reason for the removal of their bins. Reported contamination included residents placing non-food items in the bin, and placing food items in non-biodegradable bags. Respondents noted that this was likely due to a lack of knowledge about the service on the part of those who were contaminating the bins.



One user also identified that their Building Manager thought their bin was contaminated because another resident was placing meat, fish and tissues in the bin – they were not aware that these were acceptable items to place in the bin, and therefore assumed it was contaminated.

Another respondent reported that, in response to high levels of contamination in her building's 240L bin, she made and printed her own signs to stick on the side and top of the bins to inform fellow residents to which items they can and cannot place in the bin. She noted that there may have been some confusion with the colour of the bin lids, noting that contamination levels dropped once the new signs had been placed on the lids and the purpose of the bins was explained.

### **Biodegradable bags**

A major problem identified throughout the interviews related to delivery of and access to the biodegradable bags. Bag delivery methods appeared to differ between buildings and throughout time – there was little consistency in delivery even within the same building. Specific comments relating to the delivery of bags included:

*'Bags were left at the front door [of the building] – I had to put them at everyone's front door otherwise they would have been left there'*

*'We usually get the bags only once a year – but they only give you one roll, you have to chase them up [if you need more]. It becomes a bit of a hassle to chase the Building Manager up – the bags have to be collected in working hours, which becomes pretty difficult.'*

*'[The process for getting bags] is not communicated clearly unless you have lived in the building for a while, so it could be difficult for new residents. It would be more useful if there was a spare supply where people could collect them, maybe near the food waste bins.'*

*'Sometimes they will leave a roll outside your door, sometimes they will leave them in the foyer for people to pick up. It needs to happen more regularly.'*

*'New users are unlikely to understand what the bags are for, and some don't know they have to put their food waste in the green bags.'*

Several users also noted that many more bags were delivered than were likely to be needed, given the low number of users in their building.

It is apparent that a consistent and standardised process is required for ensuring bags reach users of the service, including potential new users. There appears to be a need to ensure these deliveries happen more often, and to ensure that bag deliveries are consistently accompanied by information about the service.

Council does currently deliver kitchen bench top bins and bags to residents, however there could be benefit in reviewing Council systems to ensure consistency across Council. This is reflected in the recommendations contained in Section 2 of this report.

A further problem identified with the biodegradable bags relates to the quality and durability of the bags. Respondents noted that the bags are very thin and tend to rip easily, especially if wet waste sits in the bag for a number of days. Respondents noticed the pairing of the flimsy bag with the basket-style bin was particularly problematic – one respondent suggested 'if the bin was a smooth plastic bin it would probably be easier to manage' as waste would not drip onto the counter if the bag leaked.

### **Bench-top bins**

As with the biodegradable bags, two key issues were raised relating to the bench-top bins: the first relating to obtaining a bin, and the second relating to the design and utility of the bins.



Several respondents noted that they had significant difficulty obtaining a bin from Council. Many were irritated that they would be required to pay for the bin, expecting that this part of the service would be free. Other interviewees reported that they found it difficult to call Council to request the bin within business hours, and even more difficult to pick up the bin from Council's Customer Service Centre, given that they also needed to be collected within working hours. It was recommended by an interviewee that the provision of these bins be reviewed to ensure that access to the bins is easy and simple to remove a current barrier to uptake. One resident suggested that the bins should be delivered to residents by Council to avoid the need to travel to the Customer Service Centre to collect the bins.

Several of the respondents also noted that the design of the bench-top bins was not ideal. It was noted that the potential for leaks and spills from the basket-style bin meant that keeping food waste on the counter was not entirely mess-free. Respondents suggested that a smooth plastic bin rather than an aerated bench top bin would be useful<sup>20</sup>.

## Smells

Complaints about smells were raised occasionally by respondents, however did not appear to be a significant issue experienced by all users of the service. One respondent noted that, since the introduction of the 240L bin, the garbage room has been inundated with fruit flies. The fly problem, as well as the smell associated with the bins, was reported to be worse in summer.

## 240-litre bins

As mentioned above, some smells and flies were reported by some of the residents interviewed. One resident interviewed felt that the problems associated with 'vinegar flies' in the (poorly ventilated) bin bay and (ventilated) wheelie bin were so problematic that the service was not sustainable in their unit block. However, most respondents did not identify that the utility of the 240L bins was problematic.

One resident in a poor-performing building noted that the lack of stickers<sup>21</sup> and information on the bins, and the colour of the lid being similar to the general waste bin, meant many residents were unwittingly contaminating the food waste bin. It was noted that distinguishing between the lid colours is particularly difficult if bin bays are located in dark or poorly-lit areas of the site<sup>22</sup>. Further, a lack of signage on many of the bins meant that residents were entirely unaware that the bin had a different purpose than that of the general waste bin. One respondent had created her own signage for the bins in order to draw attention to the contamination issue.

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<sup>20</sup> Leichhardt Council notes that Council trialled a smooth kitchen bench top bin in the 2007 trial. However, this bin was not designed to be used with the biodegradable liners (i.e. it was fully enclosed). The key reason Council rolled-out the aerated kitchen bench top bins that used biodegradable bags, after the trial, was to assist residents as residents could simply remove their bio bags and place them into the food bin in bin bay areas as they were leaving and entering their apartments. This was seen as being far more convenient than having to take the kitchen bin down and empty it and then have to the kitchen bin back to their apartment. Subsequent design changes to the smooth bins available may mean that this is now an option that could be considered for future.

<sup>21</sup> The food bins all had food bin stickers on their lids when delivered by Council however it could be that some have come off or faded over time.

<sup>22</sup> Note that this is not an aspect that Council can change as all Councils must have lids in line with Australian Mobile Bin Standards:

Food bin – maroon; General waste – red; Blue lid – paper / cardboard; Yellow lid – co-mingled containers; Garden – lime green



## 9.2.2 Communications and Engagement

The amount and type of information that people had received about the service appears to have varied widely, as did the source of the information they received. Respondents variously reported that they had heard about the service through neighbours, the Body Corporate, Executive Committee, and their Building Manager. Many of the respondents couldn't recall seeing any written material about the service<sup>23</sup>, although some noted that they had had pamphlets delivered with the biodegradable bags.

