Guidelines for public place recycling in shopping precincts and public places

March 2013

Australian Packaging Covenant
Smarter packaging, less waste, cleaner environment
Disclaimer

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Information, statements and recommendations implied or stated in this report are limited to the nature and scope of the project and do not constitute legal advice.

Acknowledgments

EnviroCom would like to thank the staff at the Australian Packaging Convent (APC) for their valuable assistance and cooperation during this Project.

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Introducing PPR in shopping precincts and public places

Introducing public place recycling (PPR) to shopping precincts and public places offers environmental, social and financial benefits to the Council, local retailers and patrons. Councils are looking for more ways to recover recyclable materials and support their local communities in improving their recycling efforts. Away-from-home PPR builds on the good recycling behaviour Australians have already developed in the home.

The ‘Guidelines for public place recycling in shopping precincts and public places’ provides a practical step-by-step guide for local governments to implement public place recycling (PPR), particularly for shopping strips and precincts. It is a sister document to ‘Guidelines for public recycling in shopping centres…keeping it simple – making it easy’ (December 2008).

These Guidelines stem from a successful project implemented in the Mordialloc shopping precinct, Victoria, where the resource recovery rate of recyclable plastic, glass and metals into the recycling stream was found to be 67% (by mass) at just three months after recycling bin installation.

The benefits

- Reducing the amount of waste sent to landfill and decreasing the reliance on virgin materials in the manufacture of packaging.
- Meeting the community’s expectation to ‘Do The Right Thing’ and demonstrating environmental leadership.
- Complementing existing Council sustainability actions, such as energy efficient lighting and improved at-home recycling services.
- Improving the competitive edge of the shopping precinct in the eyes of retailers and patrons.
- Cost savings where the collection for recyclables is less expensive than disposal to landfill.
- Improve quality of recyclables, by providing a consistent message to patrons at-home and away-from-home.

Source: Guidelines for public recycling in shopping centres (December 2008).

The challenges

- Changing existing contracts to include recyclables collection.
- Lack of space to ‘pair’ garbage and recycling bins side-by-side.
- Need for new recycling bins to fit in with Council’s ‘look and feel’/branding.
- The range of materials and packaging used in the shopping precinct.
- The variety of users in the shopping precinct and differing user behaviour.
- Competition for attention in the shopping precinct from other marketing messages.
- Gaining the involvement of waste collection contractors and retailers in supporting the new system.

Source: Guidelines for public recycling in shopping centres (December 2008).
How to use these guidelines

The ‘Guidelines for public place recycling in shopping precincts and public places’ have been written for Council employees (i.e. Waste Projects Officers). Public places can include recreational areas, marinas, parklands, etc.

Establishing an effective PPR system in four steps:

- Step 1. Review the current system
- Step 2. Design a new system
- Step 3. Implement the new system
- Step 4. Monitor and maintain the new system

The key to establishing an effective PPR system is communication. Communication from Step 1 to Step 4, with all key stakeholders – those within Council, contractors, retailers and patrons.

These Guidelines are simple, brief and a great starting point. However, every project is unique – you may need to tailor these guidelines to suit your project.

Read through the Guidelines in full, print the checklists in Appendix 1 and start your project today!
Step 1. Review the current system

The first step in designing a public recycling system is to review the current waste management practices.

The checklist below summarises the key points you need to ‘tick’ along the way. This checklist, along with the other checklists in these Guidelines, is ready-to-print in Appendix 1.

<table>
<thead>
<tr>
<th>Check</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>☐ Establish the project area</td>
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<tr>
<td>☐ Review the waste collection contract</td>
<td></td>
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<tr>
<td>☐ Conduct a waste audit</td>
<td></td>
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<tr>
<td>Begin the conversation</td>
<td></td>
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<tr>
<td>☐ Council departments</td>
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<tr>
<td>☐ Local retailers</td>
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</tbody>
</table>

1.1. Establish the project area

Establish whether the shopping precinct will benefit from a PPR system:

- Are there enough people visiting the precinct and using the bins?
- Are there many eateries and shops selling recyclable packaging?

Conduct a waste assessment (visual estimates) of the existing garbage bins. Each bin should be assessed individually, to give you an understanding of:

- Bin fullness (i.e. volume used)
- Are there significant amounts of recyclable materials? What types?

From the above starting points, decide whether this precinct is a good project area.

1.2. Review the waste collection contract

Review the current waste collection contract to find out:

- Who is the waste collection contractor?
- What does the contractor report on, how often and to whom?
- How often are the shopping precinct bins emptied? (Is this often enough?)
- Have any potential improvements to the system already been identified?
- Any information about the shopping precinct that will help you decide whether it is a good project area, e.g. is the site clean, is illegal dumping occurring, is littering a problem?
1.3. Conduct a waste audit

Once you have established your project area, conduct an audit of the waste generated in the shopping precinct. For health and safety reasons, only qualified and trained personnel should conduct waste audits – you may need to employ a waste auditing contractor.

Waste audits (physical sorting and analysis) are more comprehensive than waste assessments (visual estimates) and will give you a greater understanding of:

- Composition and quantities of waste materials
- Issues with current waste management practices
- Suitable/realistic waste reduction targets
- Baseline data for ongoing monitoring

If your budget can allow, audit each bin individually to give you an understanding of the waste being generated at different locations along the shopping precinct. This can help you to decide where to locate the new bins.

