



BEST WASTE PRACTICES IN MULTI-UNIT DWELLINGS

POST-INTERVENTION FINAL REPORT

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Executive Summary

The Best Waste Practices in Multi-unit dwellings (MUDs) project is delivered by Sustainability Victoria on behalf of the Victorian State Government. It is led and facilitated by Reground and is a collaborative venture involving 10 councils. The project is delivering a waste infrastructure and education intervention program at 60 MUDs across the 10 participating councils and aims to divert waste from landfill, decrease contamination and increase recycling. This project consisted of three main phases:

- Phase 1: pre-intervention
- Phase 2: interventions
- Phase 3: post-intervention evaluation

This report outlines the process of all three phases, presents a comparison of data collected during the pre and post-intervention phases, and discusses the key findings and learnings from the project overall.

Key data findings:

- **Most popular stream:** The clothing stream had the highest rates of installation, with 21 MUDs installing a clothing bin as part of the program. This installation and the ongoing collections for this stream were free.
- **Stream utilisation rate:** The stream utilisation rate (percentage fullness of the bin) decreased for all streams post-intervention except for glass and soft plastic, which saw a large increase in utilisation rate.
- **Weight and volume of waste materials:** There was no significant difference in the total weight and volume output from MUDs between the pre and post-intervention audits. However, the distribution of waste did change, with an increase across the recycling streams.
- **Contamination rates:** Overall, for the majority of recycling streams contamination rates saw a decrease or stayed the same between the pre and post-intervention audits. However, contamination did increase slightly for mixed recycling and e-waste.
- **Resources lost:** across all MUDs, 89% of general waste was considered recyclable material following the post-intervention audit, which could have been diverted from landfill. This increased from 87% following the pre-intervention audit at the start of the program. FOGO in the general waste stream increased at half of the MUDs who installed FOGO bins as part of the program.
- **Resident survey:** Overall residents' self-reported understanding of how well they understood the benefits of recycling and what materials go into what stream increased.
- **Resident feedback:** Pre-intervention common issues residents experienced were that there were not enough recycling options, other residents were not using the bins properly and bins were overflowing. Post-intervention the percentage of respondents with these common issues had decreased overall.

Key learnings and recommendations:

- **The impact of signage:** there was no statistical difference between the contamination rates when comparing the impact of Sustainability Victoria signage to council signage used in the project.
- **Benefits of waste champions:** having engaged OC committee members, OC managers, facilities staff or residents can have a huge impact on how the MUD progresses with moving towards best practice waste management. These people are key players in advocating for more recycling streams and better education for their building.
- **Financial barriers:** Based on OC committee and management feedback, financial concerns seemed to be a recurring barrier for OC committees when deciding whether or not to implement recommendations for new streams.
- **Lack of transparency and resident distrust in waste contractors:** The levels of transparency between waste contractors varied significantly, particularly around collection cost structure and the end destinations of waste and recycling materials. Overall, residents displayed a high level of distrust and dissatisfaction in their waste contractors, with at least 10 instances of residents reporting seeing their recycling collected in the same truck as general waste and many reporting no faith in the recycling system as a whole.
- **Installation learnings:** Using cloth-tape for floor markings works well for indoor waste areas, however, painted floor markings would be a better suited option for outdoor waste areas. Signage should be attached with double-sided tape or liquid nails depending on the surface and weather exposure of the waste area. Clothing bins can work well in settings outside the waste area (eg. a carpark or foyer), but should be in a secure place to avoid looting issues. To reduce issues relating to smell, FOGO bins should be cleaned regularly and garden organics added where possible.

Future requirements:

- **Best practice waste and recycling digital platform:** This project has highlighted that there is a growing need for a live and up to date resource that MUD stakeholders can access to receive specific waste management support. This platform should include a resource that has the ability to highlight the private contractors that are verified in being able to offer best practice waste and recycling management.
- **A tailored waste collection and waste management support service, targeted to MUDs:** This service needs to be consistent, provide as many streams as possible (mixed recycling, cardboard and paper, FOGO, glass, soft plastic, clothing, e-waste, batteries, hard waste) and be able to understand how to educate residents to use each of these streams effectively. Importantly, this service needs to be able to cater for all MUDs, no matter what their MUD typology and be able to provide transparent and data-backed user-reporting to ensure trust in the system.

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1. Background

The Best Waste Practices in Multi-unit dwellings (MUDs) project was delivered by Sustainability Victoria on behalf of the Victorian State Government. It is led and facilitated by Reground and is a collaborative venture involving the following councils:

- City of Stonnington
- City of Yarra
- City of Melbourne
- City of Greater Geelong
- Maribyrnong City Council
- City of Port Phillip
- Merri-bek City Council
- Glen Eira City Council
- Bayside City Council
- Darebin City Council

The project delivered a waste infrastructure and education intervention program at 60 MUDs across the ten participating councils, with the aim of diverting waste from landfill, decreasing contamination in recycling streams and increasing recycling. A core focus of the project was educating residents on waste avoidance and minimisation and on keeping resources out of landfill. The project has also produced guidance material based on the interventions used, with the intent for these Best Waste Practices to be widespread and scalable.

This report presents Phase 3: final findings from the project, including comparisons from the pre and post-intervention data alongside overall project learnings.

Glossary

Multi-unit Dwellings (MUDs): a property is a multi-unit dwelling if there are multiple residential dwellings existing on the same block; for example an apartment building, townhouses or unit blocks. For this project, the additional criteria of having one or more shared waste spaces (where bins are kept communally for use by multiple residents) was applied.

Owners Corporation (OC) committee: a group of people elected by the owners in the MUD to represent and make decisions on behalf of the building.

Owners Corporation (OC) manager: appointed by the OC committee to assist in carrying out functions of facilitating the OC committee and managing common property.

Waste Champion: an engaged resident, owner-occupier, OC manager or facilities/building manager. Sometimes waste champions are self-identifying, sometimes they are dubbed waste champions as a result of being actively involved in the waste and recycling processes for their building.

Best waste practice: a set of evolving educational and infrastructure techniques and methods used at MUDs that build on best waste practices guidelines.

Intervention: a change or action to support the education campaign or overall better waste behaviours.

Recycling streams: everything that is not sent to landfill, covering all recovery streams, including mixed recycling, cardboard and paper, Food Organics and Garden Organics (FOGO), e-waste, glass, clothing and textiles and soft plastic.

Contamination: can be either a resource disposed of in the incorrect stream (such as a plastic food container in the glass recycling stream) or an unrecyclable item in the correct stream (such as food-contaminated packaging in the mixed recycling stream)

2. Project objectives

This project aimed to achieve the following:

- reduce waste to landfill
- increase recycling rates (the percentage of waste at the building that is recycled)
- add new recycling streams (as this has been demonstrated to reduce contamination and increase recycling rates)

3. Method

This project consisted of three phases (Figure 1):

- Phase 1: pre-intervention
- Phase 2: interventions
- Phase 3: post-intervention evaluation



Figure 1: Phases of the Best Waste Practices in MUDs Project

All three phases have now been completed and the methodology from each stage is outlined below. Specific time periods for each phase are outlined in appendix I.

Phase 1: Pre-intervention

Visual waste audit

In Phase 1, Reground conducted recruitment, confirmed participants, gathered data on their existing waste systems and conducted initial site visits and visual waste audits at each site. In addition to input from residents and staff on-site, these audits captured data pertaining to pre-intervention levels of:

- landfill diversion
- resource recovery rate of all recycling streams
- contamination rate of all recycling streams
- types of contamination in all recycling streams
- rate of resources lost in the general waste stream
- types of resources lost in the general waste stream
- stream utilisation rates.

Council and Reground agreed upon sorting a sample of waste at each site to determine material composition of a stream, identify contaminants and missed recyclables. This data (along with resident input) formed the foundation of Reground's activities at each site.

The volume of waste samples per MUD type is outlined below:

Table 1: waste samples for MUD types

MUD Typology	Percentage of waste audited	Minimum volume
Low-rise MUDs up to four (4) residential storeys	30%	120L per stream
Medium to high-rise MUDs more than four (4+) residential stories	20%	240L per stream
Mixed-use developments MUDs in buildings that also include commercial properties	20%	240L per stream

For this waste sample, audit teams:

- recorded the volume and percentage fullness of each bin on site
- weighed bins using wheelchair scales
- sorted waste, including opening bagged waste and categorising materials out on a tarp
- recorded the presence and quantity of contamination (including bagged recycling and general waste) in recycling streams

- recorded the type and quantity of materials in each bin, in accordance with the following material categories:
 - paper
 - cardboard
 - aluminium & steel packaging
 - rigid plastic
 - glass
 - container deposit scheme (CDS) eligible items
 - soft plastic
 - coffee cups
 - e-waste & batteries
 - food waste
 - garden waste
 - food contaminated packaging
 - bagged recycling
 - polystyrene
 - nappies & sanitary items
 - hygiene & hazardous items (e.g. masks, kitty litter, COVID-19 tests)
 - hard waste
 - clothing
 - other textiles
 - other recycling
 - other general waste.

Only materials present at 5% levels or higher were recorded. The Reground project team captured photos at each site inspection and visual audit.

Reground did not remove waste from sites during audits. Once audited, materials were placed back in bins for regular collection. Each audit was scheduled with consideration of collection days and MUD availability and access. Audits were completed no more than two days prior to collection to ensure sufficient waste would be present to yield useful data.

Site assessment & stakeholder engagement

Reground conducted site assessments at all sites during visual audits to gather qualitative data. This included a review of the waste area and current infrastructure, current waste contracts and collection frequency, bin room functionality, and potential for future installation of more bins. These assessments captured photos and observations of the waste area, available kerbside space, and any other relevant spaces.

During the site assessment, the Reground project team aimed to make contact with at least one resident per visit, or another relevant stakeholder (such as the building manager) where this was not possible. During this interaction, Reground discussed the existing waste system and behaviours and gained insights on any ongoing issues as well as residents' hopes, goals and concerns regarding waste.



These observations were recorded at visual audits in the data collection sheet. This observational data, alongside quantitative data captured, helped inform interventions.