Respondents identified the need for more information to be communicated about the service, and for this communication to be delivered regularly in order to capture new residents moving in to the building. Interviewees suggested that information is needed to educate residents about how to use the service, what can be recycled, and about the benefits of the service for Leichhardt.

One respondent noted that she began using the service when both bags and pamphlets were delivered to her doorstep at the same time. She reported that since that initial delivery, bags had been delivered without pamphlets to describe the service, and that no other residents had taken up the service since the initial delivery.

Several residents noted that there is a need to improve signage around the bin bays, and in particular to ensure that the food waste bins are clearly marked.

In terms of specific messaging, the resident interviews highlight the need to provide tailored information about the food materials that are accepted, as well as to consider a broader message of waste avoidance. One resident reported infrequently using the program due a weekly diet that includes a high proportion of take-away food. They felt that many apartment dwellers would be in a similar situation, and potentially generated little food waste. This suggests that messages relating to cooked takeaway items (leftover Thai food, pizza crusts etc) will be important as well as messaging about fresh fruit and vegetables.

One resident currently using the service emphasised that their household also reduces waste through careful planning and frequent purchase of fresh produce, and therefore their total volume of waste disposed is quite low. They suggested that the food waste recycling program also emphasise the opportunities for food waste avoidance.

### Suggested communication methods

Respondents suggested a range of methods for communicating with residents about the service. Below is a summary list of some of the suggestions<sup>24</sup>:

- **Communication through rates notices** - annual reminder in all rates notices.
- **Provision of information/resources through the real estate agents.** When there is a new tenant they get an initiation to the service, have a choice of taking up a bin and a roll of bags
- **Personal contact** could be better as people don't read everything in their letterbox – a door knock could be a good way to recruit users

*'If the council could individually notify people and let them know that the system is up and running and ask people to try to use it again as intended.'*

<sup>23</sup> Note that in theory the bags are currently always delivered together / at same time as educational information on the food recycling service.

<sup>24</sup> Not all of the suggestions will necessarily be feasible or able to be implemented by Leichhardt Council. See Section 2 for more details on recommendations.



- **Signage at bin bays** – there is a need to get people to understand the service while they're using the bins

*We have lots of people who come and go, the only way to keep in contact is posters at the bin room, it's the only way.*

- **Email to the Body corporate** – Use the body corporate to spread the information. Some suggested that they should be encouraging of installation of under-the-counter storage unit to help separate waste within the home.
- **Mail or letter box drops**, or under the door
- **More signage around the bin bay** about what to do.
- **An incentive such as a competition** between participating buildings

*It would be useful to give buildings a rating, to know what others are doing. Giving feedback might trigger people to do it properly.*

- **Poster in communal space** such as a laundry.
- **Providing info to accompany the bag delivery**

*We need bags delivered to doorstep with the information at the same time – if people just get the pamphlet in the mail it doesn't spur immediate action.*

### 9.2.3 Messaging: Reasons to use the service

Residents were asked to provide feedback on a range of messaging strategies aimed to encourage people to participate in the service. Clear preferences with regards to messages emerged, particularly related to returning benefits back to the Leichhardt community via the return of compost or other outputs.

#### Messaging strategies

In order, the most popular messages identified were:

4. *The compost can be used in local parks to give something back to the community.*
5. *A great idea as it really does reduce amount of rubbish that goes into landfill. 11*
6. *I think it is a very good idea for people in units with no backyards where they can't easily compost at home*

Residents also identified other messages which could be used to encouraged uptake, many of which related to their own personal reasons for using the service. These include:

- *It's a good thing to do for the environment*
- *Landfill is a huge growing problems and the more we can do to reduce it the better*
- *This is used for gardens*
- *It's just a better way to do it*
- *The best thing about it is that you are able to source separate more types of waste from the general waste and landfill*
- *[Using the service] gives you a feeling that you are doing okay*



- *I'm more realistic about my food shopping now, because I can see the waste isolated in a bin*
- *They capture emissions so it doesn't go into the atmosphere*
- *I don't like things going to landfill when it doesn't need to*
- *This is an environmentally safe way to take your food waste and reduce your waste to landfill.*

A strong preference emerged for messages which relate to the use of the outputs of the service as inputs to other community benefits, such as compost being used in local parks. One resident noted that:

*'information about the benefits of the service for Leichhardt needs to be driven home'.*

## 9.3 RECOMMENDATIONS ARISING FROM RESIDENT INTERVIEWS

Key recommendations emerging from resident engagement are summarised in this section.

- There is a need to review the process by which biodegradable bags are delivered to residents. This service needs to be more frequent, more reliable, and more consistent.
- Information needs to be delivered in conjunction with bags in order to ensure residents know what the bags are for and how to use the service.
- A review of the process for obtaining a counter-top bin is needed. This service needs to be made significantly easier for residents to avoid a potential barrier to uptake.
- Signage on bins and around bin areas is required to ensure there is no confusion about the purpose of the maroon-lidded bins, and to draw attention to the service.
- A range of new communications methods will need to be employed to ensure residents are reached (especially new residents) and that they understand how to use the service.
- Messaging should focus on the potential benefits for the Leichhardt community, as well as the potential to reduce the amount of waste going to landfill.
- Posters and other information need to be on display throughout common areas of the multi-unit dwellings using the service, to explain the service to residents.
- Clear information needs to be provided regarding the allowable food items that can be deposited using the service.

As mentioned previously, some of the principles and processes above are already part of the design of the Leichhardt Council collection service. The underlying need may be to tackle the **implementation** of these processes, to ensure they are delivered consistently over time.