*Photos of a waste audit:*

Terminology used in waste audits you will need to become familiar with:

- **Contamination**: waste material found in recycling stream.
- **Resource Loss**: recyclable material found in waste stream.
- **Corrected Diversion Rate**: proportion of the total combined waste streams that is recyclables presented to the recycling stream.
- **Resource Recovery Rate**: the proportion of the total recyclable materials presented to the recycling stream to be recovered.
- **Resource Loss Rate**: the proportion of the garbage bin that is recyclable materials.
- **Contamination Rate**: the proportion of the recycling stream that is not recyclable.

Contact the local Materials Recovery Facility (MRF) and find out what materials are recyclable at the MRF:

- ✔ Plastic: plastic numbered 1 to 7
- ✔ Glass: packaging glass (bottles)
- ✔ Metal: packaging metals (aluminium and steel)
- ✔ Paper: newspapers, glossy paper and liquid paperboard
- ✔ Cardboard: corrugated cardboard and packageboard
Pass these details onto the waste audit contractor so they can correctly report on ‘contamination’ and ‘lost resources’. You will also need these details yourself when designing the new system.

Use the waste audit results to determine the potential recovery rate and build a business case to present to Council.

### 1.4. Begin the conversation

Communication is key! Talk to as many stakeholders as possible to gain their insight and increase support for the project.

<table>
<thead>
<tr>
<th>Group</th>
<th>Communication</th>
</tr>
</thead>
</table>
| **Council departments** | Present your business case and build support for the project with the relevant Council departments (see key council contacts list, below).  
Communicate the limitations of the current system and your investigations thus far. Demonstrate how a new system of recycling bins would help to achieve Council’s objectives and sustainability policies. |
| **Local retailers** | Seek their support and written endorsement, especially if you plan on applying for a grant to fund new infrastructure (see example letter, below).  
Discuss with retailers:  
- What do they think of the current waste management system?  
- What would they want/expect in a system upgrade?  
- Would they be willing to write a letter of support for a new system?  
For retailers that sell a lot of packaging, such as cafes and newsagencies, expand the discussion to include:  
- What packaging do they currently sell? (Is this recyclable at the MRF?)  
- Would they be willing to change to recycled and/or recyclable packaging?  
Make a communications register of retailer email addresses and keep them informed of project progress. |
Example of a key council contacts list:

<table>
<thead>
<tr>
<th>Council department</th>
<th>Key contact</th>
<th>How are they participating?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste &amp; Infrastructure</td>
<td>[Name]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[Contact number]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[Email address]</td>
<td></td>
</tr>
<tr>
<td>Media &amp; Communications</td>
<td>[Name]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[Contact number]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[Email address]</td>
<td></td>
</tr>
<tr>
<td>Town Planning &amp; Urban Design</td>
<td>[Name]</td>
<td></td>
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<td></td>
<td>[Contact number]</td>
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<td>Depot</td>
<td>[Name]</td>
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<td></td>
<td>[Contact number]</td>
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<td></td>
<td>[Email address]</td>
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</tbody>
</table>

Example outline for letters of support:

[Name of funding body]
[Address of funding body]

[Today’s date]

To whom it may concern:

RE: Council’s plan for recycling in [shopping strip name]

I am writing to declare my support of the funding application by [Council] to install recycling bins to the shopping strip located on [street name] at [suburb] to service retail and hospitality waste.

As the owner of a [business type] on this strip, selling recyclable items, I believe there is a need for appropriate disposal of this material to be available to customers.

The installation of recycling bins near our store at [suburb] will ensure that customers are provided with the necessary infrastructure to make informed decisions about their waste, and ultimately recycle items purchased at [business name] such as [recyclable item sold]. Therefore reducing the environmental footprint of the waste stream via the installation of recycling bins is an initiative this business and its staff and management wholeheartedly support.

We trust you will look favourably at Council’s funding application.

Yours faithfully,

__________[signature]

On behalf of
[business name, suburb]
Step 2. Design a new system

The second step is to reflect on your review of the current system and investigate new bin options in order to build a new and better system.

The checklist below summarises the key points you need to ‘tick’ along the way. This checklist, along with the other checklists in these Guidelines, is ready-to-print in Appendix 1.

<table>
<thead>
<tr>
<th>Check</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>□ Set up a detailed project plan</td>
<td></td>
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<tr>
<td>□ Set targets and objectives</td>
<td></td>
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<tr>
<td>The recycling bins</td>
<td></td>
</tr>
<tr>
<td>□ Bins or bin stations?</td>
<td></td>
</tr>
<tr>
<td>□ Bin design (lids and constrictors)</td>
<td></td>
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<tr>
<td>□ Bin safety</td>
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<tr>
<td>□ Bin signage</td>
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<td>□ Bin placement</td>
<td></td>
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<tr>
<td>□ Bin volume and number of bins</td>
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<tr>
<td>□ Servicing frequency</td>
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<tr>
<td>Continue the conversation</td>
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<td>□ Council departments</td>
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<td>□ Bin supplier</td>
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<tr>
<td>□ Waste collection contractor</td>
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<tr>
<td>□ Local retailers</td>
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</table>

2.1. Set up a detailed project plan

Set up a detailed project plan including a project timeline to keep things on track. Communicate the dates to the relevant Council departments and seek feedback (see section 2.4. Continue the conversation, below).