Pre-intervention survey:

Prior to installation, a pre-intervention survey was sent to residents via the OC manager and/or the OC Committee. This survey included questions on:

- residents' understanding of waste and recycling practices
- residents' degree of interest in additional recycling streams and increased waste separation
- issues that residents face regarding waste management and recycling

Phase 2: interventions

Reground followed the below process with OC committees to approve the new installations:

Table 2: Approval process between Reground and MUD stakeholders for changes to waste room.

Step	Process
1	After completing the visual audits and initial waste area assessment, the Reground team submitted individual recommendations to the OC manager and/or OC committee. These were broken down into priority focus areas, high priority streams included FOGO, whereas clothing bins were listed as lower priority. This was to help decision makers prioritise what streams they should focus on getting in first, based on the potential for the most resource recovery impact.
2	Each property had a minimum of one month to review the intervention recommendations.
3	The OC committee/manager came back to Reground with what they were willing to approve for installation.
4	Reground assisted the OC committees and managers to liaise with waste providers to have new streams installed. For example, this could look like organising a clothing bin to be installed with ongoing collections and access to the property scheduled.
5	Reground returned to each property* to install new streams, Sustainability Victoria signage (used for all Councils except for Stonnington & Glen Eira who used their own signage), floor markings and bespoke signage where issues were reported, such as hard waste management.
6	At each installation Reground also installed a sign with a link and QR code inviting residents to report any feedback and issues. Appropriate actions were taken to address any issues, by either communicating with digital resources for the property or by completing another site visit to the MUD if required.

**One property in the City of Melbourne did not receive the installation of new signage or streams as part of the intervention period; this property instead wanted to keep the signage installed by their waste contractor during the same period.*

Phase 3: post-intervention evaluation

Phase 3 involved coming back to complete the follow-up visual audit at each property, using the same method used in the pre-intervention audit during Phase 1. The purpose of this phase was to measure the impact of any changes and identify further areas for support or refinement. Where possible, the MUDs were visited on the same day as they had been pre-intervention; typically the day prior to collection when the bins were most full.

Post-intervention survey:

The post-intervention survey was distributed to residents via OC managers and/or committees during the same period as post-intervention audits were completed. The post-intervention survey featured the same questions as the pre-intervention survey, with an added question around the introduction of Victoria's container deposit scheme (CDS) and how likely residents would be to engage with this program. The questions asked in this section can be found in section VIII. Resident Survey Results.

4. Project data

The data reflects our findings across pre and post-implementation visual audits, site assessments and resident surveys from all three phases.

It should be noted, the data set included multiple factors across the 60 MUDs which could influence the data. This includes:

- For some MUDs the Pre and post-intervention audits were conducted at different times of the year.
- Due to scheduling requirements for the visual audits, audits were completed either 1-2 days prior to the waste being collected.

I. Stream type breakdown

Post-intervention all 60 MUDs had general waste and mixed recycling present. Over a third had FOGO and clothing donation bins in place and at least two MUDs had soft plastic and battery bins installed (Figure 3). The clothing bin was the most installed bin in MUDs with 21 installations occurring during intervention (Figure 2). This was followed by FOGO (at nine MUD installations) and cardboard & paper (at five MUD installations).

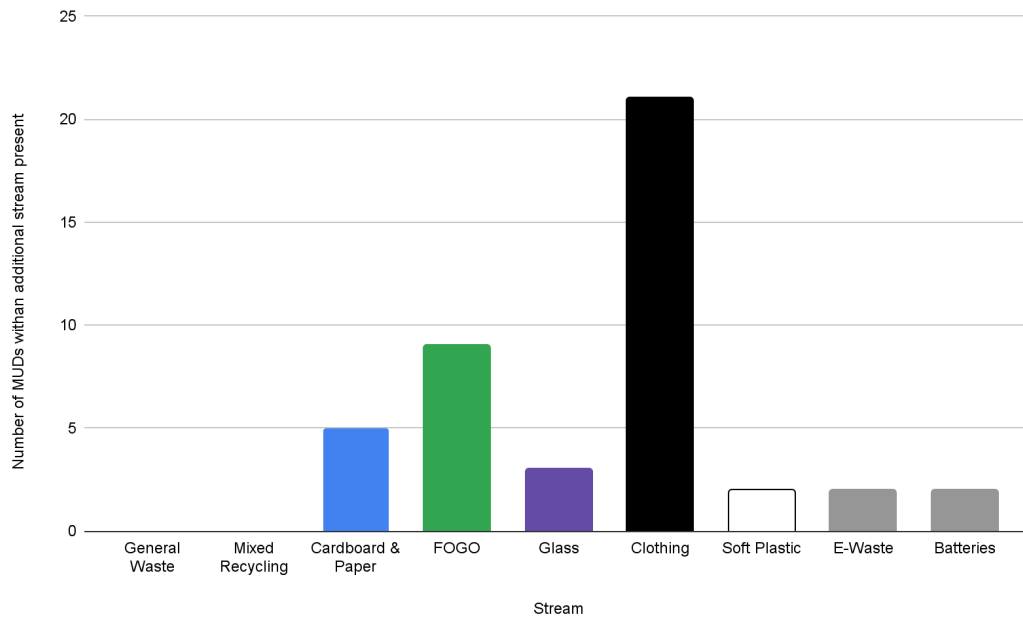


Figure 2: Number of MUDs who added additional recycling streams during the program intervention period

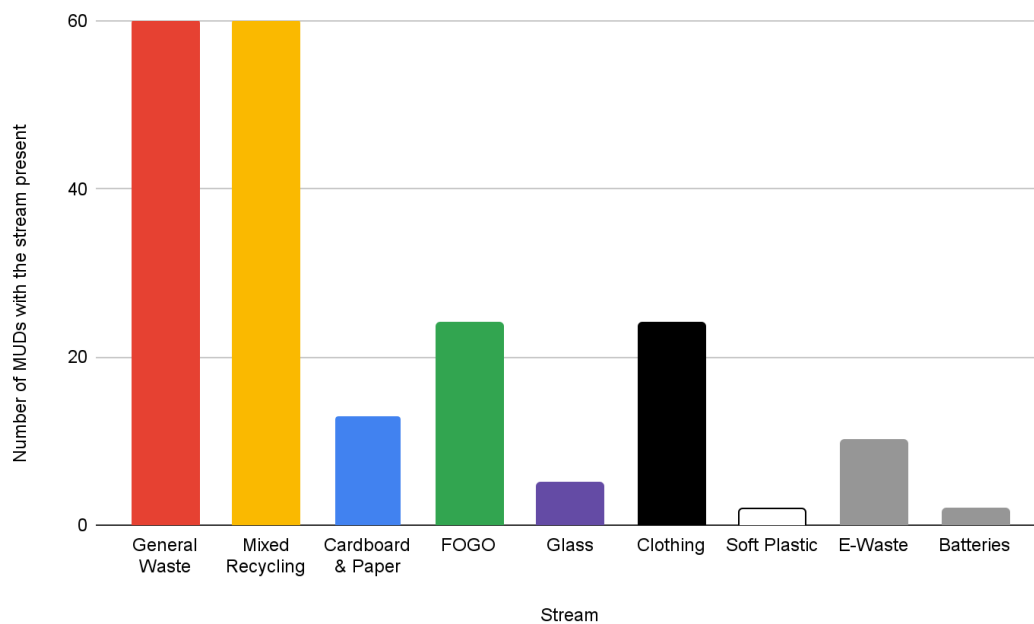


Figure 3: Number of MUDs with each stream present post intervention'

II. Stream utilisation rate

Stream utilisation rate refers to the percentage fullness of the bin on the day of inspection, that is, how much waste is present in each stream. The stream utilisation rate decreased for all streams post-intervention except for glass and soft plastic which saw a large increase in utilisation (Table 3).

It should be noted for e-waste and textiles streams, collections can be irregular or ad hoc. Where possible, the Reground project team identified and accounted for the time elapsed since the last collection of each stream, however, where this cannot be determined the accuracy of utilisation rate is reduced.

Table 3: Stream utilisation rates for pre- and post-intervention

Streams	Stream utilisation rate pre-intervention	Stream utilisation rate post-intervention
General Waste	61%	46%
Mixed Recycling	67%	46%
FOGO	51%	33%
Cardboard & Paper	4%	42%
Glass	13%	70%
Soft Plastic	N/A*	48%
E-Waste	87%	49%
Textiles	76%	40%

*Where new streams were introduced as part of the project, pre-intervention utilisation rates are unavailable.

III. Stream weight and volume data

The weight and volume of materials audited pre and post-intervention are broken down into each stream (Table 4). Weight is referring to the net weight of the bin's contents, and volume is referring to the amount of waste volume present on the day (as a calculation of percentage fullness multiplied by actual volume present).

The available bin volume increased significantly post-intervention, as a result of more bins being added in as result of the project. However, the amount of waste MUDs were disposing of post-intervention remained similar to pre-intervention levels or showed a slight decrease (Table 4).

When comparing pre and post-intervention audits:

- mixed recycling and e-waste saw a decrease in both weight and volume
- FOGO increased in weight but decreased in volume
- cardboard and paper, glass, soft plastic and textiles all increased in weight and volume
- general waste also saw a decrease in weight and volume in the post-intervention audit.

Table 4: Materials audited pre and post-intervention

Stream	Pre-intervention		Post-intervention		Change in weight (kg)	Change in Volume (L)
	Weight (kg)	Volume (L)	Weight (kg)	Volume (L)		
General waste	6,781	99,232	6,364	79,556	-417	-19,676
Mixed Recycling	3,265	93,604	2,471	71,428	-794	-22,176
FOGO	674	6,306	873	4,639	199	-1,667
Cardboard & Paper	71	2,907	165	6,303	94	3,396
Glass	3.6	62	76	837	72.4	775
Soft Plastic	0	0	7.9	268	7.9	268
E-Waste	332	2,562	224	1,584	-108	-978
Textiles	172	3,006	450	4210	278	1,204
Total: all streams	4,518.07	108,447	4,266.42	89,269	-251.65	-19,178

IV.Stream material breakdown

Figures 4-10 break down the materials in each stream by percentage volume. The chart on the left for each figure shows the pre-intervention profile whereas the chart on the right displays the post-intervention profile.