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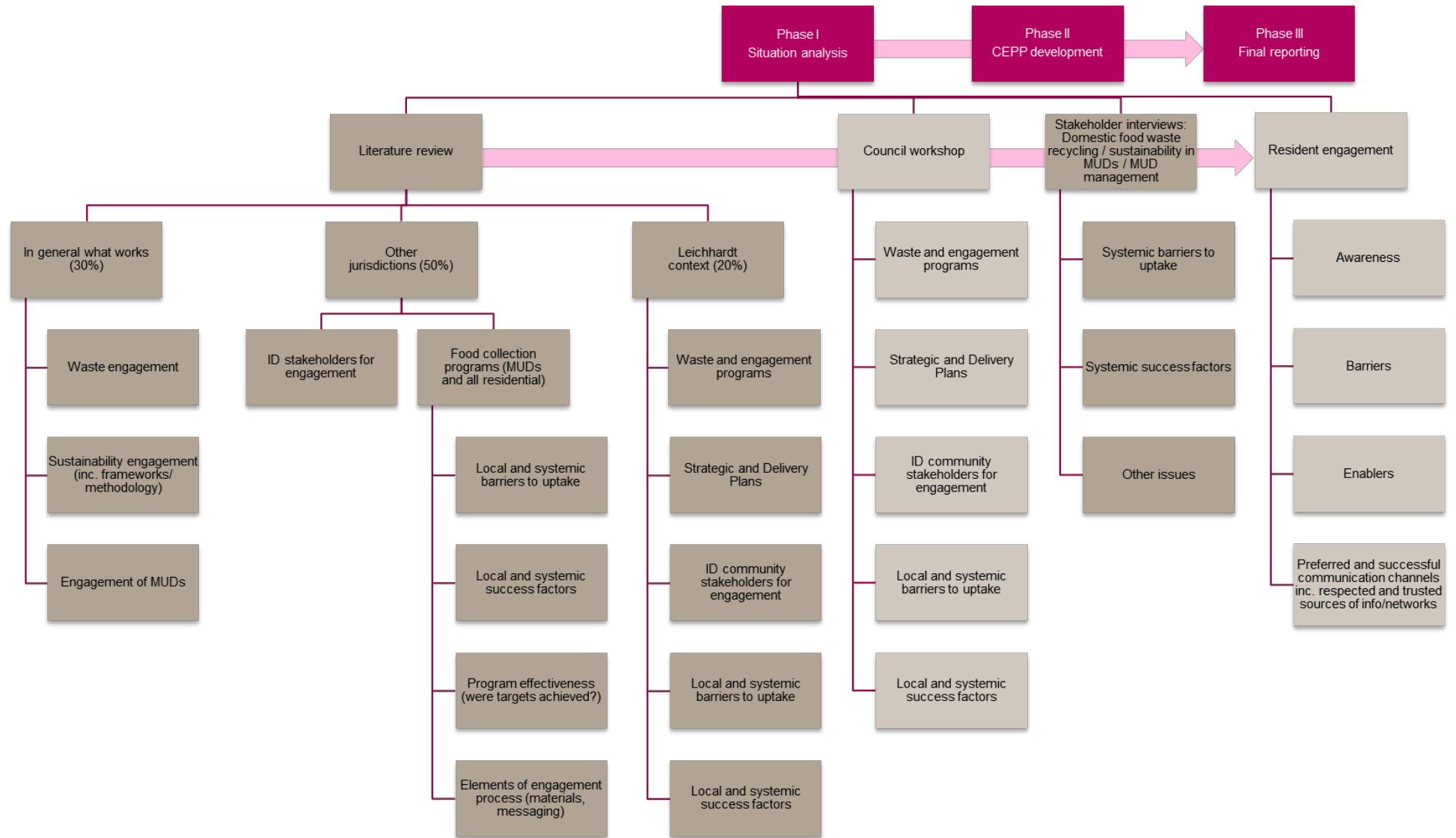


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# Appendices

# Appendix 1 – Stages of the research



## Appendix 2 – LMC Food Waste materials

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The following pages provide examples of the Food Waste Recycling materials produced by Leichhardt Council.

These include:

- **Initial roll out materials**
  - Letter from the Mayor to Body Corporate (including Sign-on form)
  - Letter from the Mayor to Residents of MUDs (including Information Sheet)
  - Educational brochure
- **Current materials**
  - Food Tales newsletter 2011 and 2013
  - Information Sheet 2013
  - Contamination notices (letter and bin sticker)



To The Body Corporate/Site Manager

## **Food Recycling Collection**

Council Ref: F08/00050

Council is writing to you about an exciting initiative that will enable the residents of your unit complex (Multi-unit dwelling or MUD) to reduce waste and greenhouse gases that lead to global warming.

Council would like to work with the site managers or a body corporate representative of your MUD, to facilitate the introduction of a separate food recycling collection. A food recycling collection was trialed for 3 months in 2007 with great success, particularly for MUD's. Around 90% of residents in the MUD's trial said the food recycling system was easy and convenient to use, with the same number of residents noticing a reduction in their garbage. 98% said they would continue using the service if it was introduced in the future. Your MUD may have previously been involved in this trial.

To participate in the food recycling collection, residents will be asked to separate their food organics from the normal garbage. To make it easier for residents to separate their food, Council will provide all residents with a new bin for their kitchen bench top with compostable bags. Residents line the kitchen bin with the compostable bags before carrying them to the common bin bay / room. Council will provide new specially designed food recycling bins with a maroon lid, to the common bin bay / room in your building. Food bins will have stickers to indicate what can go into the bins and all residents will receive a letter and Information sheet prior to the new collection and an educational brochure with the delivery of their new kitchen bins.

On average, around 50% of what ends up in Leichhardt household garbage bins is food waste, which is currently sent to landfill. When food waste (e.g. fruit and vegetables, bread and meat) break down in a landfill, greenhouse gases (which contribute to global warming) and environmentally harmful liquids are generated.

Leichhardt Council wants to work with you to increase the recovery of our organic resources and reduce the impacts of global warming. Please see the attached Information Sheet on how the food recycling collection can work easily in your MUD. If you could also complete the attached Return Sheet indicating how the site Manager or Body Corporate representative could assist in this process.

Thank you for taking the time to provide us with your information and we look forward to your participation in the food recycling collection.

Yours sincerely



Mayor  
Carolyn Allen

# INFORMATION SHEET - FOOD RECYCLING SERVICE

## **What will the food recycling service involve?**

Residents in each unit will be asked to separate their food organics. Council will provide each unit with a kitchen bench top bin, with a year's supply of compostable bags. Residents can line their kitchen bench top bin with the compostable bags before carrying them to the common bin bay area or room.

Council will deliver new bins to the common bin bay area/room in your building. One (or more) of your MUD's garbage wheelie bin (s) in the bin bay room/area will be exchanged for a new specially designed food recycling bin (s), with a maroon lid, for food only. These bins would also include a 'bio-insert' that is a proven technology that assists in the breakdown of material in the bin. No *additional* bins would be needed in the bin bay area/room to introduce this service. Existing garbage bin (s) would be just be swapped for a new food only bin.