Over the life of the project, regularly revisit the project plan and update it to reflect any changes.
**Example project plan with timeline:**

<table>
<thead>
<tr>
<th>Step 2. Design a new system</th>
<th>Date completed</th>
<th>Task(s) completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set up a project plan</td>
<td>[dd/mm/yyyy]</td>
<td>☐ ...</td>
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<tr>
<td>Set targets and objectives</td>
<td>[dd/mm/yyyy]</td>
<td>☐ ...</td>
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<tr>
<td>Design the recycling bins</td>
<td>[dd/mm/yyyy]</td>
<td>☐ ...</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 3. Implement the new system</th>
<th>Date completed</th>
<th>Task(s) completed</th>
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</thead>
<tbody>
<tr>
<td>Set up a comms plan</td>
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<tr>
<td>Promote the new bins</td>
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<tr>
<th>Step 4. Monitor and maintain the new system</th>
<th>Date completed</th>
<th>Task(s) completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review the new system</td>
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<tr>
<td>Conduct a waste audit</td>
<td></td>
<td></td>
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<tr>
<td>Ongoing waste assessments</td>
<td></td>
<td></td>
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<tr>
<td>Maintenance and reporting</td>
<td></td>
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</tr>
</tbody>
</table>

Set up a risk matrix, to help you identify and analyse possible risks in the project.

**Example risk matrix:**

<table>
<thead>
<tr>
<th>Risk area</th>
<th>Level</th>
<th>Plan</th>
</tr>
</thead>
</table>
| Visitors failing to use the PPR correctly     | Medium  | - Clear signage on bins of acceptable materials.  
|                                               |         | - Public education, media releases, etc.  
|                                               |         | - Ongoing monitoring of PPR to determine any issues. |
| Insufficient infrastructure for the number of visitors | Low     | - Waste Projects Officer to use waste audit results to ensure appropriate number of bin installations. |
| Waste/recycling contractor unable to recycle materials | Low     | - Suitable contractor will be found if current contractor cannot recycle. |

...
2.2. Set targets and objectives

In order to measure the success of the new system, you will need to set some targets and objectives. The targets and objectives you choose should be suitable, realistic and reflect the waste audit results.

**Example targets:**

- **Contamination rate** of 10% or less in the recycling stream.
- **Resource recovery rate** of 90% into the recycling stream of the key materials you want to capture, e.g. recyclable plastic bottles, glass and cans.
- **Resource recovery rate** of 70% into the recycling stream of all other recyclable materials, e.g. newspapers and magazines, liquid paperboard, package board.

It will be important to look at your targets by both mass and volume in order to get the full picture.

**Example objectives:**

- Recycling bins and signage installed within a 4 week time period.
- Follow-up waste audit within 3 months of bin installation, and monthly visual bin inspections for 6 months thereafter.
- Use of sustainable behaviour principles in communication and education.
- Communication with relevant Council departments and teams.
- Promotion of recycling by retailers.

Encourage retailers to change what materials/packaging they purchase and on-sell to their customers, as this will have an impact on the recycling stream. Work together with retailers to improve what they sell, e.g. changing from polystyrene cups to recyclable plastic drink containers, or only giving a paper serviette to customers who request them.

2.3. The recycling bins

There are a number of aspects to consider:

- Bins or bin stations?
- Bin design (lids and constrictors)
- Bin safety
- Bin signage
- Bin location
- Bin volume and number of bins
- Servicing frequency

Each of the above is discussed in more detail in the following pages.

You may decide to retrofit the current bins rather than purchase new bins. If 50% or more (by volume) of the current waste stream in your shopping precinct is recyclable materials, then you can capture these recyclables by converting half of the garbage bins into recycling bins – this is more cost-effective than purchasing a new recycling bin for every garbage bin.
**Bins or bin stations?**

Firstly, decide whether the shopping precinct will need bins or bin stations. To help you decide, talk to other local councils with similar projects and visit their project areas.

**Bin design**

The design of the recycling bins/stations will depend on what materials you want to capture:

- **Round opening**: bottles and cans, coffee cups
- **Rectangular opening**: newspapers, pizza boxes, takeaway containers

Look at your waste audit results to help you decide.

Constrictor holes (round or rectangular) are a great way to reduce contamination entering the recycling stream, but remember to ensure the holes are still large enough to fit the recyclables you do want (e.g. a larger rectangular hole will be required to capture pizza boxes).

You may decide to add rubber rosettes. Again, rosettes are a great way to reduce contamination entering the recycling stream, but on the other hand, they also discourage some patrons who do not like touching the rubber in order to pass their recyclables through and so place everything in the garbage bin instead. This comes down to a trade-off between contamination and resource loss.

**Photos of rubber rosettes:**

![Photo of rubber rosettes]

Additional aspects to consider:

- ✔ Cleaner access - make it easy, e.g. bin station with bin on wheels inside.
- ✔ Birds - design the openings to avoid birds removing the waste.
- ✔ Rain - if there is no overhead shelter, use covered openings.

Overall, for colour, size and shape of the bin, it is a balance between achieving functionality of the bins in line with Council ‘look and feel’/branding.
Photos of different styles of bin stations:

Bin safety

Refer to the Australian Standard, AS 4123.6-2006 (Mobile waste containers - Health, safety and environment).