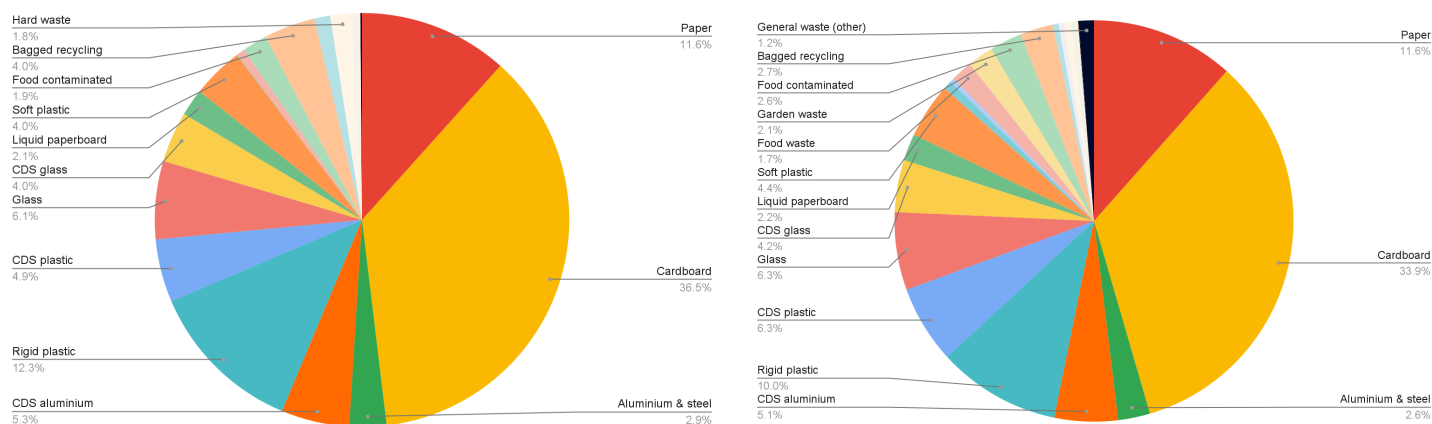


Figure 4: Percentage volume of materials found in the mixed recycling stream pre (left) and post-intervention (right)



Figure 5: Percentage volume of materials found in the FOGO stream pre (left) and post-intervention (right)

The materials with less than 4% have no label, in the FOGO stream pre-intervention these materials were food-contaminated recyclables, cardboard and aluminium & steel packaging (Figure 5). In the post-intervention these materials were aluminium & steel packaging, CDS aluminium, rigid plastic, CDS plastic, glass, CDS glass, liquid paperboard and bagged recycling (Figure 5).

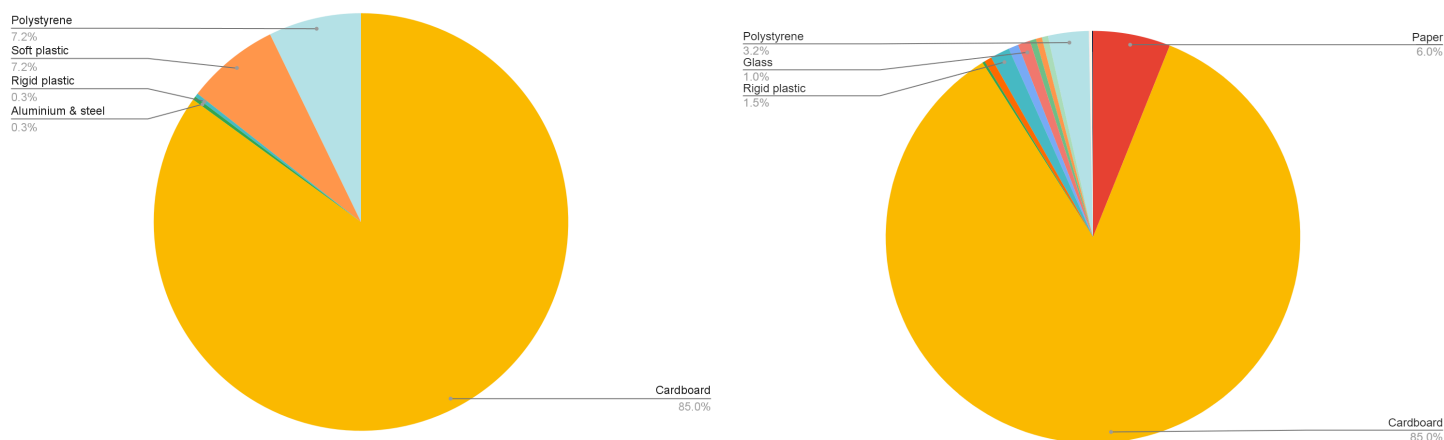


Figure 6: Percentage volume of materials found in the cardboard & paper stream pre (left) and post-intervention (right)

The materials with less than 4% have no label, in the post-intervention for cardboard & paper the unlabelled materials consisted of aluminium & steel packaging, CDS aluminium, rigid plastic, CDS plastic, liquid paperboard, soft plastic, food contaminated recyclables, hygiene & hazardous and hard waste (Figure 6).

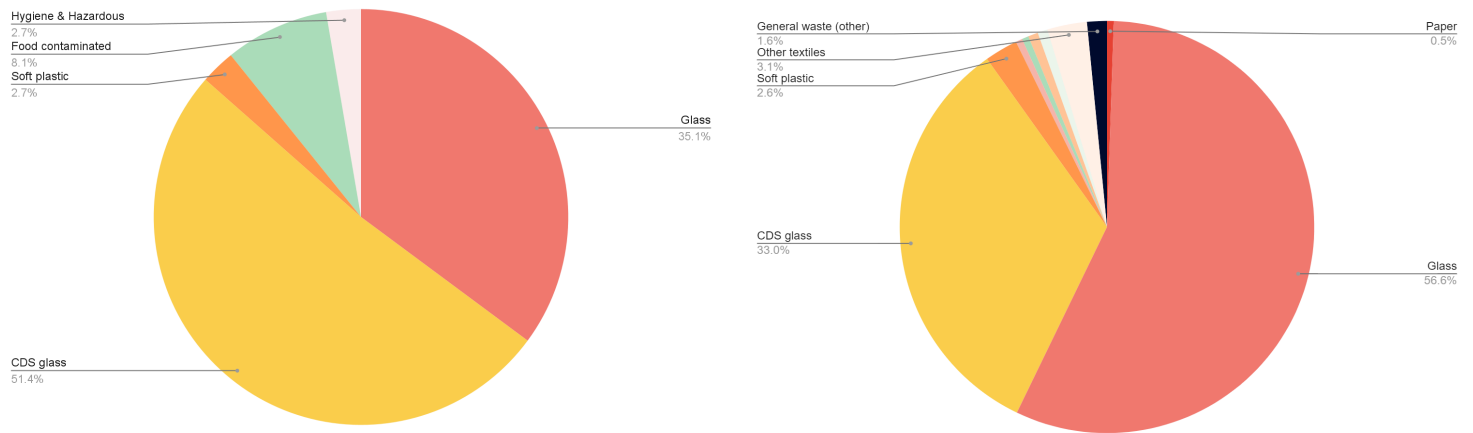


Figure 7: Percentage volume of materials found in the glass stream pre (left) and post-intervention (right)

The materials with less than 4% have no label, in the post-intervention glass stream the unlabelled materials were food waste, food contaminated recyclables, bagged recycling and clothing (Figure 7).

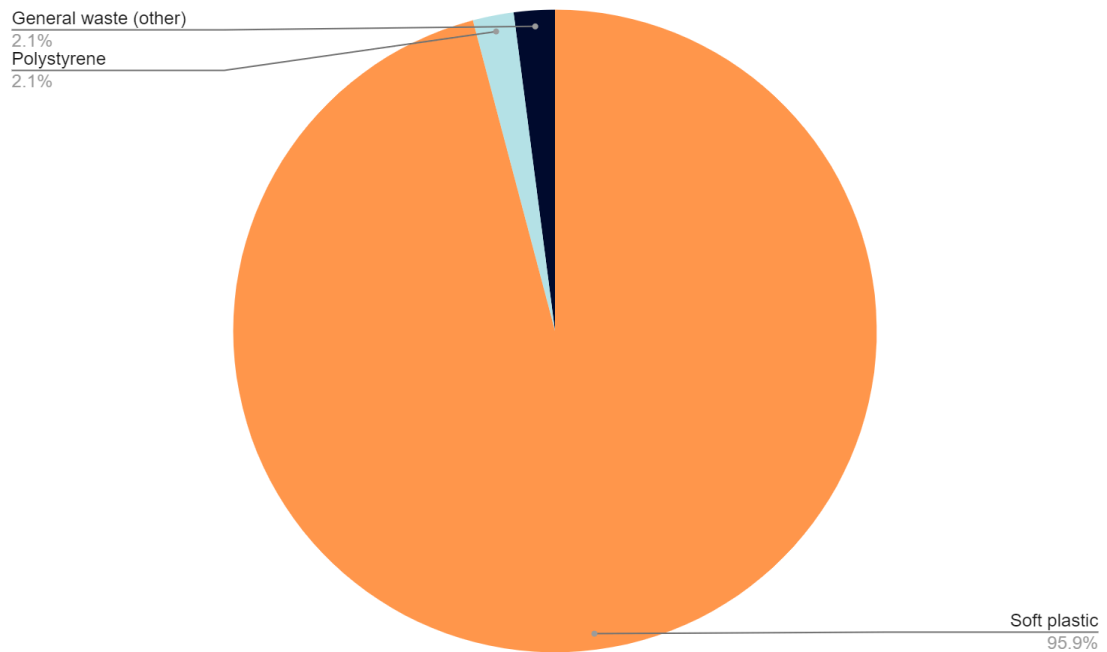


Figure 8: Percentage volume of materials found in the soft plastic stream post-intervention



Figure 9: Percentage volume of materials found in the e-waste stream pre (left) and post-intervention (right)