## **Will there be any changes to collection days?**

There will be **NO** changes to collection days. Food recycling bins should be placed out at the same time as general garbage bins. The food recycling bins will be collected by a *separate* collection vehicle to the general garbage collection.

## **What educational information will there be to assist us and the residents?**

All units will receive a letter from the Mayor regarding the food recycling collection, with information on the successful trial and expansion of the system to their MUD with an accompanying information sheet ; an educational brochure that will be delivered with the kitchen bench top bins, outlining the types of material that can be placed in the food bin, what would be considered contamination i.e. what should not go into the bin e.g. ordinary plastic bags and plastic wrap etc; and Council's contact numbers for further information or clarification. Other communication tools will include bin bay or rubbish room signs, bin stickers and reminder flyers for resident letter boxes if bins were found to be contaminated.

## **When will the food recycling collection commence?**

Collection of food only bins will commence in the week beginning 1st July 2008. Please place the food bins out at the same time as for your garbage collection.

A food bin (s) will be exchanged for garbage bins during the week of 24<sup>th</sup> June at the time that the garbage bins are emptied during that week. The food bins will have stickers indicating what does/does not go into the food only bins.

Kitchen bench top bins/bags will be also be delivered during the week of 24<sup>th</sup> June with the educational brochure that indicates what does/does not go into the food only bins.

## **How can our site manager/body corporate representative assist?**

There are a number of ways to assist Council Officers to ensure an efficient and smooth introduction to the food recycling collection. Please take the time to fill in our short Return Form attached indicating the types of activities the site manager or body corporate representative can assist with.

For further information please call Ian McCann for bin deliveries/ collection times T: 9367 9319 and Cheryl Walker T: 9367 9227 for educational information. Please see over for details for returning your Information Sheet.

# RETURN SHEET - Implementation of food recycling service

Please complete the details below to assist us in contacting you:

Address of Body Corporate \_\_\_\_\_

Contact Person (s) name and role e.g. Building Mgr:  
\_\_\_\_\_

Contact Telephone Number (s)/ email: \_\_\_\_\_

## INFORMATION NEEDED FOR BIN DELIVERIES – 240L bins & kitchen bins etc

Please place a Y (yes) or N (No) in the boxes accordingly:

### 240L bins

Our MUD has internal bin rooms/bays.....

You will need to contact us to gain access to the bin rooms/bays.....

Our MUD has outdoor bin bays.....

You will need to contact us to gain access to the bin bays.....

### Kitchen bench top bins/bags etc

Our MUD has a central location for you to deliver the kitchen bins/bags & brochure, from where residents could collect them.....

You will need to contact us to gain access for delivery.....

If no to the above, Council staff will require access to the building to deliver the bins/bags to each unit.....

You will need to contact us to gain access to the building.....

If there is a different contact number for access to your MUD for deliveries please place contact details here: \_\_\_\_\_

Your completion of this form is appreciated. You can return the form via email at [ianm@lmc.nsw.gov.au](mailto:ianm@lmc.nsw.gov.au); by fax F: 9367 9275 or T: 9367 9319 by

**15<sup>th</sup> May 2008.**

To The Resident

## **Food Recycling Collection**

Council Ref: F08/00050

Council is writing to you about an exciting initiative that will enable you and the other residents of your unit complex to reduce waste and greenhouse gases that lead to global warming.

Council would like to work with you and your household with the introduction of a separate food recycling collection. To participate in the recycling food collection, you will be asked to separate your food organics from your normal garbage. Council will provide you with a new bin for your kitchen bench top, together with compostable bags to line your new bin, before carrying them to the common bin bay. Council will provide new specially designed food recycling bins, with a maroon lid, to the common bin bay in your building. Council is working with your site manager or body corporate representative, where possible to assist in this process.

A food recycling collection was trialed for 3 months in 2007 with great success, particularly in multi-unit dwellings (MUD's). Around 90% of residents in the MUD's trial said the food recycling system was easy and convenient to use, with the same number of residents noticing a reduction in their garbage. 98% said they would continue using the service if it was introduced in the future. Your MUD may have previously been involved in this trial.

On average, around 50% of what ends up in Leichhardt household garbage bins is food waste, which is currently sent to landfill. When food waste (e.g. fruit and vegetables, bread and meat) break down in a landfill, greenhouse gases (which contribute to global warming) and environmentally harmful liquids are generated.

Leichhardt Council looks forward to working with you to increase the recovery of our organic resources and reduce the impacts of global warming. Please see the attached Information Sheet on how the food recycling collection can work easily in your MUD.

If you would like more information, or assistance with the survey, please contact the Resource Recovery and Waste Services Team on 9367 9227 or 9367 9319.

Yours sincerely



Mayor  
Carolyn Allen



# FOOD RECYCLING COLLECTION



## Information Sheet

### Dear Resident

Please find below a *general* guide on using the new food collection service. You will receive a new kitchen bench top bin, compostable bags and brochure with specific details on what can go into the food collection, in the week beginning 24<sup>th</sup> June. You can start using your new bins during the above week with the first collection service commencing **in the week beginning 1<sup>st</sup> July 2008.**

## WHAT TO DO TO GET STARTED

**Step 1: Use the compostable (cornstarch) bag to line your new aerated kitchen bench top bin.**

**Step 2: Place all your raw and cooked food waste into your kitchen bench top bin.**

*Please note: You will receive a brochure that has a list of what can and what can not go into your new kitchen bench top bin.*

**Step 3: Once full, tie a knot in the top of the bag and place it into your new food wheelie bin with the maroon lid in your bin bay area.**

*Please note: You will probably only need to change your bag every 2 or 3 days.*

**Step 4: The food wheelie bin is to be placed on the kerb AT THE SAME TIME AS THE GENERAL WASTE BIN**

*Please note: The food wheelie bin will be collected by a different truck to your waste bin.*



Place scraps into your kitchen bench top bin.



Tie a knot in the cornstarch bag.



Place bag into the food wheelie bin in your bin bay area or room.