- No sharp corners on bin, particularly at the front of the bin.
- Secure the bin lid down.
- Line round restrictors with rubber to prevent cuts – also ensure hands cannot be caught by the rubber restrictor grips!
- If using plastic liners, use transparent liners in recycling bins to show up any contamination.
**Bin signage**

Refer to the Australian Standard, AS 4123.7-2006 (Mobile waste containers - Colours, Markings and Designation Requirements).

Good bin signage will make it easy for the public to differentiate between the recycling and garbage bins and what materials can be placed in each.

- Colour-code bins and bin lids yellow for recycling and red for garbage.
- Use ‘Do the Right Thing Use the Right Bin’ signage.

There is a great range of signage available for download, visit [www.ehp.qld.gov.au/waste/recycling/awareness_raising_materials_for_public_place_recycling.html](http://www.ehp.qld.gov.au/waste/recycling/awareness_raising_materials_for_public_place_recycling.html) (Contact the DEHP for permission to alter/tailor the signage to your project).

Choose a print medium that suits your system, e.g. plastic stickers, plastic signs or metal signs.

*DEHP and AFGC’s PSF have developed signage to suit different recycling systems:*

![Signage Examples](image)

**DEHP**  Department of Environment and Heritage Protection, Queensland  
**AFGC**  Australian Food and Grocery Council  
**PSF**  Packaging Stewardship Forum

Using DEHP/PSF signage will provide a consistent theme and thus assist the public in using your infrastructure. The ‘Do the Right Thing Use the Right Bin’ message has been used by more than 400 townships and organisations across Australia, and 80% of Australians recognise that the message means put your litter in the bin and ‘recycle right’.
**Bin placement**

Bins must be easily seen and convenient to use. Track the movement of patrons and waste along the shopping precinct and place bins where they are clearly needed.

- Pair the bins (one garbage bin with one recycling bin).
- Place bin pairs along the entirety of the shopping precinct.
- Along thoroughfares and outside eateries, place bin pairs closer together.
- Place garbage bins closer to the walkway, to reduce contamination entering the recycling stream.

Try not to remove bins from out the front of busy shops that currently have bins that are capturing waste, as this will be likely to result in a littering issue.

*Example map of project area including bin placement:*

![Example map of project area including bin placement](image)

The amount and type of waste generated will determine:

- Size/volume of the bins
- Number of bins
- Servicing frequency (emptying and cleaning)
2.4. Continue the conversation

Communication is key! Continue to talk to the project stakeholders to maintain momentum and support for the new system.

<table>
<thead>
<tr>
<th>Group</th>
<th>Communication</th>
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</thead>
<tbody>
<tr>
<td><strong>Council departments</strong></td>
<td>Seek feedback on the dates you have proposed in your project plan and any barriers against them, such as key staff on leave, equipment or machinery unavailable, or other projects operating in the area. In conjunction with the relevant departments, decide on bins or bin stations, bin design, shape, colour, signage, etc. and then engage the supplier.</td>
</tr>
<tr>
<td><strong>Bin supplier</strong></td>
<td>Engage the bin/station supplier and outline the chosen bin design, shape, colour and any other features. Seek feedback on the dates you’ve proposed to be sure they can supply on time.</td>
</tr>
<tr>
<td><strong>Waste collection contractor</strong></td>
<td>Engage the contractor to ensure they can meet this extra service and if Council needs to pay any additional service fees. Work with contractor to establish the servicing system (frequency of emptying and cleaning). Update the waste collection contract to include details of the extra service.</td>
</tr>
<tr>
<td><strong>Local retailers</strong></td>
<td>Contact local retailers, via the communications register you have already set up (refer to section 1.3. Begin the conversation, previously), and let them know the expected bin installation dates and promote other project positives.</td>
</tr>
</tbody>
</table>
Step 3. Implement the new system

The third step is to implement the new system, both physically (bin installation) and mentally (communications plan and promotion!).

The checklist below summarises the key points you need to ‘tick’ along the way. This checklist, along with the other checklists in these Guidelines, is ready-to-print in Appendix 1.

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</thead>
<tbody>
<tr>
<td>☐ Set up a communications plan</td>
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<tr>
<td>Promote the new infrastructure</td>
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<tr>
<td>☐ Council website</td>
<td></td>
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<tr>
<td>☐ Media releases</td>
<td></td>
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<tr>
<td>☐ Posters</td>
<td></td>
</tr>
<tr>
<td>☐ Social media</td>
<td></td>
</tr>
<tr>
<td>☐ Local events</td>
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</table>

3.1. Set up a clear communications plan

Set up a communications plan and plan to promote the new infrastructure on multiple occasions and using a number of different communication methods (see section 3.2. Promoting the new infrastructure, next).

Taking the time to document a thorough communications plan will help you clearly identify your objective(s) and thus the communications approach you will take for your target audience(s).

An example of a communications plan is contained in the next two pages. It is a real-life example taken from the Mordialloc shopping precinct project (to read more about this project, refer to Appendix 2).
Example of a communications plan:

Kingston City Council Public Place Recycling Project, Main Street Mordialloc

Communications Plan

Prepared By: Jacqui Iliff – Waste Education Officer, Kingston City Council
Date: 1 March 2012

PROJECT FOCUS
Establishing public place recycling in a busy shopping strip and transit hub.
Capturing maximum recyclable material from the first appearance of new bins, via clear communication of what should be placed in them, and the reasons why this is important.
Minimising contamination of new recycling bins by clearly identifying acceptable materials and common contaminants.