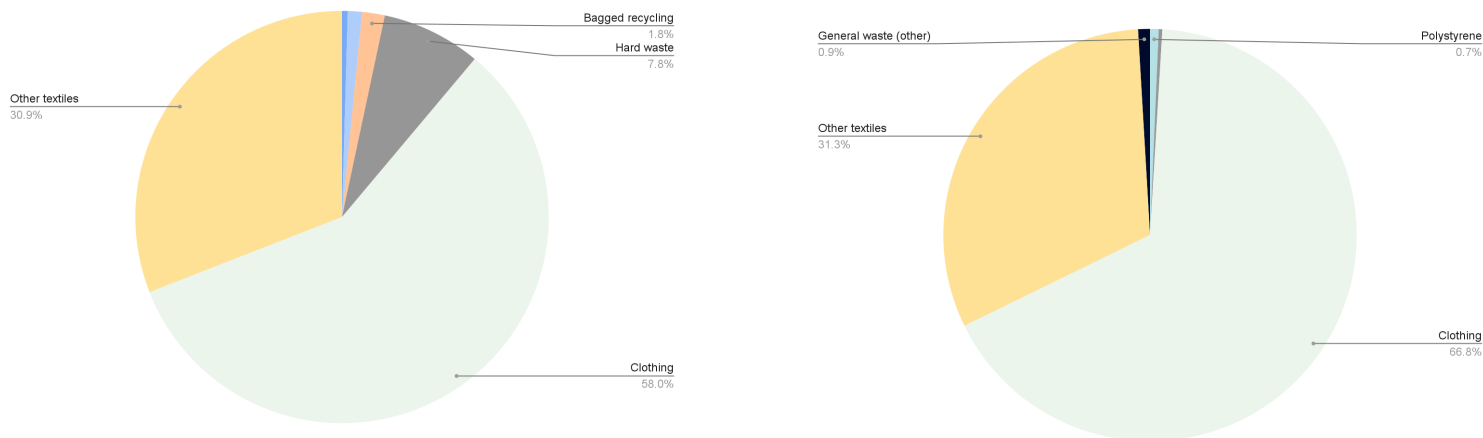


Figure 10: Percentage volume of materials found in the textiles stream pre (left) and post-intervention (right)

V. Contamination rates per recycling stream

Contamination rate refers to the percentage of materials considered contamination in each stream. Overall the contamination rate decreased post intervention (Table 5).

Mixed recycling, FOGO and e-waste showed an increase in contamination rates. The key contaminants found were similar pre and post-intervention for most streams. For a full breakdown of which materials were classified as contaminants for each stream, see Appendix II.

Table 5: Contamination rates and key contaminants for the pre and post-intervention audits

Stream	Pre-intervention		Post-intervention	
	Contamination Rate	Key Contaminants	Contamination Rate	Key Contaminants
Mixed Recycling	16.5%	Bagged recycling Soft plastic	17.4%	Soft plastic Bagged recycling Food contaminated recycling
FOGO	1.9%	Paper Bagged recycling	4.1%	Soft plastic Cardboard & paper Other*
Cardboard & Paper	30.7%	Polystyrene Soft plastic	13.6%	Polystyrene Rigid plastic
Glass	19.9%	Food contaminated recyclables Soft plastic	10.3%	Soft plastic Other textiles
Soft Plastic	N/A	N/A	4.1%	Polystyrene Other*
E-waste	9%	Hard waste	18.4%	Hard waste Other textiles
Textiles	74.6%	Hard waste Bagged recycling	2.5%	Polystyrene Hard waste Other*
Average across all recycling streams	13.4%	Bagged recycling Soft plastic Hard waste	12.7%	Soft Plastic Bagged recycling Food contaminated recycling

*Other refers to any general waste that was not included in our 21 categories; we recorded common types, and found that:

- In the FOGO stream, paper napkins were a frequent contaminant.
- 'Other' in the soft plastic stream was mainly mixed aluminium.
- Finally, 'other' in the textile stream was a large mix of items ranging from wood to bagged general waste.

VI. Resources lost in the general waste stream

Table 6 presents the weight and volume of materials audited in the general waste stream pre and post-intervention. Across all MUDs the rate of resources lost in general waste was 87% pre-intervention and 89% post-intervention.

This indicates that post-intervention 89% of materials found across all MUDs, or 5664 kg of waste, currently found in the general waste are considered recyclable and can be diverted from landfill. Figure 11 presents a breakdown of these materials.

Table 6: Weights & volumes of materials audited in general waste stream pre and post-intervention

	Pre-intervention	Post-intervention
Weight (kg)	6,781	6,364
Volume (L)	99,232	79,556
Rate of resources lost	87%	89%

Resources lost refers to the materials placed in the general waste stream that could have been recycled. In both the pre and post-intervention audits food waste was the largest resource lost to general waste (Figure 11).



Figure 11: Percentage volume of resources lost in the general waste stream pre (left) and post-intervention (right)

VII. Cross council comparisons

The below graphs show data findings as a comparison between the ten councils.

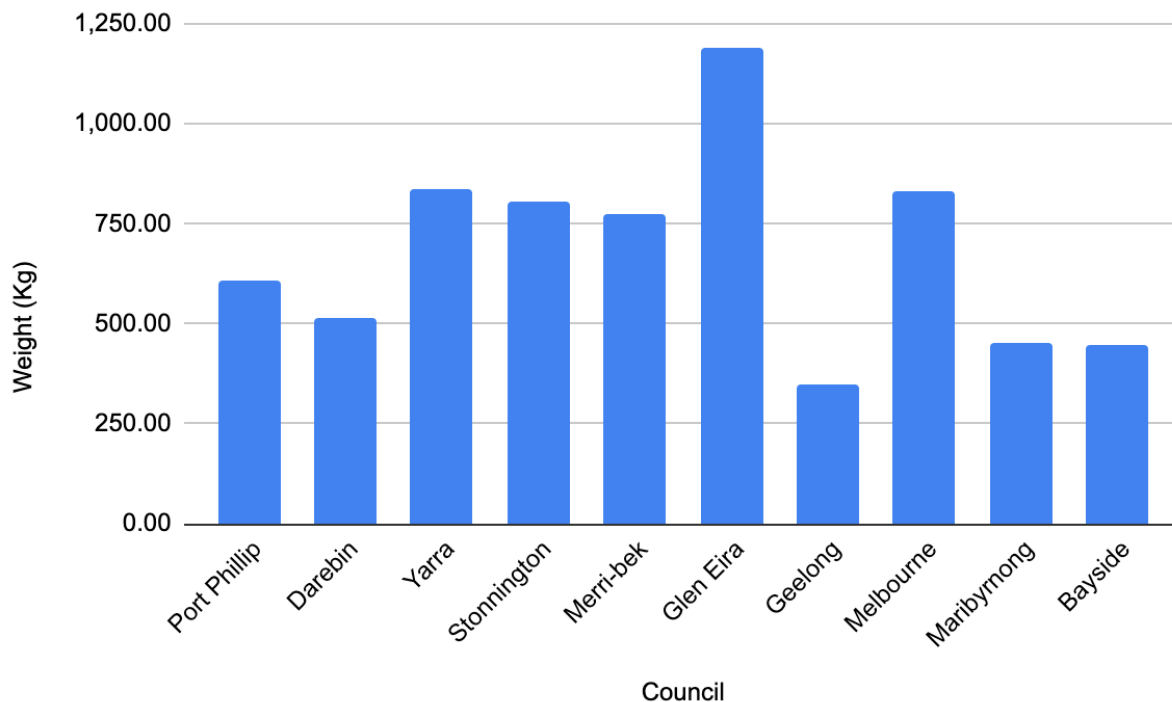


Figure 12: General waste weight data as collected across the program, presented as a comparison across councils.

Figure 12 highlights the total general waste weight data across councils. It should be noted this is affected by size of the MUDs within each Council, their collection frequency and could be implicated by residential transition rates across the duration of the program. Overall the program handled 6,811.29Kg of general waste throughout the visual audits.

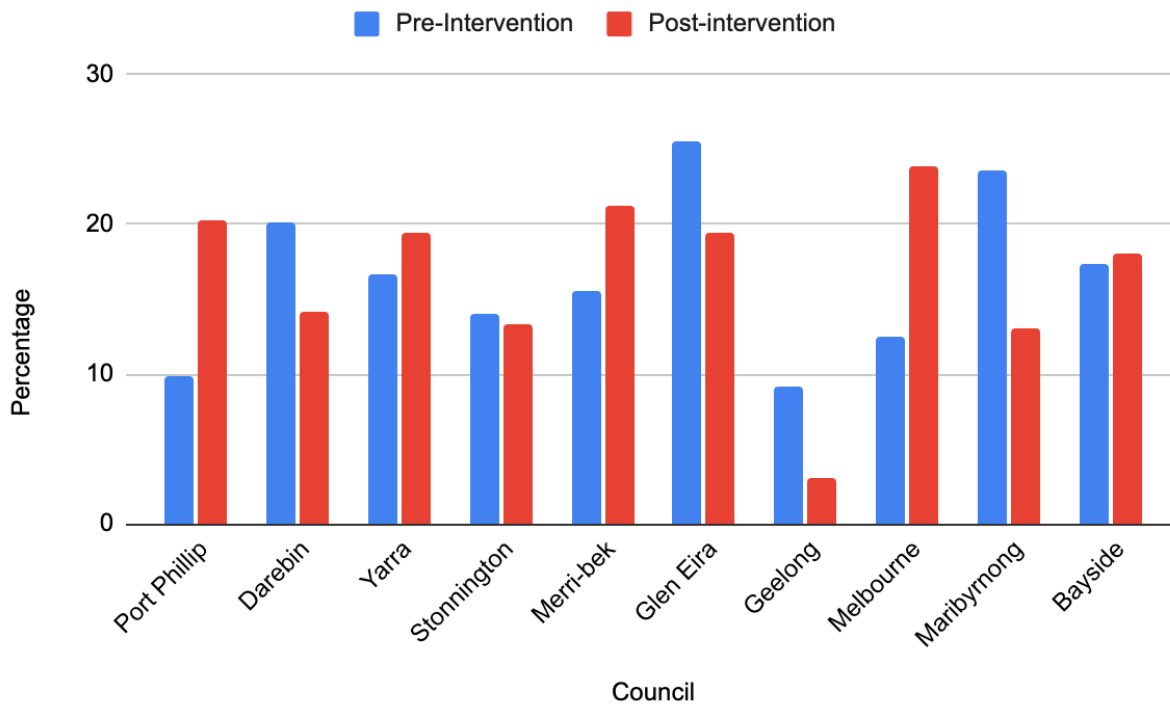


Figure 13: Percentage of contamination in the mixed recycling stream as a comparison across Councils

Figure 13 highlights the contamination rates across the program for the mixed recycling stream only. Half of the councils experienced a decrease in mixed recycling contamination across the program. The other half saw an increase in mixed recycling contamination, for Port Phillip City Council and City of Melbourne this contamination rate was close to double between the pre and post-intervention audits.

