



Improving recycling in high-rise properties across Hounslow

From August 2019 – May 2021, the London Borough of Hounslow and Ogilvy Behavioural Science Practice collaborated on a rigorous behavioural insights trial to effectively test ways to increase recycling in high-rise properties.



The Challenge

In Hounslow **39% of housing stock are high-rise flats** (or those with communal waste and recycling facilities).

However, **just 5.9% of the borough's recycling came from these properties.**

We have around **40,000 flats across the borough**, these properties therefore represented a significant untapped potential in efforts to increase our recycling rate!

To encourage Hounslow residents living in high-rise flats to recycle more we asked Ogilvy to design interventions that helped residents to:

1. Put the right thing in the right bin
2. Store or prepare recycling in the home

In driving these behaviours, we aimed to achieve:

- An **increased** amount of recycling put in the correct recycling bin
- A **decreased** amount of recycling put in the residual waste bin
- A **decreased** amount of residual waste put in the recycling bin
- **Improved** resident attitude and perceptions of recycling and waste

Behaviour is heavily influenced by the context in which it occurs.

Ogilvy conducted an environmental audit of a number of high-rise properties within the Borough, observing how people behave and reviewing the existing waste facilities.

The Process

They conducted 13 in-depth qualitative interviews with residents in order to build a strong understanding of the environment in which residents make their recycling decisions.

Conducted a Behavioural Insights Review where by Ogilvy interrogated academic literature to uncover further insights into what motivates or discourages 'correct' recycling behaviour especially in high rise flats.

This identified seven key psychological and behavioural challenges:

- Diffusion of responsibility
- Distrust in the process
- Lack of time and convenience
- No consistent in-home storage
- Lack of feedback
- Drop in the ocean effect
- Perception of social norms



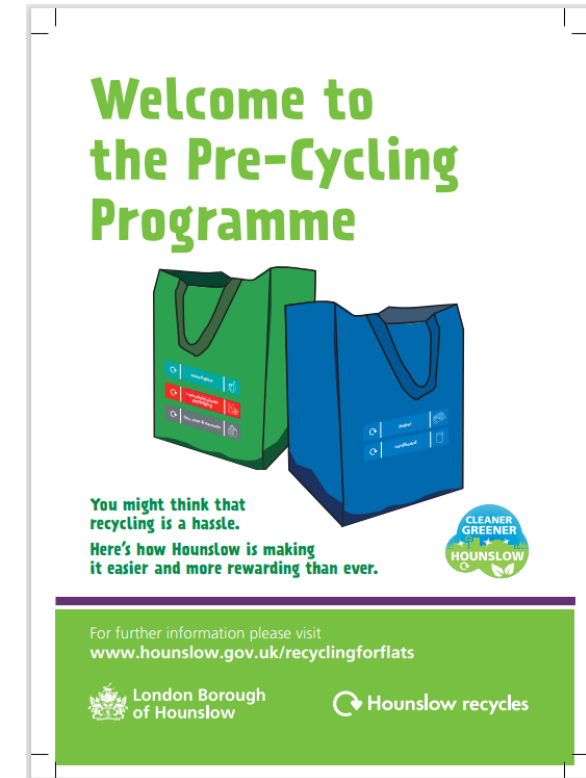
Based on these findings Ogilvy ran a full day workshop with W&R team and our Contractor Recycle 360 to work together to develop interventions that could not only successfully overcome these barriers **but that could be replicated and scaled up across the Borough**. The top 3 intervention ideas were identified to take forward into the trial. These were:

1. **‘Welcome to the pre-cycling programme’ how-to-guide**
2. **Pre-cycling bags**
3. **Pre-cycling lottery**

‘Welcome to the pre-cycling programme’ how-to guide

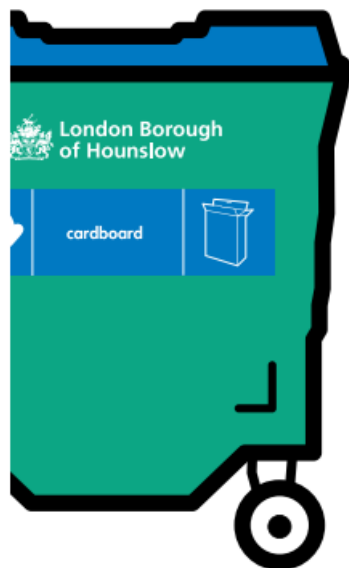
A how-to guide in the form of an engaging leaflet which welcomes and introduces residents to “pre-cycling” – the idea of sorting recycling in-home, then recycling correctly.

This was designed to equip residents with the **knowledge** of what to put in what bin; **empower** residents to play their part in Hounslow’s recycling services; and **explain** to residents the pre-cycling bags and pre-cycling lottery.



Your recycling is at risk

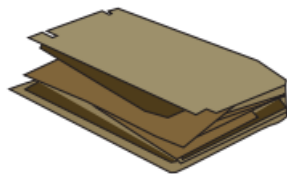
Hounslow's high quality recycling is reliant on the efforts of its residents who sort their waste at site, especially in high rise flats.