COMMUNICATIONS PLAN OBJECTIVES
- Reach local stakeholders with information on new infrastructure
- Reach potential bin users with information on how to use new infrastructure
- Inform the local community of the new initiative that will have positive environmental outcomes
- Highlight recyclable and non-recyclable materials on new bin signage and via adjacent vendors

CONTEXT AND CHALLENGES BACKGROUND
Mordialloc is a busy strip with retail, supermarket and café trading, positioned on a major bus route, train line and city commute along the Nepean Highway. The shops and food outlets are the nearest for beach, park and pier visitors to purchase food and drink.
The bins are close together along footpaths and also in laneways to bus and train access, so much of the foot traffic is potentially passing through, and in a hurry.
The target diversion rate from the foreshore, shopping strip and railway station is 40% by weight of the total waste stream. This target was calculated using composition data from surrounding municipalities, and pre-education audits have revealed that 48.5% of material in existing bins is recyclable. Therefore the installation of recycling bins in the Mordialloc shopping strip has the capacity to divert between 18 and 36 tonnes from landfill per annum.

COMMUNICATIONS APPROACH
Advertising in local print media and posters in the immediate area will aim of reach potential bin users, drawing attention to the new infrastructure and what materials should go in which bin.
Clear and effective bin stickering is vital to influence point-of-disposal decisions that result in correct placement of recyclables in the new bins. New infrastructure will be stickered on all three exposed sides and on top, in Australian Standard colours for the two waste streams, and employing ‘Do the right thing, use the right bin signage’ guidelines set out by the APC.

KEY RELEVANT TARGET AUDIENCES

<table>
<thead>
<tr>
<th>Name</th>
<th>Role/support/opposition on issue</th>
<th>Influence</th>
</tr>
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<tbody>
<tr>
<td>Retail staff and owners</td>
<td>Gain support from all people working in the local area</td>
<td>Awareness of changes in bin infrastructure</td>
</tr>
<tr>
<td>Public shopping/eating in Mordialloc</td>
<td>Alert all pedestrians in the local area of new bins</td>
<td>Awareness of correct use of new bin infrastructure</td>
</tr>
<tr>
<td>Kingston Council employees</td>
<td>Supporting the upgrade of bin facilities in shopping strips</td>
<td>Support of the Mordialloc upgrade to lead to new bin infrastructure in other parts of the municipality</td>
</tr>
<tr>
<td>Waste collection contractor</td>
<td>Supporting the collection and maintenance of material from new infrastructure</td>
<td>Support of the correct use of new infrastructure by keeping bins clean and maintained</td>
</tr>
<tr>
<td>The general Kingston community</td>
<td>Alert all residents of new bins in the Mordialloc area, as part of Council’s goal to divert all recoverable material from landfill</td>
<td>Prompt the public to look out for new bins when visiting Mordialloc</td>
</tr>
</tbody>
</table>
KEY MESSAGES

<table>
<thead>
<tr>
<th>Action/Tools</th>
<th>Budget</th>
<th>Timeframe</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alert on bin installation, including APC logo – print media</td>
<td>Free articles in Council’s Kingston Your City newspaper</td>
<td>New bin dates TBA – design issues still being debated</td>
<td>EnviroCom/APC</td>
</tr>
<tr>
<td>Key information on correct bin use – print media and shop window posters adjacent to bins</td>
<td>Free articles in Council’s Kingston Your City newspaper</td>
<td>New bin dates TBA</td>
<td>EnviroCom/APC</td>
</tr>
<tr>
<td>Update on bin audit findings, including APC input, to promote what the funding has achieved</td>
<td>Audit results on Council website. Free articles in Council’s Kingston Your City newspaper</td>
<td>To follow audit - dates TBA</td>
<td>EnviroCom/APC</td>
</tr>
</tbody>
</table>

DETAILED IMPLEMENTATION/ACTION PLAN

<table>
<thead>
<tr>
<th>Tools</th>
<th>Key Milestones</th>
<th>Due date/Conditional</th>
<th>Costs/Income</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Kingston Your City’ and ‘Leader’ newspapers</td>
<td>Launch of project</td>
<td>March 2012</td>
<td>In-kind</td>
<td>EnviroCom</td>
</tr>
<tr>
<td>New bins and signage</td>
<td>New bin installation</td>
<td>TBC</td>
<td>$12,900</td>
<td>Council/Furphy Foundry</td>
</tr>
<tr>
<td>Posters in shop windows</td>
<td>New bins installed</td>
<td>TBC</td>
<td>$255</td>
<td>EnviroCom</td>
</tr>
<tr>
<td>Face to face education</td>
<td>Education Day</td>
<td>After bins installed</td>
<td>$1500</td>
<td>EnviroCom</td>
</tr>
<tr>
<td>‘Connect’ staff news</td>
<td>New bins installed</td>
<td>TBC</td>
<td>In-kind</td>
<td>EnviroCom</td>
</tr>
<tr>
<td>Photos on Council website</td>
<td>New bins installed</td>
<td>TBC</td>
<td>In-kind</td>
<td>Council/EnviroCom</td>
</tr>
<tr>
<td>‘Kingston Your City’ and ‘Leader’ newspapers</td>
<td>New bins installed</td>
<td>After education day</td>
<td>In-kind</td>
<td>EnviroCom</td>
</tr>
<tr>
<td>‘Kingston Your City’ and ‘Leader’ newspapers</td>
<td>Project results from follow up audit</td>
<td>After audit and data available on resources diverted</td>
<td>In-kind</td>
<td>EnviroCom</td>
</tr>
<tr>
<td>Report uploaded to Council website</td>
<td>Report after follow up audit</td>
<td>After report approval by Council and APC</td>
<td>In-kind</td>
<td>Council/EnviroCom</td>
</tr>
</tbody>
</table>