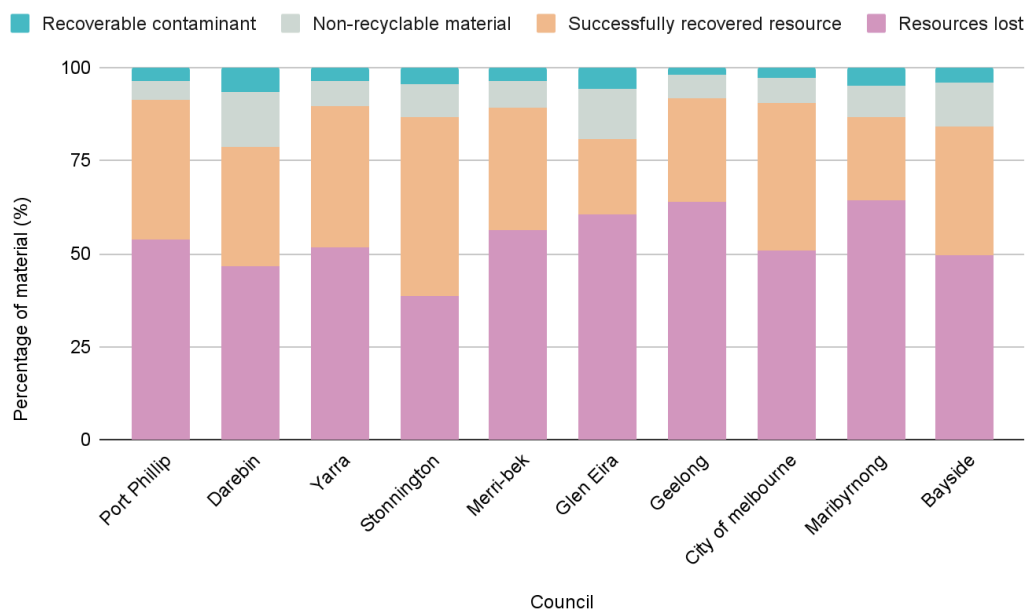


Figure 14: Pre-intervention breakdown by council with the percentage of material categorised as recoverable contaminant, non-recyclable material, successfully recovered resource and resources lost

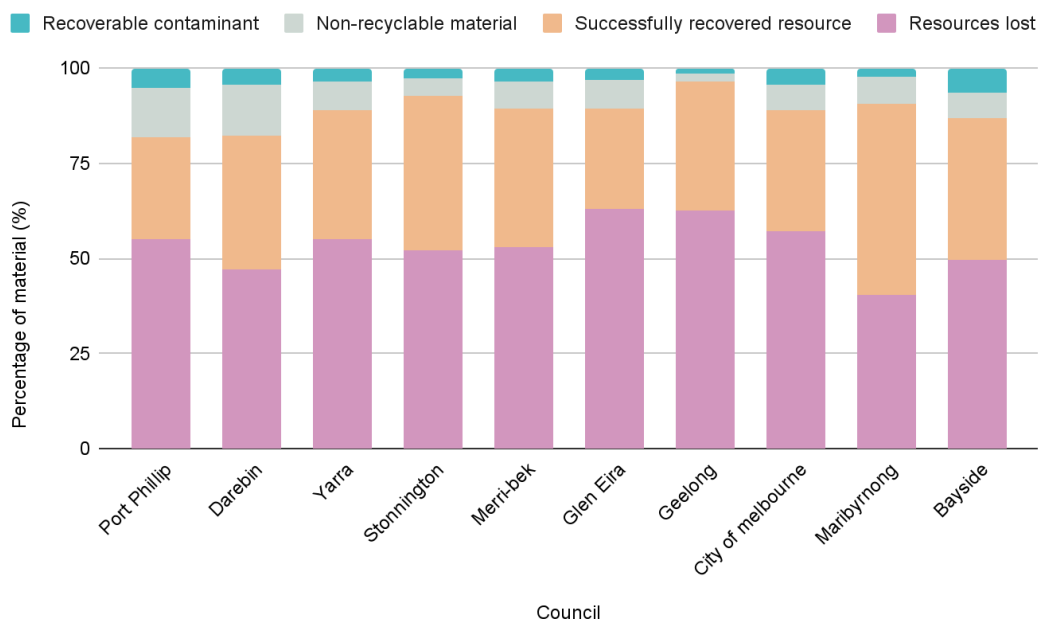


Figure 15: Post-intervention breakdown by council with the percentage of material categorised as recoverable contaminant, non-recyclable material, successfully recovered resource and resources lost.

Figures 14 and 15 show all of the material audited broken down into four categories. **Recoverable contaminant** refers to a recyclable material placed in the wrong stream such as a plastic milk bottle in the glass stream. **Non-recyclable material** refers to material in general waste that cannot be recycled, such as paper napkins. **Successfully recovered resource** refers to recyclable material that was placed in the correct stream to be recovered, such as a glass bottle placed in the glass stream. Finally, **resources lost** refers to recyclable material in general waste.

Table 7: Data from MUDs that had FOGO bins implemented as part of the project, including bin type and number, total net bin weight and contamination rate for the FOGO stream.

Council	MUD address	No. Units	Type & number of bins	Total net bin weight Kg (Post-intervention)	Contamination (%)
Yarra	6 Rochester St, Fitzroy	24	1x 120L Food Organics only	28.9	5%
Merri-bek	10 Breese Street, Brunswick	34	1x 120L FOGO	9.5	0%
Merri-bek	850 Pascoe Vale Road, Glenroy	22	4x 120L FOGO	0	NA
Geelong	8 Gheringhap St, Geelong	42	1x 120L FOGO	1.8	0%
Maribyrnong	75 Droop St, Footscray	18	2x 240L FOGO	9	10%
Maribyrnong	40 Stephen Street, Yarraville	21	2x 240L FOGO (1 x 240L Garden Organics only existed prior to the project)	48.6	1%
Maribyrnong	35-39 Elphinstone St, West Footscray	12	3x 240L FOGO	177.35*	2%
Maribyrnong	104 Cross St, West Footscray	18	2x 240L FOGO	82.55	10%
Maribyrnong	13-15 Nicholson Street, Footscray	12	2x 240L FOGO	16.4	1%

**This property had large areas of garden space and at the time of the audit, had put soil into the FOGO bins which contributed significantly to the weight of the bin (residents were asked to remove the soil from the bin due to weight issues with collection).*

Table 8: Data from MUDs that had FOGO bins implemented as part of the project, analysing FOGO levels in the general waste stream pre and post-intervention.

FOGO in the general waste stream				
Council	MUD	Pre-intervention (%)	Post-intervention (%)	Percentage change (%)
Yarra	6 Rochester St, Fitzroy	20%	45%	+125%
Merri-bek	10 Breese Street, Brunswick	45%	35%	-22.2%
Merri-bek	850 Pascoe Vale Road, Glenroy	35%	30%	-14.3%
Geelong	8 Gheringhap St, Geelong	25%	30%	+20%
Maribyrnong	75 Droop St, Footscray	10%	15%	+50%
Maribyrnong	40 Stephen Street, Yarraville	25%	20%	-20%
Maribyrnong	35-39 Elphinstone St, West Footscray	35%	30%	-14.3%
Maribyrnong	104 Cross St, West Footscray	25%	30%	+20%
Maribyrnong	13-15 Nicholson Street, Footscray	25%	18%	-28%

Tables 7 and 8 focus on the properties that received a FOGO bin as part of the project. The maximum contamination rate in the FOGO stream in the post-intervention audit was 10% (Table 7). FOGO in the general waste stream decreased in half of the properties. The other half saw an increase in FOGO in the general waste stream, with the largest percentage increase seen at 6 Rochester St, Fitzroy with a 125% increase (Table 8).

VIII. Resident Survey Results

A survey was sent to residents in December 2022 and November 2023. 126 people completed the pre-intervention survey and 88 people completed the post-intervention survey. Figures 15-18 break down residents' responses below.

There was a 5% increase in the number of residents who self-reported extremely well or well in their understanding of the benefits of recycling post-intervention (Figure 16). Furthermore, the percentage of residents who agreed they had an understanding of which items go in each stream and are using the streams correctly increased by 4% (Figure 16).

FOGO was the dominant stream residents would like to see added to their waste set up, with 23% requesting it post intervention (Figure 18) followed by soft plastic, glass and e-waste.

Over 50% of residents self-reported as likely or highly likely to use the container deposit scheme, introduced in Victoria in November 2023 (Figure 19).