**Please keep this flyer for your reference. You will also receive a *brochure* with your new kitchen bench top bin. The new food wheelie bins in your bin bay/room will also have *stickers* indicating what goes into the food bins.**

**Please see over for more information**



# MORE INFORMATION ON THE FOOD RECYCLING COLLECTION

## **Why is Council doing a separate food collection?**

Removing organic material from landfill saves valuable resources and reduces the negative environmental impacts associated with landfilling. When food waste and other organic material decomposes in a landfill, methane (a potent greenhouse gas) and leachate (an environmentally harmful liquid) are produced, making food and other organic waste, the most important to recycle. The NSW government has set a target for households to 'recover' i.e. reuse or recycle, 66% of their waste. Council's last audit showed that 44% of what is in the garbage bin is food waste. Therefore, targeting food waste provides the best chance to increase our recovery rates and meet the NSW government's target.

## **Isn't it better to compost or wormfarm at home?**

Council continues to encourage home composting and wormfarming. As indicated by Council's most recent audit, there is still a large amount of food ending up in the garbage bin. This may be due to people not composting or worm farming at home (as some do not have the space). Even when people do compost etc at home, in the majority of cases there is still some leftover foods, particularly meat, chicken and fish scraps. Council believes it is important to investigate alternative ways to recover the food waste that is currently in our garbage bins.

## **Where is the food going?**

Your food organics will be processed at Earthpower Technologies Pty. Ltd. at Camelia in Sydney, using an anaerobic digester, which uses bacteria to convert solid and liquid food into high nutrient organic fertiliser and biogas (similar to natural gas). This biogas is then sold into the electricity grid as 'Renewable Energy', otherwise known as green electricity.

## **Why are we using compostable bags provided by Council?**

A majority of residents in the recent food collection trial said that the compostable bag contributed to the convenience (and therefore high level of support) of the food collection system. Residents of MUDs generally have to carry their waste to a centralised location, so providing a bag enables residents to drop the food off on their way out of the building. The bags are fully biodegradable and meet the Australian Standards for biodegradable bags. Ordinary plastic bags are not accepted by the processing facility. Council will provide you with a year's supply of compostable bags (based on the number of bags used by residents during the trial ie 3 bags/week). Extra bags will be made available for purchase from Council's Citizen Service Centre if necessary.

## **What will happen if I put the wrong thing in the kitchen bench top bin?**

Items that cannot go into the kitchen bench top bin are called 'contamination'. Contamination interferes with the anaerobic digestion process and may result in the food you have separated being sent to landfill. If the wrong things get placed into the food wheelie bin, your household will receive a flyer to remind you of what is accepted in the bin.

**If you have further questions about the food recycling collection please phone our Resource Recovery and Waste Services Team on 9367 9227 or 9367 9319.**





# FOOD RECYCLING COLLECTION

Dear Resident

## Congratulations!

In the first 2 weeks of the food collection you have recycled 3tonne of food. This is equivalent to a 3 tonne reduction in greenhouse gases! Using the food bin for all of your food will save space in your rubbish bins, reducing waste to landfill and greenhouse gases that contribute to global warming.

**\*Council will deliver a large roll of compostable bags to all units in early August 2008.**

### It's easy to recycle your food

**Step 1: Use the compostable (cornstarch) bag to line your aerated kitchen bench top bin.**

**Step 2: Place all your leftover raw and cooked food into your kitchen bench top bin.**

*Please note: You will probably only need to empty your kitchen bin every 2 - 3 days.*

**Step 3: Once full, tie a knot in the top of the bag and place it into your food wheelie bin with the maroon lid in your bin bay area.**

**Step 4: The food wheelie bin is to be placed on the kerb AT THE SAME TIME AS THE RUBBISH BIN**

*Please note: The food wheelie bin will be collected by a different truck to your rubbish*



Place scraps into your kitchen bench top bin.



Tie a knot in the cornstarch bag. **Please DO NOT use ordinary plastic bags** – these are not accepted at the recycling facility.



Place bag into the **food wheelie bin** in your bin bay area or room.

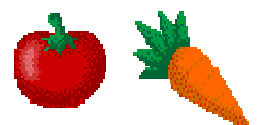


**How do I get more compostable biodegradable bags?**

**Council will deliver a second roll of 150bags in early August 2008**, which will be a full year's supply. A roll of 150 bags will be provided free each year. Any *\*extra* bags will be made available for purchase from Council's Citizen Service Centre if necessary. **Ordinary plastic bags are not accepted by the food processing facility.**

\* Extra rolls of 25 bags can be purchased for \$4.00 (GST inclusive) for the 2008/2009 year.

**Please see over for more information**



# MORE INFORMATION ON THE FOOD RECYCLING COLLECTION

## What happens if unaccepted items go into the food only bin?

Items that cannot go into the kitchen bench top bin or food only bin are called 'contamination' e.g. ordinary plastic bags. Contamination interferes with the anaerobic digestion process and may result in the food you have separated being sent to landfill, or Council having to pay more to the processing facility. If the wrong things get placed into the food wheelie bin, all unit residents will receive a flyer with a reminder of what is accepted in the bin. The bin cannot be collected by the food recycling truck. It will be collected by the garbage truck and will have to go to landfill.

## What can't I put in my Kitchen Bench Top and Food Organics Bin?



**NO recyclable items**  
(glass & plastic bottles & containers, cans, cardboard/paper etc)

**No \*ordinary plastic bags, plastic wrapping or meat trays** (\*Council issued biodegradable bags only)

**No garden organics**

**No textile material**

## What can I put in my Kitchen Bench Top and Food Organics Bin?



**Fruit & Vegetables**

**Dairy Products**

**Meat, Chicken & Fish including delicatessen**



**Bakery & Cereals eg: bread, rice and pasta.**

**Coffee grinds & tea bags, soiled paper towels, serviettes & hair.**

For further information on the food recycling service please visit [www.leichhardt.nsw.gov.au](http://www.leichhardt.nsw.gov.au) under Services, Waste & Recycling or phone the Citizens Service Centre on 9367 9222.



**Congratulations!** By using Council's Food Recycling Service over 400 tonnes of food has been saved from going to landfill!

## Food tales 2013



Available at the Citizen Service Centre or grab an Order Form from Council's website for free delivery!



See over for your easy guide to using Council's food recycling service.