EVALUATION

Practical and measurable evaluation of the planned PPR project is inherent in the pre bin installation and follow up audit on new bins’ contents, after education has taken place. This is the most concrete and revealing form of evaluation of new infrastructure, whereby the effectiveness of bin placement and signage is gauged, and can be compared against pre-installation audit data.

Education phase

Verbal feedback from the public and traders in the area during the education phase of the project will be presented along with visual inspection data gathered monthly after bin installation. Commitment from traders will be sought, and posters provided to reinforce the recycling message, particularly with vendors of items packaged in recyclable containers.

Target results

The achievement of a contamination rate at or below 10% will be an indicator of the success of the project, and this will be indicated within the follow up audit and visual assessment of bin contents, providing evaluation of the monthly progress and specific audit date effectiveness of the recycling bins introduced by this project.
3.2. Promote the new infrastructure

Utilise as many promotional avenues as possible, such as:

- Media releases
- Social media
- Council website
- Posters
- Local events
- Face-to-face engagement

Examples of the above are contained in the next few pages. They are real-life examples taken from the Mordialloc shopping precinct project (refer to Appendix 2).

Media releases

Try to publish a number of media releases in local newspapers over the timeline of your project, to keep your audience(s) up-to-date with progress and report on successes, promote recycling at local events and remind your audience(s) how to ‘Recycle Right’.

Example of a media release:

*MEDIA RELEASE*

New recycling bins in Mordialloc helping shoppers do the right thing

Kingston Council has installed recycling bins along the Mordialloc shopping strip to help shoppers and commuters to recycle to their full potential.

The campaign has been funded through the Australian Packaging Covenant grants program, to prevent recyclable containers from being sent to landfill, and the findings of this pilot program will be shared with councils across the country.

Kingston Council Mayor, Cr Ron Brownlee OAM said the campaign will help Kingston residents reduce unnecessary waste going to landfill, and will assist in making recycling available in all Kingston shopping precincts in the most efficient way.

“Recycling bins in public places encourage people to do the right thing, both at home and while out shopping. Importantly, recycling to your full potential will help to divert recyclable materials away from landfill and towards more sustainable uses, such as soft drink cans, white officer paper and jam jars,” said Cr Brownlee.

Cr Brownlee said during the summer holiday period it is important that everyone continues to recycle while they are away from home.

“When you’re out and about this summer, please be smart and recycle right. You can use the public recycling bins for newspapers, cardboard, plastic bottles and containers, juice boxes, coffee cups, metal cans and glass bottles – but please remember that food scraps go in the rubbish bin. Your efforts will make a difference,” said Cr Brownlee.

The recycle bins in Mordialloc are emptied every morning to ensure there is plenty of room for shoppers’ recyclables every day.

Recycling facts:

- Recycling just one aluminium can saves enough energy to run a television set for 3 hours
- Recycling just one glass bottle saves enough energy to power a washing machine for 10 minutes
- Recycling just one plastic bottle saves enough energy to power a CFL bulb for 30 hours
- Recycling one tonne of paper/cardboard saves 30,000 litres of water

The Minister for Environment and Climate Change Ryan Smith has previously said that although Melburnians were great recyclers, on average up to 20 per cent of the material in garbage bins is still incorrectly thrown away, instead of being recycled.

“This amounts to over 300,000 wheelie bins of recyclable packaging ending up in landfill every week,” he said. “The proper use of recycling bins in public places will make a real contribution to the environment.”

Minister Smith said the campaign was further proof of the Victorian Government’s commitment to reducing the amount of waste going to landfill and conserve valuable resources.
Example of social media promotion - Facebook:

**Social media**

Social media is a great way to promote your project and obtain instant feedback.

Similar to print media, you can use social media to keep your audience(s) up-to-date with progress and report on successes, promote recycling at local events and remind your audience(s) how to ‘Recycle Right’.

When using Facebook, make sure your posts are concise and include an eye-catching picture.

The example on the left has been taken from the Mordialloc shopping strip project. 350 people viewed the post, 14 people ‘liked’ it and 1 person commented (“I hope this is a success – there is so much packaging discarded when it should be recycled”).

According to feedback from Council’s Media Officer, 14 ‘likes’ is amongst the highest number that the Council’s Facebook page receives, indicating that the post was successful. The Media Officer also noted that environmental posts usually receive more ‘likes’.

The environment is a popular theme on social media – utilising social media can boost the success of your project!

**Council website**

As the project progresses, publish its successes and results on Council’s website. Publish the URL in the media releases in local newspapers.

If there is an in-house Council newsletter or email, publish the project details and URL to spread the word among Council staff.
Posters in shop windows

Engage the Media & Communications Department to design an area-specific poster to promote the new infrastructure (see example below). Keep the poster clean and simple (no clutter).