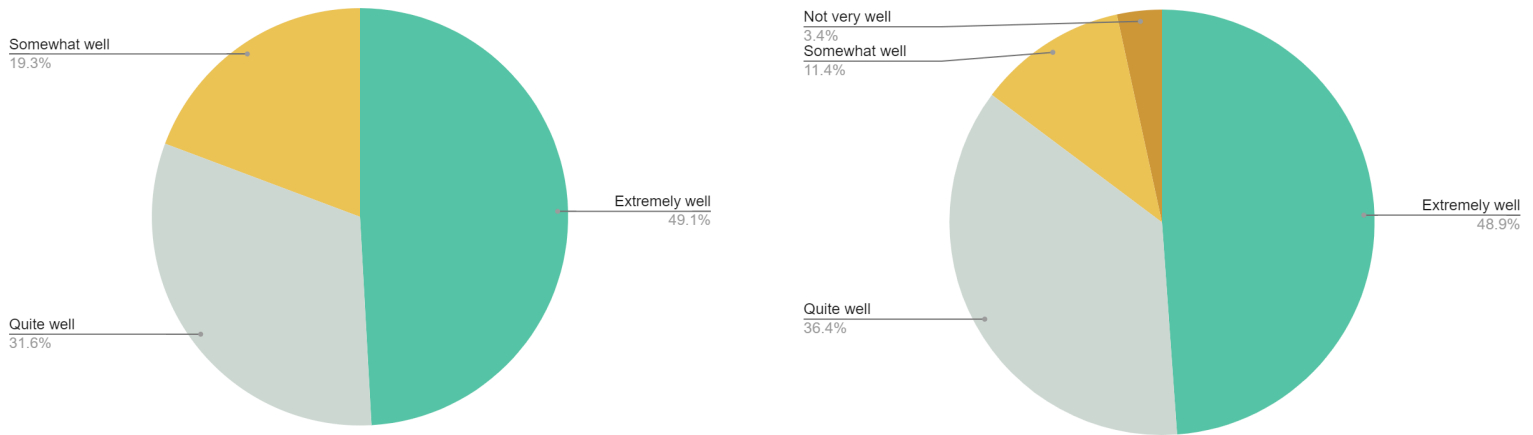


Figure 16: "How well do you feel you understand the benefits of recycling?"
Residents rated their understanding pre-intervention (left) and post-intervention (right)

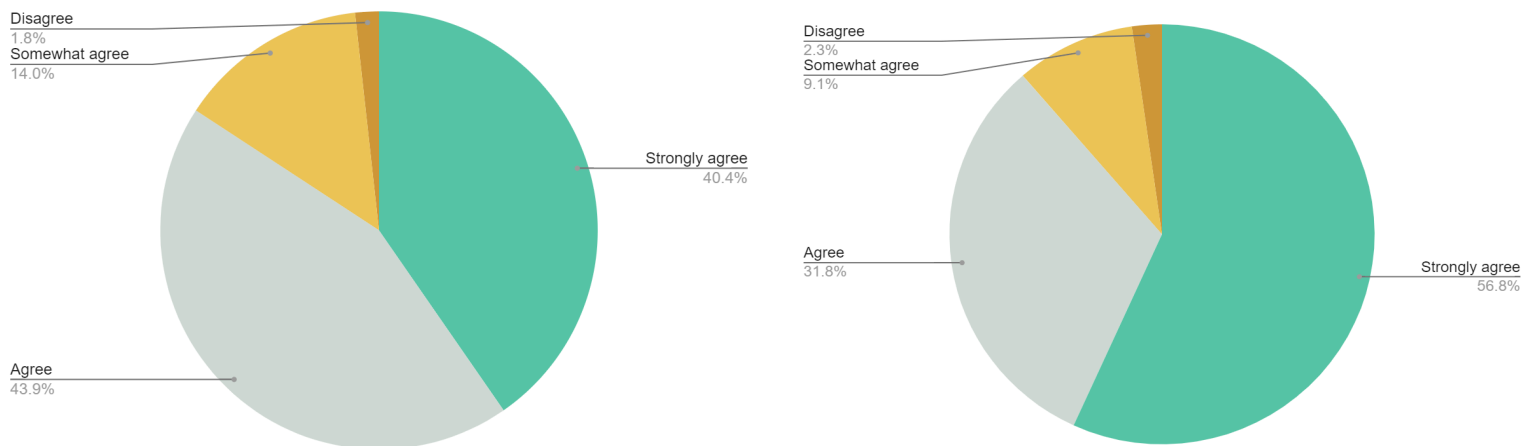


Figure 17: "Do you feel confident you know what goes into each bin and that you are using the bins correctly?" - Residents self rated their ability pre-intervention (left) and post-intervention (right)

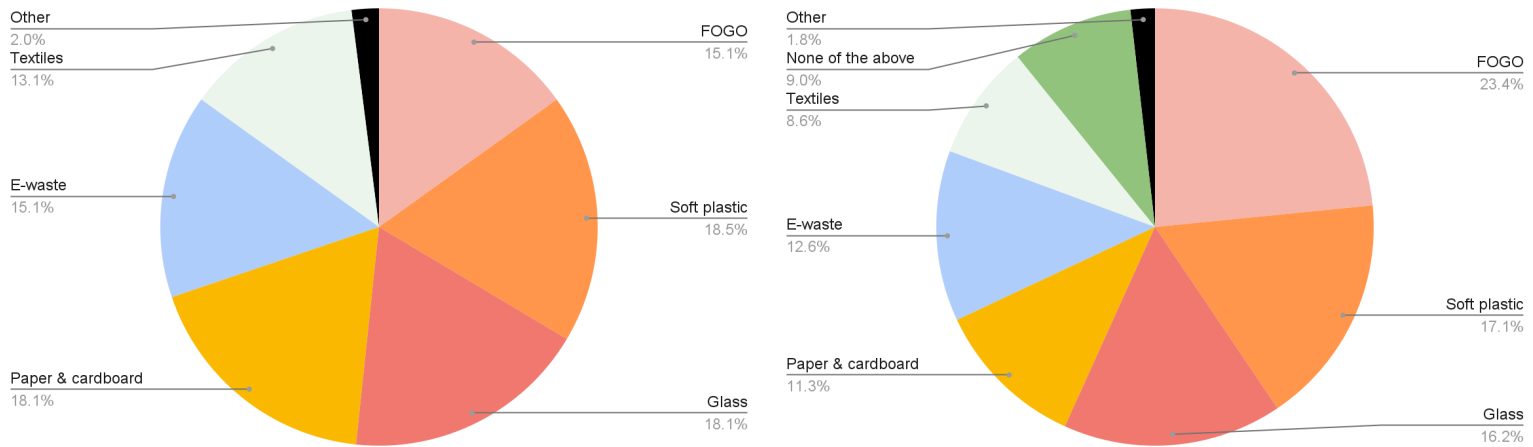


Figure 18: “Are there any other items you would like to see collected at your building?”
Residents selected responses from multiple choice. Pre-intervention (left) and post-intervention (right)

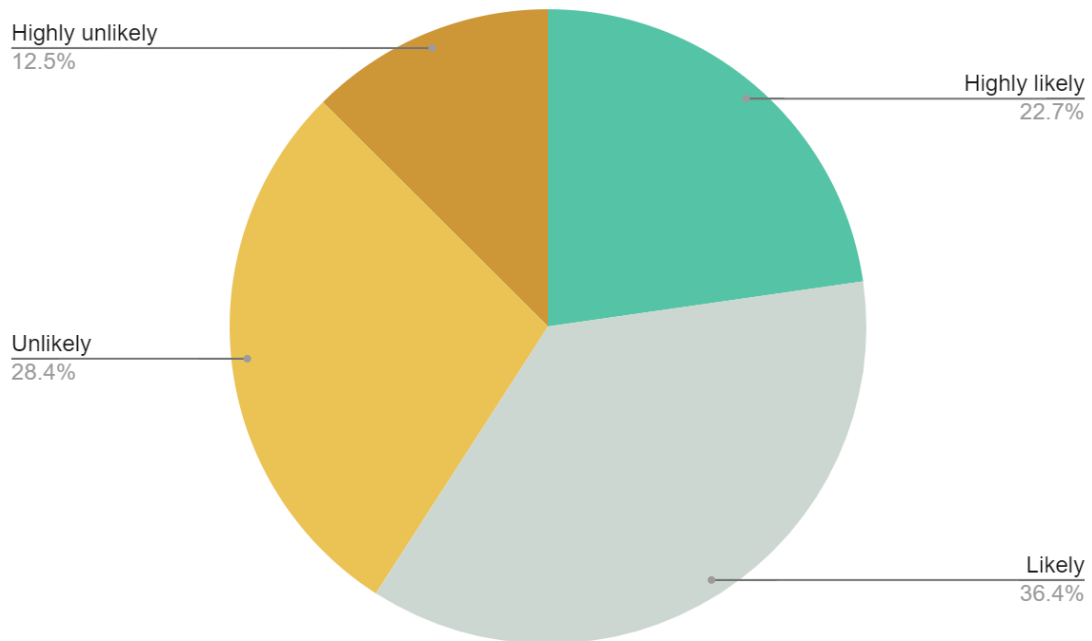


Figure 19: “Starting 1 November 2023, Victoria's Container Deposit Scheme will begin. How likely are you to utilise this service?”

Table 9: Waste issues reported by residents pre and post-intervention

Issues residents were experiencing	Pre intervention	Post-intervention
Blocked chutes	3.5%	5.6%
Hard waste dumping	17.5%	6.7%
I don't have enough storage space in my home to separate my waste and recycling	21.1%	19.1%
I don't see the point in recycling	1.8%	0%
I experience a physical or social barrier that affects how I use the waste area (e.g. physical disability, visual impairment, language barrier)	1.8%	3.4%
I get confused about what goes in each bin	12.3%	9.0%
It's too difficult to separate my waste and recycling	1.8%	4.5%
My building doesn't have enough recycling options	75.4%	14.6%
My building doesn't have FOGO	12.3%	5.6%
People not flattening cardboard	1.8%	4.5%
Other people don't use the bins properly	71.9%	62.9%
I have seen general waste and recycling collected in the same truck	8.8%	0.0%
Overflowing bins	38.6%	16.9%
The waste area is too far away	10.5%	3.4%
The waste area smells	29.8%	13.5%
Unclear signage	8.8%	6.7%
I don't have any issues	7.0%	24.7%

Pre-intervention common issues residents experienced were that there were not enough recycling options (75.4% of respondents), other residents were not using the bins properly (71.9%) and bins were overflowing (38.6%) (Table 9). Post-intervention the percentage of respondents with these common issues had decreased overall. Furthermore, the percentage of residents with no issues increased post intervention from 7% to 24.7%.