### Recycling your food scraps is easy!

Composting, wormfarming or using a Bokashi bin is an easy way to recycle food at home.

Council sells worm farms, compost bins and Bokashi buckets/mix at the Citizen Service Centre or complete the Compost Bin Order Form for free delivery!

Visit Council's website to see *Leichhardt is Making Compost - it's Easy!* - a step by step guide to make great compost!



### Food recycling service

If you don't have room to compost at home, use Council's food recycling service to recycle your food scraps. All you need is a kitchen bench top bin and compostable bags provided to all units each year.

**Council supplied bags** are fully biodegradable and therefore easily broken down in the food recycling process.

Ordinary plastic bags or 'degradable bags' are NOT accepted by the processing facility.

### Less Leftovers in Leichhardt!

**Almost 40% of what ends up in the household garbage bin is food waste!**

Make the most out of your food and reduce food waste! Visit [www.foodwise.com.au](http://www.foodwise.com.au) or [www.lovefoodhatewaste.nsw.gov.au](http://www.lovefoodhatewaste.nsw.gov.au) for facts, hints and tips on food storing, saving, recipes for leftovers and more!

Visit [www.leichhardt.nsw.gov.au](http://www.leichhardt.nsw.gov.au) or phone Council's Resource Recovery/ Waste Officer on Ph:9367 9222 for more information.

# It's easy to \*recycle your food scraps!



## Step 1

Place your Kitchen Bench Top Bin on your bench top. Line with the biodegradable bag.



## Step 2

Place all your food waste and scraps into your aerated kitchen bench top bin.



## Step 3

Once full, tie a knot in the top of the liner and place it into your maroon lid food recycle bin located in your bin bay area.



## Step 4

The maroon lid food recycle bin is collected each week on the same day as your red lid garbage bin (in a different truck).

\* Food bins are available for units who **share** their garbage bins in a communal bin bay area. Check with your Building Manager who may stock kitchen bench top bins / compost bags.

## What CAN be Recycled in my Kitchen Bench Top Bin?

All types of fruit and vegetables, dairy products, meat (including meats from the delicatessen), chicken, fish, bakery and cereals, rice and pasta; you can also recycle coffee grinds, tea bags and leaves, soiled paper towels / serviettes and hair.



**Please do not place any glass, plastic bottles, containers, cans, paper, cardboard, plastic wrap, meat trays, textiles or ordinary plastic bags in the food bin.**



Visit [www.leichhardt.nsw.gov.au](http://www.leichhardt.nsw.gov.au) or phone Council's Resource Recovery/ Waste Officer on Ph:9367 9222 for more information.

Watch out for your compostable bags in the coming weeks!

# Food Tales

What's happening with food recycling in Leichhardt ?

August, 2010



We are leading the way with food recycling

## Congratulations!

Since the introduction of the food recycling service in Leichhardt Council began in 2007, residents have turned over 260 tonnes of food scraps into resources and saved scraps from landfill. This is great, but we can do better!

### Inside this issue:

What CAN be recycled in your Kitchen Bench Top Bin? 3

What CANNOT be recycled in your Kitchen Bench Top bin. 3

Food for Thought. 4

Kitchen Bench Top Bins & compostable bags 4

Don't have a bin or want to know more? 4

Landfill or compost? 4

It is estimated that in Australia of the 20 million tonnes of waste which goes to landfill each year, 15% or 3 million tonnes is food.

This is the equivalent of 145 kilograms for each of us.

We throw away a total of \$5.3 billion on all forms of food per year. This shocking statistic includes:

- \$2.9 billion worth of fresh food
- \$630 million worth of uneaten take-away food
- \$876 million in leftovers
- \$596 million of unfinished drinks and
- \$241 million of frozen food.

Source 'Wasteful Consumption in Australia', The Australia Institute, 2005.



Recycling food scraps for Leichhardt Council residents is easy!

## Don't waste your food scraps!

The easiest and best way to deal with food scraps is to recycle them by setting up a worm farm or a compost heap at your home.

The next best thing is to place any left over food or food scraps into your Kitchen Bench Top Bin and then into your food recycle bin for collection so they can be recycled.

By recycling food scraps they are turned into a valuable nutrient rich fertiliser and green electricity, thereby making a direct contribution to reducing greenhouse gases and global warming.



## How do we measure up?

The last audit of the household garbage by Leichhardt Council indicated that 44% of what is in the red lid garbage bin is

## What a waste!

The food we waste is the equivalent of throwing one in every five bags of groceries in the bin.

Not only are we wasting lots of money we are wasting the water energy and other resources that went in to producing the food. Food waste in landfills generates methane, a greenhouse gas far more damaging than carbon dioxide.



## Did you know??

- At least half of the food we throw away could have been eaten if it was managed better.
- Only around 15% of our individual environmental impact is through direct use of water and electricity at home. The rest can be traced back to the other goods and services we consume and mostly from the production and distribution of food.

We're on the web [www.leichhardt.nsw.gov.au](http://www.leichhardt.nsw.gov.au)

Printed on 100% post consumer recycled paper

# It's easy to \*recycle your food scraps!

**Recycle all your food scraps in the maroon lid food recycling wheelie bin.**

**The four easy steps to good food recycling are:**



## **Step 1**

*Place your Kitchen Bench Top Bin on your bench top. Line with the compostable bag (as provided by Council).*



## **Step 2**

*Place all your food waste and scraps into your aerated kitchen bench top bin.*



## **Step 3**

*Once full, tie a knot in the top of the liner and place it into your maroon lid food recycle bin located in your bin bay area.*



## **Step 4**

*Place the full compostable bag into your maroon lid food recycle bin.*

*The maroon lid food recycle bin is collected each week on the same day as your red lid garbage bin (in a different truck).*

\* Food bins are available for units who share their garbage bins in a communal bin bay area.



## What CAN Be Recycled in my Kitchen Bench Top Bin?

**Y**ou can recycle all types of fruit and vegetables, dairy products, meat (including meats from the delicatessen), chicken, fish, bakery and cereals, rice and pasta; you can also recycle coffee grinds, tea bags and leaves, soiled paper towels, serviettes and hair in your Kitchen Bench Top Bin.