Ask local retailers if you can put the poster in their shop windows, to catch the eye of the patrons in the area and promote the new infrastructure.

Example of a promotional recycling poster:

![Poster Example]

There is also a great range of posters available that promote how recycling can help benefit the broader environment, such as water and energy savings.

DEHP and AFGC’s PSF have developed posters promoting the benefits of recycling:

Promotion at local events

Promote the new infrastructure at one or more local events or attractions in order to reach a larger proportion of your target audience(s). You can promote recycling at any local event – food and wine festivals, carols events, street festivals!

For example, if there is a large projector screen at the event, display an event-specific PowerPoint slide (see example, below). Other options include event bulletin boards and voiceovers on a loudspeaker, for example.

Example of promotional PowerPoint slide:
**Face-to-face engagement**

Plan an education day to engage with patrons who use the infrastructure.

Use giveaways that fit with your “close the loop” theme, such as:

- Stickers, e.g. “You’re a start for recycling right!”
- Badges, e.g. AFGC’s PSF “We’re recycling!” badges
- Pencils made from recycled newspaper
- BYO Cup® and other more expensive items as part of a prize draw

Example of “close the loop” themed giveaways:

You could also engage retailers to promote the infrastructure as well!

For example, give stickers to any keen retailers you speak to during the education day. The retailer can then stick a “You’re a start for recycling right!” sticker onto any recyclable material they sell (e.g. plastic drink bottle, newspaper) and engage the customer in conversation about recycling.
Step 4. Monitor and maintain the new system

The fourth step is to monitor and maintain the new system for its ongoing success.

The checklist below summarises the key points you need to ‘tick’ along the way. This checklist, along with the other checklists in these Guidelines, is ready-to-print in Appendix 1.

<table>
<thead>
<tr>
<th>Check</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>☐ Review the new system</td>
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<tr>
<td>☐ Conduct a waste audit</td>
<td></td>
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<tr>
<td>Ongoing conversation</td>
<td></td>
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<td>☐ Council departments</td>
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<td>☐ Waste collection contractor</td>
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<tr>
<td>☐ Local retailers and the public</td>
<td></td>
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<tr>
<td>☐ Ongoing waste assessments</td>
<td></td>
</tr>
<tr>
<td>☐ Maintenance and reporting</td>
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</tbody>
</table>

4.1. Review the new system

Review the bin placement by conducting a waste assessment (visual estimates) of the new infrastructure. Each bin should be assessed individually, to give you an understanding of:

- Bin fullness (i.e. volume used)
- Common contaminants (in recycling) and lost resources (in garbage)

Decide whether any of the bins need re-locating to improve the system.

4.2. Conduct a waste audit

Conduct a 2nd waste audit, to build on the baseline data that was collected prior to installation of the recycling bins.

This 2nd waste audit will give you an understanding of:

- Composition and quantities of materials in the garbage and recycling streams
- Issues with the new system (e.g. specific items that are not being recycled)
- Status of your chosen waste reduction targets
- Benchmark data for ongoing monitoring

Again, if your budget can allow, the 2nd waste audit can audit each bin individually, to give you an even greater understanding of the materials in each bin along the shopping precinct. This can help you identify problems bins/areas.
4.3. Ongoing conversation

Communication is key! Continue to talk to the project stakeholders to assist with monitoring and maintenance of the new system, and to gain support for potential new projects.

<table>
<thead>
<tr>
<th>Group</th>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Council departments</td>
<td>Gain support for potential new projects by promoting the introduction of recycling in the municipality and highlighting the positives of the new system.</td>
</tr>
<tr>
<td>Waste collection contractor</td>
<td>Ask the contractor for anecdotal insights into how the new system is working, e.g. is the site clean, is illegal dumping occurring, is littering a problem? Obtaining data for the project area alone may be difficult. Instead ask the contractor for total volume data for the recycling run and make estimates based on this.</td>
</tr>
<tr>
<td>Local retailers and the public</td>
<td>Conduct a survey of retailers and patrons in the area of the new infrastructure, to gauge their attitudes to recycling away-from-home and the new system, and give them an opportunity to provide feedback. Examples of surveys are provided on the next page.</td>
</tr>
</tbody>
</table>
4.4. Ongoing waste assessments

Waste assessments (visual estimates) cost less than waste audits (physical sorting and analysis) and thus are a great cost-effective ongoing monitoring tool.

Following the 2nd waste audit, it is a good idea to conduct a waste assessment each month for six months. Assess each bin individually for:

- Bin fullness (i.e. volume used)
- Common contaminants (in recycling) and lost resources (in garbage)

4.5. Maintenance and reporting

Keep track of the recycling data obtained from the waste collection contractor, and report on the project results in Council’s annual report.

