

Behavioural Change

Lessons from the Birkenhead Point Public Place Recycling trial

This is a project is a NSW EPA Waste Less, Recycle More initiative funded from the waste levy.

Edge Environment

- Our mission is to catalyse positive environmental change with scientific integrity
- We strive to deliver positive and practical environmental change for our clients



We help organisations and people to measure, manage and think about sustainability based on sound science.

Introduction & Context

- Edge delivers NSW EPA's Bintrim and Circulate programs
- Edge is partnering with Eunomia to bring world leading expertise to Australia
- Open collaboration to drive regulatory and policy advisory for industry



Public Place Recycling Trial at Birkenhead Point

- Industry collaboration to drive change and deliver solutions to multi-stakeholder problems
- Recognise the importance of addressing a cause rather than the symptoms
- Effecting systemic change in an industry or behaviour to drive positive environmental outcomes



**SOURCE
SEPARATION
SYSTEMS**

The Reality of Public Place Recycling



The Reality of Public Place Recycling



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The Reality of Public Place Recycling



The Reality of Public Place Recycling

The reality is it's dirty business... and unfortunately, in many cases it all goes to landfill.



The Reality of Public Place Recycling

- Recycling streams were already present at the centre
- But it was an ineffective system dealing with more than 85t of waste per year
- Poorly implemented or designed infrastructure is ineffective



Something Needs to Change

Inclusion of Public Place Recycling (PPR) in the Bin Trim rebates

Trial was preceded by a literature review:

- Aperture restrictions reduce contamination
- Colour coding of bins is essential
- Identify accepted materials rather than those unacceptable
- Importance of ongoing education program

Something Needs to Change

This left us with the following information gaps:

- Controlling contamination through aperture size/shape
- Role of facility managers to educate and lead PPR programs
- how to identify best bin placement for PPR systems in commercial/retail centres
- how to deliver the education to various stakeholder
- what are typical barriers to people using PPR

Something Needs to Change

Four Weeks of Monitoring

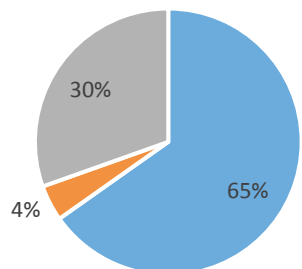
- Baseline
- Signage Design
- Signage Placement
- Consolidated system inc. education program





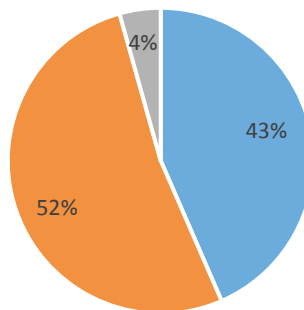
Birkenhead Point Trial Results

Are you confident of which items can be placed into the recycling bin?



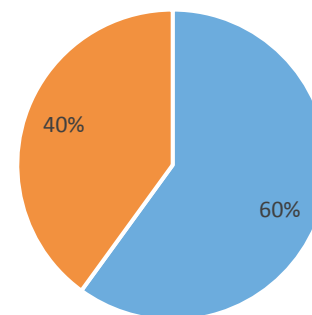
■ Yes ■ No ■ Somewhat

Were there any items you were unsure of where to place ?



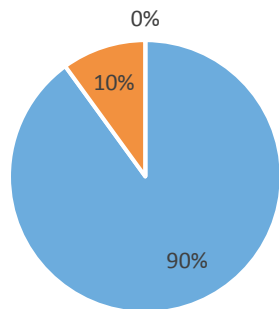
■ Yes ■ No ■ Somewhat

Which signage position was easier to read?



■ Front ■ Backing Board

Are you confident which items can be placed into the recycling bin?



■ Yes ■ No ■ Somewhat

- Responses of unsure items**
- Soy sauce containers
 - Plastic bag
 - Chopsticks x 2
 - Plastic containers
 - Styrafoam x 2
 - Coffee cup
 - Food contaminated recyclables

Birkenhead Point Trial Results

Capture rates increased from 35% (baseline) to 70%+ with installation of new signage

Backing boards consistently showed capture rates of 10-20% more than front signage

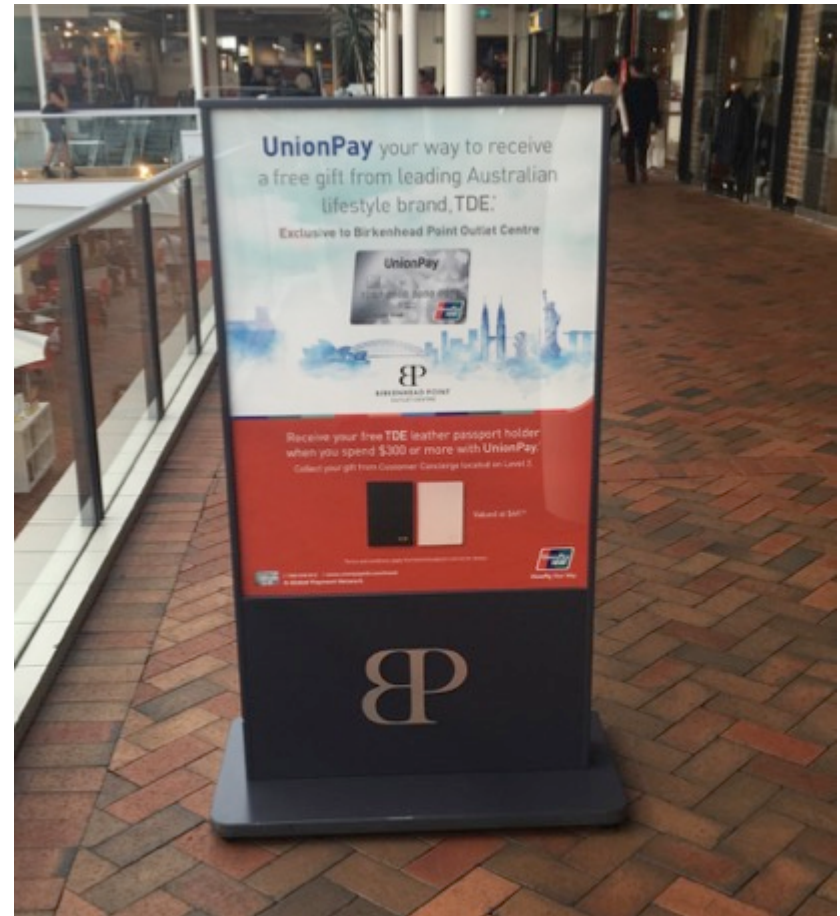
Contamination was only slightly improved by additional signage and placement

Next Steps – Final Designs



Next Steps – Tenant Education

- Launch event for public and tenants
- Design out non-recyclable packaging (poly styrene) through leasing
- Provide sauces in bulk container (soy sauce fish)
- PET drink containers only



Next Steps – Lessons Learned

System design is critical to performance. Minute changes can have significant effects.

- Imagery
- Language
- Colour
- Placement