**“Don’t forget to recycle your coffee grinds, tea bags and tea leaves in your Kitchen Bench Top Bin”**

## What CAN'T Be Recycled in my food scrap Kitchen Bench Top Bin

**D**o not put glass, plastic bottles and containers, cans, paper, cardboard, ordinary plastic bags, plastic wrap, meat trays or textiles in your Kitchen Bench Top Bin.

If you do, these items will interfere with the anaerobic digestion process and result in your food scrap recycling being wasted in landfill!

**“Don’t forget only biodegradable bags can be used in your Kitchen Bench Top bin. These are available from Council’s Citizen Service Centre & libraries”**



## Food for Thought

Make the most out of your food and reduce food waste! These websites can provide useful information to help you:

*Food Wise* - [www.foodwise.com.au](http://www.foodwise.com.au)

This website is part of the 'Do Something' campaign which promotes environmental change. It provides facts about the extent of food waste in Australia and what you can do to prevent this. There are hints and tips on food storing, saving, recipes for leftovers and more.

*Love Food, Hate Waste*-

[www.lovefoodhatewaste.nsw.gov.au](http://www.lovefoodhatewaste.nsw.gov.au)

This NSW Government Department of Environment Climate Change and Water website is a great tool for learning how to prepare perfect portions, save time and money, find loads of recipes, storage tips, food waste information and lots more.



7-15 Weherill Street  
Leichhardt NSW 2040  
[Leichhardt@lmc.nsw.gov.au](mailto:Leichhardt@lmc.nsw.gov.au)  
Ph: 9367 9222  
Fax: 9367 9111

## New bag!

We listened to your concerns & changed the bag!

**Council supplied bags** are 100% compostable vegetable material and strong!

*It is very important that you only use the biodegradable bags available from Council.*

## Kitchen Bench top bins & compostable bags

Kitchen Bench Top Bins were provided to each unit at the introduction of the food recycling service.

The bins (and bags) belong with the unit, the same as other Council provided bins and should be left with the property if you leave.

Council provides 150 compostable bags *free* each financial year. Bags will be delivered to your unit block during August. Please contact your building or site manager (where applicable) to receive your bags.

The compostable bags are fully biodegradable and therefore easily broken down in the food recycling process.

Ordinary plastic bags or 'degradable bags' are NOT accepted by the processing facility.

## Don't have a bin or want to know more ?

Have you recently moved and don't have a kitchen bench top bin?

Like to know more about the food recycling service and how it works?

Check Council's website under Food Recycling or phone Council's Citizen Service Centre on 9367 9222.



### Landfill or Compost?

#### Which do you prefer?

The Leichhardt Council Food Recycling service gives you the choice to recycle your food scraps.

**Please do not waste them.**





Leading the way with

# food recycling

Help us turn your food waste into a nutrient rich fertiliser!



# How do I use my Kitchen Bench Top and Food Organics Bin?



## Step 1

Use the compostable (corn starch) bag to line your new aerated kitchen bench top bin.



## Step 2

Place all your food waste and scraps into your aerated kitchen bench top bin.



## Step 3

Once full, tie a knot in the top of the liner and place it into your new food organics bin with the maroon lid (this will be located in your bin bay area or ask your Body Corporate or Strata Manager)



## Step 4

The food organics bin with the maroon lid is to be placed at the kerb for collection EACH WEEK at the same time as the garbage bins for your unit block.

For more information please call Council

## What can I put in my Kitchen Bench Top and Food Organics Bin?



Fruit & Vegetables



Dairy Products



Meat, Chicken & Fish including delicatessen



Bakery & Cereals eg: bread, rice and pasta.



Coffee grinds & tea bags, soiled paper towels, serviettes & hair.



## What can't I put in my Kitchen Bench Top and Food Organics Bin?



**NO recyclable items**  
(glass & plastic bottles & containers, cans, cardboard/paper etc)



**No \*ordinary plastic bags, plastic wrapping or meat trays** (\*Council issued biodegradable bags only)



**No garden organics**



**No textile material**



## Handy hints for using your kitchen bench top bin

- Your new kitchen bench top bin and the food organics bin located in your bin bay area, are specifically designed to allow air to circulate throughout the bins to prevent odours.
- You could keep the kitchen bench top in the refrigerator or under the bench in a cupboard if you don't want to keep your kitchen tidy on the bench top.
- Keep meat/fish scraps sealed in a container in the refrigerator until the night before collection to avoid odours.
- To clean your kitchen bench top bin, soak in washing up water.
- Add some bicarbonate soda to the bottom of your bins to absorb liquids and any odours.

## Food Recycling – a sustainable alternative

- Around 45% of the waste from Leichhardt household garbage bins is food waste which is currently sent to land fill.
- As food waste and other organic material breaks down in a land fill, greenhouse gases (which contribute to global warming) and environmentally harmful liquid wastes are generated. Diverting this 'waste' from land fill, avoids these environmental impacts.
- By 'recovering' the food organics and making it into a valuable nutrient rich fertiliser and green electricity, you can make a direct contribution to reducing greenhouse gases and global warming.
- If you compost or have a worm farm at home you are already recycling your food! If you do not compost all your food on site, you can place any remaining food waste into your kitchen bin and your food organics bin for collection.

**Contamination Flyer and sticker**

**REMINDER – No plastic or rubbish bags in the food bin please**



Dear Resident

Thank you for participating in your FOOD recycling collection.

**Just a reminder that *ordinary* plastic bags and rubbish bags are not accepted in the food bin.**



Please only use the compostable *biodegradable* bags supplied by Council

By using your food bin you are reducing greenhouse gases that lead to global warming



Thank you for your cooperation. If you need biobags or have further questions about the food recycling collection please visit Council's website [www.leichhardt.nsw.gov.au](http://www.leichhardt.nsw.gov.au) & search *food recycling* or phone the Citizens Services Centre on 9367 9222.



### What can't I put in my Kitchen Bench Top and Food Organics Bin?



NO recyclable items (glasses & plastic bottles & containers, cans, cardboard/paper etc)	No *ordinary plastic bags, plastic wrapping or meat trays (*Council issued biodegradable bags only)	No garden organics	No textile material
---	---	--------------------	---------------------

**NO X**



### What can I put in my Kitchen Bench Top and Food Organics Bin?



Fruit & Vegetables



Dairy Products



Meat, Chicken & Fish (including delicatessen)



Bakery & Cereals (eg bread, rice and pasta)



Coffee grinds & tea bags, soiled paper towels, newspapers & etc

**YES**



Council delivered a large roll of 150bags to all units in Aug. 08 & will deliver a roll each Aug. free of charge. Small rolls of biobags are available at Council's Citizen Service Centre & Leichhardt & Balmain libraries ( \$4.00/roll as of 2008/09.