6. Discussion

I. Key data findings and observations

Weight, volume and utilisation rate comparison: pre and post-intervention

As seen in Table 4, the weight and volume of mixed recycling and e-waste streams decreased. In mixed recycling, this is likely to be the outcome of existing mixed recycling bins split out into cardboard and paper only and glass bins, removing heavy and large materials from mixed recycling into their own streams. This is supported by data in Table 3, showing the stream utilisation rate has decreased for mixed recycling (the bins were less full on inspection) but increased significantly for both cardboard and paper and glass streams (these bins were more full). The reported reduction in e-waste, on the other hand, is likely to be related to the ad hoc collections seen for this waste stream, as well as the more variable composition of the stream itself.

The FOGO stream also saw a decrease in utilisation (Table 3) which we attribute to the introduction of FOGO bins in nine MUDs (Figure 3) as part of Phase 2, increasing the available volume. Overall the density of the FOGO bins increased between the pre and post-intervention audits. As food waste is typically denser than garden waste, it is thought that the reduced volume but increased weight in the FOGO stream (Table 4), is attributed to more residents utilising the FOGO bin for food waste and not just garden waste. However, variations in this stream could also be attributed to fluctuations in garden waste based on the season and how much prunings/clippings residents are clearing from their gardens.

Contamination rates

Overall, the project saw a **combined decrease in the contamination rate across all recycling streams** (Table 5). Mixed recycling and FOGO saw a slight increase in contamination: 0.9% and 2.2% respectively. For FOGO this is attributable to the fact more bins were added into MUDs for the first time, increasing the likelihood of contamination (Table 8). For the mixed recycling stream, this slight increase suggests there is still confusion around what can and cannot go into each recycling stream, despite all properties (excluding the one MUD from City of Melbourne) receiving new signage.

Figure 13 highlights that there were significant variations in contamination rate across councils. Half of the councils involved saw an increase in contamination rates as an average across their MUDs. This highlights there is more work needed in this space to ensure residents are educated thoroughly, and signage and digital resources alone need to be further strengthened with other campaign and engagement strategies.

In Figures 4-10, it can be seen that the post-audits revealed a greater diversity of types of material contaminants. This is thought to be as a result of more of these recycling streams being added in as part of the program and therefore more exposed to the potential of contaminating materials.

When analysing the contamination rates across all recycling streams, **there was no statistical significance (p-value 0.404) in contamination rate when comparing properties that received Sustainability Victoria**



signage or council specific signage. The key difference between Sustainability Victoria and council specific signage was that Sustainability Victoria signage had only images of what could go into the bin, whereas council signage also included images of what could not go into the bin. The councils that used their own signage for this project were Stonnington City Council (for two MUDs only) and Glen Eira City Council (all MUDs) and Bayside City Council (for one MUD only).

Resource recovery rates

When assessing the resource recovery rates, it is clear from a resident behaviour point of view that there was still a significant amount of recyclable materials ending up in the general waste stream. This was highlighted by 89% of the general waste stream still considered as resources lost (Table 6 and Figure 11) post-intervention. Despite this high resource loss rate, it should be noted that overall there was still a decrease in weight and volume of materials ending up in the general waste stream across the program.

When assessing the success of the FOGO bin, the data showed all properties who installed a FOGO bin as part of the program were utilising this stream, as shown by the weight data in Table 7. However, not all residents have been successfully educated on separating FOGO material resources from their general waste. This was highlighted in Table 8 where over half of the properties that had a FOGO bin installed saw an increase in FOGO materials in the general waste stream between the pre and post-intervention audits. This highlights further education and engagement is required to ensure all residents are utilising the FOGO stream.

Resident survey results

Following the program, residents reported only a slight improvement in their understanding of the benefits behind 'why' we should be recycling (Figure 16). However, residents' confidence in understanding what goes into each bin has increased, with over half of the survey participating residents strongly agreeing they were confident with what went into each stream (Figure 17) which could be attributed to both the resident workshops and the educational signage.

It should be noted that it was typically the more 'engaged residents' (residents who are invested in their building, eg. owner occupiers, or people who are passionate about environmental outcomes) who participated in our workshops and surveys. Therefore, the survey data is unlikely to have captured all residents' perspectives and could be weighted to people who are more willing to take the time to educate themselves regarding waste and recycling practices.

II. Key findings from working with MUD stakeholders

Recruitment and onboarding

In some situations recruitment to the program was made easier or difficult by the OC management. If OC management saw the value in the program, it made onboarding the committee a faster and less



challenging process. In contrast, if they weren't on board or too busy to handle being this additional communication point between the program and the OC committee, it often meant the invitation was never even forwarded on. This was particularly challenging for Councils such as Geelong, where a handful of OC management businesses monopolise MUDs in the area and were unwilling to engage with the program. In these instances, flyer drops proved to be more effective in targeting the OC committee directly.

Requiring more time to engage and work with MUDs

This project highlighted that OC committees can require adequate time to be able to have decisions approved. For example, often major decisions to a waste contract need to be decided upon at an annual general meeting (AGM), this was particularly the case for larger MUDs with larger OC committees. Challenges and time delays were a result of having to persuade all members on the OC committee to agree with the changes, getting the new changes approved in the budget and negotiating changes with the OC management and waste contractor.

Benefits of waste champions

Waste champions proved to be powerful advocates for the program and installing new streams within OC committee meetings. The project team found the process of communicating and installing new streams to be significantly easier at MUDs with a waste champion.

Financial barriers

Financial concerns proved to be a recurring barrier for OC committees when deciding whether or not to implement recommendations for new streams. This was evident in Figure 3, where it shows that 21 MUDs added new clothing donation bins as part of the program. This was a free stream (that is, it did not incur cost to Council, OC Committees or OC Management) that was collected by Southern Cross Recycling (SCR) Group that was easy for OC committees to approve internally. It was found that for streams that cost the OC committee more money, a longer amount of time was required by the building to negotiate budget and get final approval.

III. Key findings from engaging with waste contractors

Lack of transparency and resident distrust in waste contractors

The levels of transparency between contractors varied significantly. While some were happy to disclose their pricing structures and at which facilities they process their waste, others were much more restricted in providing information to anyone who was not one of their contract holders.

Overall, **residents displayed a high level of distrust and dissatisfaction in their waste contractors.** For example, throughout the program there were at least ten instances across separate MUDs where residents reported witnessing their mixed recycling collected by the same truck as the general waste. Only one MUD reported having been alerted to high contamination by their contractor. As these figures only represent what we heard directly from waste champions, it is likely collections going into the same truck are occurring even more frequently.

In many cases, residents' distrust in waste contractors led directly to a lack of belief in positive recycling outcomes and a subsequent disengagement with the practice overall.

Challenges with changing contractors

We encountered significant challenges when encouraging or supporting MUDs to improve their waste services (eg. by adding additional recycling streams) by amending their contract or changing contractors. For example, more accountable private contractors (those willing to provide more transparency around their end destinations and data collection) were often more expensive than the contractors who refused to provide this information. For cost-sensitive OC committees, this was a major barrier to improved service. Furthermore, some buildings were limited to which contractors they could choose from due to servicing restrictions of their building; for example, MUDs with low access points or narrow surrounding streets were restricted to contractors who have small trucks.

IV. Installation learnings

Floor markings: cloth-tape works well in indoor waste room settings and lasts longest on smooth polished concrete. It will not last as long in outdoor areas where it is exposed to elements such as water and dirt. In these situations painting out floor markings is recommended.

Attaching signage: double-sided tape works well in indoor areas where the walls are flat and smooth. For surfaces that are bumpy or very dusty, it is recommended liquid nails be used for a more long-lasting solution. When attaching signage to wire, cable ties are recommended.

Clothing bins: Can work well outside of the waste room (eg. in car parks or foyers) however, need to ensure they are emptied on a consistent schedule that meets the needs of residents. Location of the bins must also ensure they are secure and out of sight of potential looters. Looting of donation bins results in mess, lost value for the contractor and resident dissatisfaction.

FOGO bins: should be on a regular cleaning schedule, particularly if kept in indoor waste areas. It was found the bins that contained high amounts of garden organics had fewer issues with smell.

V. Future requirements

Best practice waste and recycling digital platform

There is a growing need for easy to access, trusted and up to date waste and recycling information tailored to MUD stakeholders. This has been made evident at multiple points across this project. Given the levels of distrust among residents towards waste contractors, and the lack of accountability and transparency generally in the waste sector, this platform should include a functionality rating private waste contractors. This should be based on best practice performance, including pricing, end destination of waste and recycling and circularity commitments. This would empower residents to make better choices when choosing their waste contractor, setting up their waste management systems and at the same time encourage and reward greater transparency and improve service standards generally.

A tailored waste collection and waste management support service for MUDs

MUDs need assistance with their end-to-end waste management setup. The need for specific and bespoke assistance to address the unique needs of the building, its stakeholders and residents is a key future

requirement. A best practice waste collection service has the ability to provide consistent and transparent collection servicing of MUDs while also providing education and data to residents. The service should be able to coordinate and facilitate as many streams as required by the building (mixed recycling, cardboard and paper, FOGO, glass, soft plastic, clothing, e-waste, batteries, hard waste) and be able to engage and educate residents to use each of these streams effectively. Importantly, this service needs to be able to cater for all MUDs, no matter what their MUD typology and be able to provide accurate and data-backed transparency reporting to ensure trust in the system. There is a unique opportunity within MUD communities to improve correct waste and recycling setup and behaviour change to optimise resource recovery at scale.

7. Conclusion

The Best Waste Practices in MUDs project, as supported by Sustainability Victoria on behalf of the Victorian State Government, worked directly with 60 MUDs across 10 Councils to implement best practice waste management systems and education. This targeted physical waste room changes and education through signage, new waste streams, digital resources and online workshops. Additionally, the project set out to understand and document barriers to best practice implementation in order to support the future work of council partners in MUDs.

The project worked directly with MUD stakeholders, including OC committees, OC managers, facilities managers, waste contractors and residents, engaging them in their waste systems, spaces, problems and solutions. The majority of the project's collateral utilised signage and resources from Sustainability Victoria's 'Small Acts, Big Impact' campaign.

The outcomes of the project underline the benefits of having direct support and waste related conversations with MUD stakeholders, particularly as MUD needs and opportunities vary significantly between building types, council areas and service typology.