Regularly check that bin signage is clean and in good condition, and replace as necessary.
Appendix 1: Checklists - Steps 1 to 4

Step 1: Review the current system

<table>
<thead>
<tr>
<th>Check</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Establish the project area</td>
<td></td>
</tr>
<tr>
<td>☐ Review the waste collection contract</td>
<td></td>
</tr>
<tr>
<td>☐ Conduct a waste audit</td>
<td></td>
</tr>
<tr>
<td>Begin the conversation</td>
<td></td>
</tr>
<tr>
<td>☐ Council departments</td>
<td></td>
</tr>
<tr>
<td>☐ Local retailers</td>
<td></td>
</tr>
</tbody>
</table>

Step 2: Design a new system

<table>
<thead>
<tr>
<th>Check</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Set up a detailed project plan</td>
<td></td>
</tr>
<tr>
<td>☐ Set targets and objectives</td>
<td></td>
</tr>
<tr>
<td>The recycling bins</td>
<td></td>
</tr>
<tr>
<td>☐ Bins or bin stations?</td>
<td></td>
</tr>
<tr>
<td>☐ Bin design (lids and constrictors)</td>
<td></td>
</tr>
<tr>
<td>☐ Bin safety</td>
<td></td>
</tr>
<tr>
<td>☐ Bin signage</td>
<td></td>
</tr>
<tr>
<td>☐ Bin placement</td>
<td></td>
</tr>
<tr>
<td>☐ Bin volume and number of bins</td>
<td></td>
</tr>
<tr>
<td>☐ Servicing frequency</td>
<td></td>
</tr>
<tr>
<td>Continue the conversation</td>
<td></td>
</tr>
<tr>
<td>☐ Council departments</td>
<td></td>
</tr>
<tr>
<td>☐ Bin supplier</td>
<td></td>
</tr>
<tr>
<td>☐ Waste collection contractor</td>
<td></td>
</tr>
<tr>
<td>☐ Local retailers</td>
<td></td>
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</tbody>
</table>
Step 3: Implement the new system

<table>
<thead>
<tr>
<th>Check</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Set up a communications plan</td>
<td></td>
</tr>
<tr>
<td>Promote the new infrastructure</td>
<td></td>
</tr>
<tr>
<td>□ Council website</td>
<td></td>
</tr>
<tr>
<td>□ Media releases</td>
<td></td>
</tr>
<tr>
<td>□ Posters</td>
<td></td>
</tr>
<tr>
<td>□ Social media</td>
<td></td>
</tr>
<tr>
<td>□ Local events</td>
<td></td>
</tr>
</tbody>
</table>

Step 4: Monitor and maintain the new system

<table>
<thead>
<tr>
<th>Check</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Review the new system</td>
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<tr>
<td>Ongoing conversation</td>
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<td></td>
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<tr>
<td>□ Waste collection contractor</td>
<td></td>
</tr>
<tr>
<td>□ Local retailers and the public</td>
<td></td>
</tr>
<tr>
<td>□ Ongoing waste assessments</td>
<td></td>
</tr>
<tr>
<td>□ Maintenance and reporting</td>
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</tr>
</tbody>
</table>
Appendix 2: Case study - PPR in Mordialloc shopping precinct

‘Closing the Loop on the Mordialloc Shopping Strip’

The Mordialloc shopping precinct is a popular meeting and shopping destination for many local residents in the City of Kingston. A large number of visitors also frequent the area during the warmer months due to its proximity to Mordialloc beach, one of the busiest beaches in metropolitan Melbourne. The shopping precinct itself is situated between two high pedestrian traffic areas, one being the Mordialloc train station and the other is Mordialloc Foreshore Reserve.

As the shopping precinct is located between the foreshore and train station it is a major thoroughfare for pedestrian traffic. Thus the potential to recover large volumes of recyclable material made this an ideal location for a Public Place Recycling (PPR) system.

Prior to the ‘Closing the Loop on the Mordialloc Shopping Strip’ Project, the foreshore reserve already had recycling infrastructure funded by Kingston City Council, and the train station had recycling infrastructure funded by the Australian Food and Grocery Council’s (AFGC) Packaging Stewardship Forum (PSF), Metro Trains Melbourne (Metro Trains) and Sustainability Victoria (SV). However, the Mordialloc shopping precinct itself only had general waste bins for public waste disposal, meaning any recyclable material collected from the shopping precinct area was sent to landfill.

Local traders had voiced their concern on the amount of litter and resource loss in the shopping precinct due to the lack of recycling opportunities, and it was estimated that 36 tonnes per annum were being lost to landfill.* A waste audit found that approximately half of the garbage stream by mass and over 90% by volume were recyclable materials.

The ‘Closing the Loop on the Mordialloc Shopping Strip’ Project took place in 2012, funded by the Australian Packaging Covenant (APC), Environment Protection Authority (EPA Victoria) and Kingston City Council. The Project installed 11 sets of paired recycling and garbage bins, thus filling the gap in PPR encountered in the area, by linking recycling infrastructure located at the foreshore and train station.

The ‘Closing the Loop on the Mordialloc Shopping Strip’ Project achieved:

- Implementation of a Public Place Recycling (PPR) system at the Mordialloc shopping precinct.
- At three months - Resource recovery rate of 67% (by mass) of recyclable plastic, glass and metals into the recycling stream.
- At three months - Target contamination rate of 10% or less in the recycling stream was achieved by volume.
  (NB. Contamination by mass was 23% and thus did not meet the target; however the majority of the contaminating materials were recyclable containers with liquid (e.g. plastic bottles, glass, coffee cups) so the recycling rate was in fact very high and only the remaining liquid was a problem).
- Sustainable behaviour change principles implemented in the communication and education to reinforce the recycling away-from-home message.

*This estimation took into account seasonality and data from surrounding municipalities indicating that 40% of the garbage stream in similar areas was recyclable.