**ATTENTION RESIDENT!**

**THIS BIN IS FOR FOOD ONLY**  
**Maroon lid bin**

Your food bin has **not** been collected this week.

Please remove unacceptable items from your bin & phone Leichhardt Citizen Services Centre on 9367 9222 within 24hours to arrange for collection.

**X** **REMINDER – NO ordinary plastic or rubbish bags in the food bin please.**

*Thank you for recycling your food to save greenhouse gases*





Contamination Flyer and sticker

**REMINDER – No plastic or rubbish bags in the food bin please**



Dear Resident

Thank you for participating in your FOOD recycling collection.

Just a reminder that *ordinary* plastic bags and rubbish bags are not accepted in the food bin.



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What can't I put in my Kitchen Bench Top and Food Organics Bin?






**NO X**



**NO** recyclable items (glasses & plastic bottles & containers, cans, cardboard/paper etc)

**NO** ordinary plastic bags, plastic wrapping or meat trays (\*Council issued biodegradable bags only)

**NO** garden organics

**NO** textile material

What can I put in my Kitchen Bench Top and Food Organics Bin?



**YES**








Council delivered a large roll of 150bags to all units in Aug. 08 & will deliver a roll each Aug. free of charge. Small rolls of biobags are available at Council's Citizen Service Centre & Leichhardt & Balmain libraries (\$4.00/roll as of 2008/09).

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**THIS BIN IS FOR FOOD ONLY**  
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Please remove unacceptable items from your bin & phone Leichhardt Citizen Services Centre on 9367 9222 within 24hours to arrange for collection.

X

**REMINDER – NO ordinary plastic or rubbish bags in the food bin please.**



Thank you for recycling your food to save greenhouse gases



## Appendix 3 – Recommendations from initial service review

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The following is an excerpt from the *URM – Food Recycling Service Review*.

### *RECOMMENDATION:*

*As this is a new service type, and requires a change in behaviour an ongoing education program should be developed to:*

- *procedure for new residents [sic]*
- *increase willingness to participate*
- *encourage continued participation*
- *increase awareness of the service.*

*The education program should be two pronged and staged.*

### **Group 1 – New residents and existing residents already participating:**

*It is recommended that contact, at least quarterly, should be made to educate new residents and to re-affirm, reinforce and re-educate existing residents using the service (i.e. how much is being diverted from landfill, the important of not using supermarket plastic bags, etc).*

*At this time supplies of bins and bags could be replenished if necessary.*

### **Group 2 – Residents who don't want to use the service:**

*It was revealed by those interviewed that when the service was first introduced most residents participated but stopped using the service due to concerns over odour and insects in their kitchen and odour in the 240 litre collection bins. The need to wash and deodorise bins weekly was seen as disadvantage of the service. The odour problems have increase in the summer months especially as many bin bays are in the sun.*

*Our early investigations in this regard of countries with successful food recycling services, e.g. Finland are situation at a latitude of 64° north (cold) versus Australia at 30° south (hot). Other services in Australia include garden organics.*

*On going education campaign should be conducted to encourage this group to participate.*

*We would also recommend the possible investigation of bin manufacturers regarding the development of a bin more suited to the collection of food (eg better seals, build in [sic] deodorising system).*

~~~~~

### *Appendix 3*

#### *Recommendations:*

#### **Education**

- *Ongoing quarterly (or more) updates on*
  - *How to access the food collection service*
  - *Re-education/motivation/congratulations for residents*



**New residents**

- Existing Community information kit – (Resource recovery and waste brochure) to be used with new DL insert (to be developed) with simple message on how to get on board the food recycling service, e.g. “Did you know Council has a food recycling service for units etc – phone XXX” etc
- Existing brochure – ‘Leading the way with food recycling’ to be updated and delivered at same time as bin/bags (see below for changes)

**Ongoing education on the food service**

- At least quarterly to all residents mail-out on food service using existing Resident Information Sheet OR use resources below for this, i.e. news
- Regular information on the food recycling collection in:
  - Mayoral column; and as separate advertisements
  - In Council’s quarterly newsletter
  - Council’s Website:
    - to include a section on the resources, e.g. the Food recycling poster etc but add a link the DECC’s standard signs website to enable strata and Building Managers to make up their own signs using standard images
    - Place information in Latest News section on the food collection for MUDs
  - Develop a logo to brand the food recycling service
  - Send a flyer with any repeat bag deliveries, e.g. Resident Information Sheet wrapped around them.

**Large MUDs, e.g. Balmain Shores**

- Stock of bench top bins/bags to be on site if possible
- Contact of Building/Strata Managers quarterly to check stock/education information etc
- Maintain database of Strata/Building Manager
- Forward food updates from Council’s quarterly newsletter or column information for us in individual MUD newsletters and websites where applicable
- MUD Expo – on site with, e.g. sausage sizzle and information stand re the food collection service.

**Process and systems for bench top bin/bags**

- 1<sup>st</sup> contact is Citizen Service.
- Orders for bench top bins and bags via ‘GarbageMaster’.
- Orders off GarbageMaster reviewed on Fridays by I & SD administration. Orders printed out and given to Waste Supervisors on Mondays. Delivery occurs asap that week by Depot staff.
- Discuss potential for light duties staff to deliver and spend short time with resident re how it works etc
- Proforma feedback/question sheet for Waste Inspectors to take with bin/bag delivery
- Send a flyer with any repeat bag deliveries, e.g. Existing resident Information Sheet wrapped around them.
- Trial of Sulo Organics 240L/140L bins with modified insert
- Follow up site visits to URM education site visits
- Source solutions for bin odours
- Advertise on fact sheet/website where to source odour solutions for resident purchase



## Appendix 4 – Resident contact process

**Figure 18: Process for contacting residents to invite them to interview – to ensure clear communication about research purpose, expectations and the decision to interview, as well as to provide them with written information about the food collection service**