Key factors influencing the success of best practice implementation at MUDs were found to be waste contractor service and transparency, financial barriers, distrust in the recycling system and the presence (or absence) of on-the-ground support in the form of a waste champion. These factors led to challenges installing and implementing new recycling streams at all MUDs. However, the data demonstrates a raft of positive impacts created by the project, including increased resource recovery of key materials such as FOGO and clothing as well as an overall increase in recycling knowledge amongst residents. We believe this project helped to establish best practice waste management and resource recovery as a priority for the MUDs moving forward, kick-starting changes and improvements that will continue beyond the conclusion of this project.

For further information please contact: **Alice Callagher - Reground:** alice@reground.com.au



8. Appendices

I. Project timeline

LEGEND:		
Completed on time		
Completed after the scheduled completion date		
W/C = Week Commencing		
MILESTONES & TASKS	Scheduled completion date	Actual completion date /status
PROJECT INCEPTION		
Kick off group meeting with Lead and project partner councils	W/C: 19/09/2022	W/C: 19/09/2022
Individual inception meeting with 10 councils - Determine council MUD focus and recruitment approach	W/C: 3/10/2022	W/C: 3/10/2022
Delivery of Project Plan	W/C: 10/10/2022	W/C: 10/10/2022
Development and delivery of communications and engagement plan	W/C: 31/10/2022	W/C: 31/10/2022
Development and delivery of project monitoring and evaluation plan	W/C: 31/10/2022	W/C: 31/10/2022
Project working group meeting to discuss C&E and M&E plans	W/C 7/11/2022	W/C: 7/11/2022
RECRUITMENT		
Group 1:		
Program overview flyer and email copy shared	W/C: 3/10/2022	W/C: 3/10/2022
Councils collating, contacting & sharing potential MUDs (if not doing an EOI)	W/C: 31/10/2022	W/C: 31/10/2022
Reground contacting potential MUDs	W/C: 31/10/2022	W/C: 31/10/2022
Assessment and appointment of MUDs to project (including signed approval by OC, requesting additional MUD details and appointment of waste champion)	W/C: 31/10/2022	W/C: 31/10/2022
Formal EOI closes	31/10/2022	31/10/2022
Review & contact potential MUDs received through EOI	W/C: 07/11/2022	W/C: 07/11/2022
Information session with participating MUDs	15/11/2022	15/11/2022
Group 2:		
Reground & Councils to utilise networks for recruiting final MUDs	7/11/2022	20/12/2022
Socials & e-newsletter callout (if applicable)	W/C: 14/11/2022	W/C: 14/11/2022
Assessment and appointment of MUDs to project (including signed approval by OC, requesting additional MUD details and appointment of waste champion)	W/C: 21/11/2022	23/01/2023
Information session with participating MUDs	06/11/2022	06/12/2022

IMPLEMENTATION		
Part 1: Pre-intervention		
Group 1: Baseline visual audits conducted	W/C: 5/12/2022	13/12/2022
Group 1: Review of waste contracts and bin room setup in collaboration with OC and waste champion. Support to stakeholders in the process of adding new stream/s - Bin lid and body colouring - Upgrade or downgrade certain streams - Education collateral	W/C: 16/01/2023	W/C: 16/01/2023
Christmas holiday period (Reground office closed)		
Group 2: Baseline visual audits conducted	W/C: 13/02/2023	20/02/2023
Group 2: Review of waste contracts and bin rooms setup in collaboration with OC and waste champion. Support to stakeholders in the process of adding new stream/s - Bin lid and body colouring - Upgrade or downgrade certain streams - Education collateral	W/C: 27/02/2023	W/C: 27/02/2023
Baseline data to be provided	W/C: 27/02/2023	W/C: 27/02/2023
Part 2: Interventions		
Group 1: Bin room upgrades - Bin room upgrades (placement existing and new bins) - Floor markings - Signage installed (bin room and chutes) - Delivery of kitchen caddies to residents (if applicable)	W/C: 27/03/2023	W/C: 26/06/2023
Group 2: Bin room upgrades - Bin room upgrades (placement existing and new bins) - Floor markings - Signage installed (bin room and chutes) - Delivery of kitchen caddies to residents (if applicable)	W/C: 27/03/2023	W/C: 26/06/2023
Rollout of behaviour change program per C&E plan - guidance material addressing what can / cannot go in each stream - Video on how to set up home bins to match external waste streams - Waste induction process for new and current tenants - Empowering MUDs to liaise with waste contractors - Ongoing tips on how to avoid and minimise waste and recycle - Data feedback from waste contractors to highlight progress	September 2023	W/C: 09/10/2023
Ongoing monitoring of MUDs	September 2023	W/C: 09/10/2023

Part 3: Post-intervention		
Follow-up visual audits conducted	November 2023	W/C: 27/11/2023
BEST PRACTICE GUIDANCE MATERIAL		
Development of Best Practice Guidance material	November 2023	W/C: 23/11/2023
Draft guidance material to be shared with Councils	December 2023	07/12/2023
Consolidated feedback from Councils	December 2023	08/01/2024
Final guidance material supplied	January 2024	01/02/2024
SUMMARY REPORT		
Development of project summary report	January 2024	08/01/2024
Round off meeting and next steps with 10 councils	January 2024	Scheduled: 29/02/2024

II. Contaminants & recyclables

Material	Mixed recycling	FOGO	Paper & Cardboard	Glass	Soft Plastic	E-waste	Textiles
Paper	Recycling	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant
Cardboard	Recycling	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant
Aluminium & steel packaging	Recycling	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant
CDS aluminium	Recycling	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant
Rigid plastic	Recycling	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant
CDS plastic	Recycling	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant
Glass	Recycling	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant
CDS glass	Recycling	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant
Liquid paperboard	General waste	General waste	General waste	General waste	General waste	General waste	General waste
Soft plastic	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recycling	Recoverable contaminant	Recoverable contaminant
Coffee cups	General waste	General waste	General waste	General waste	General waste	General waste	General waste
E-waste & batteries	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recycling	Recoverable contaminant

Food waste	Recoverable contaminant	Recycling	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant
Garden waste	Recoverable contaminant	Recycling	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant
Contaminated recyclables	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant
Bagged recycling	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant
Polystyrene	General waste	General waste	General waste	General waste	General waste	General waste	General waste
Nappies & sanitary items	General waste	General waste	General waste	General waste	General waste	General waste	General waste
Hygiene & Hazardous	General waste	General waste	General waste	General waste	General waste	General waste	General waste
Hard waste	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant
Clothing	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recycling
Other textiles	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recoverable contaminant	Recycling

III. Details of MUDs involved

Council	Address	Council or Privately Serviced?	No. Units
Bayside City Council	241 Bay Street, Brighton	Private	15
	30 Munro Avenue, Cheltenham	Private	26
	10 Durrant St, Brighton	Council	19
	1 Major Street, Highett	Private	40
	9-11 Arthur Street, Sandringham	Council	12
	635 Hampton Street, Brighton	Council	15
Darebin City Council	636 High St, Thornbury	Private	66
	44-46 James St, Northcote	Council	14
	93 Flinder St, Thornbury	Council	10
	7-9 Railway Place, Fairfield	Private	76
	15-25 Bastings St, Northcote	Private	16
	23 Ashley Street, Reservoir	Council	10

Yarra City Council	6 Rochester St, Fitzroy	Private	24
	210 Alexandra Pde East, Clifton Hill	Private	33
	470 Smith St, Collingwood	Private	110
	10 Trenerry Cres, Abbotsford ("Boiler House")	Private	80
	70 Nicholson St, Fitzroy	Private	60
	176 Argyle St, Fitzroy (George's Corner)	Private	37
	32-36 Smith St, Collingwood	Private	27
Stonnington City Council	Toorak Park, 590 Orrong Rd, Armadale	Hybrid	46
	383 Wattletree Road, Malvern East	Private	10
	63 Osborne St, South Yarra	Council	11
	Windsor Apartments, 233 Dandenong Rd, Windsor	Private	40
	Mondriana Apartments, 10 Clifton St & 11 Mount St, Prahran	Council	72
	Rue De Chapel 256-260 Chapel St, Prahran	Private	84
Merri-bek City Council	10 Breese Street, Brunswick	Private	34
	2A Michael St, Brunswick	Council	33
	175 Sydney Rd, Brunswick	Private	69
	2-4 Moonering Drive, Coburg (2 Waste rooms)	Private	56
	850 Pascoe Vale Road, Glenroy	Council	22
	Industry Lane, Coburg	Private	73
City of Greater Geelong	8 Gheringhap St, Geelong	Council (Cleanaway)	42
	110 Tomara Drive, Connewarre	Council (Cleanaway)	9
	110 Tomara Drive, Connewarre	Council (Cleanaway)	9
	110 Tomara Drive, Connewarre	Council (Cleanaway)	9
	96 Mercer St, Geelong	Council (Cleanaway)	19

Port Phillip City Council	11-13 Jackson Street, St Kilda	Private	24
	135 Inkerman Street, St Kilda	Private	102
	182 Albert Road, South Melbourne	Council	15
	63 Dorcas Street, South Melbourne	Hybrid	89
	69 Dorcas Street, South Melbourne	Hybrid	96
	52 Fitzroy Street, St Kilda	Private	31
Glen Eira City Council	45 Orrong Road, Elsternwick	Private	11
	14 Quinns Road, Bentleigh East	Private	20
	11 St Georges Avenue, Bentleigh East	Private	15
	1-9 Claire Street, Mckinnon	Private	25
	11 Bond Street Caulfield North	Private	185
	1 Village Mews, Caulfield North	Private	121
City of Melbourne	20-26 Coromandel Place, Melbourne	Private	90
	151 Berkeley St, Melbourne	Council	147
	178 Wellington Parade, East Melbourne	Private	46
	33-71C Spencer Street, Melbourne	Council	410
	81 South Wharf Drive, Docklands	Council	229
	100 Kavanagh Street, Southbank	Council	261
Maribyrnong City Council	75 Droop St, Footscray	Council	18
	4 La Scala Avenue, Maribyrnong	Council	62
	40 Stephen Street, Yarraville	Council	21
	35-39 Elphinstone St, West Footscray	Council	12
	104 Cross St, West Footscray	Council	18
	13-15 Nicholson Street, Footscray	Council	12