When the wrong recycling is put in the wrong bin, or if general rubbish is placed in the recycling bins, it can spoil all of the recycling in those bins.

With too much contamination, your neighbours' correctly recycled items may end up in general waste, rather than in the recycling stream where they belong.

With your help, we can beat the problem of contamination across Hounslow and continue achieving high quality recycling rates.



You don't have to be a perfect recycler, but when you do it, do it well!

Pre-Cycling Bags

Pre-Cycling is a programme designed for residents just like you, who know that recycling is important to do, but might find it difficult to have the time or space to do it properly.



To help you sort your waste at home, we've provided you with these bags and customisable stickers, to sort your recycling, your way.

What should I do?

- ✓ **1] Design your bags** – stick the stickers found in your Pre-Cycling Starter Pack onto the bag to remind you what goes in each one.
- ✓ **2] Prep your materials** – rinse any bottles, cans, pots or trays, and squash cardboard boxes to save space.
- ✓ **3] Store your recycling** in your Pre-Cycling bags.
- ✓ **4] Bring your Pre-Cycling bags to the bin store** when you're ready and empty the contents into the correct bin (see the following pages for more info on what goes in which bin).

Your Pre-Cycling bags are designed to be used again and again. Please do not throw these (or any other plastic bags) in the recycling bins!

What can be recycled in your flat?

We would like to thank all Hounslow residents who have helped increase our recycling rate so far. Are you recycling as much as you can?

Recycling is collected weekly and you can recycle the following:



Paper

- ✓ Paper
- ✓ Newspapers
- ✓ Catalogues, Magazines and Directories
- ✓ Envelopes
- ✗ Shredded paper
- ✗ Coated paper (plastic, foil, glitter)

Cardboard

- ✓ Flattened Cardboard
- ✓ Tetra Pak (Milk and Juice Cartons)
- ✗ Polystyrene
- ✗ Plastic wrap
- ✗ Paper



FEEL FREE TO TAKE ME OUT AND PUT ME ON YOUR FRIDGE



Mixed glass

- ✓ Glass Bottles
- ✓ Glass Jars
- ✗ Lightbulbs
- ✗ Crockery/Pyrex
- ✗ Drinking Glasses

Plastic

- ✓ Plastic Bottles
- ✓ Plastic Tubs
- ✓ Plastic Pots
- ✓ Plastic Trays
- ✗ Plastic carrier bags and packaging
- ✗ Polystyrene
- ✗ Black plastic trays



Tins, Cans & Aerosols

- ✓ Drink Cans
- ✓ Food Tins
- ✓ Aluminium Foil
- ✓ Empty Aerosol Cans
- ✗ Scrap Metal
- ✗ Crisp Packets
- ✗ Paint Tins



Win big with the Pre-Cycling Lottery

A lottery you enter just by recycling!
Could you be a lucky winner?

With this Pre-Cycling Starter Pack, we are giving you 4 golden opportunities to win a voucher to use in some of your favourite high street shops. **Be sure not to use them all at once – our lottery will be running for 4 weeks with one lucky winner picked each week!**



Simply stick a golden ticket to an item of your recycling, with your contact details included.

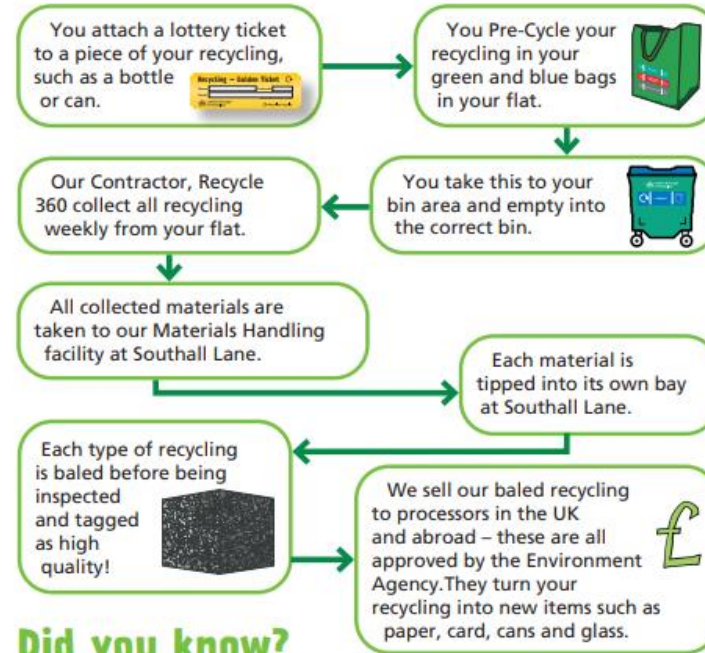


Once your recycling has been collected, staff at our materials handling facility will pick out all golden ticket items that they find.

Lucky winners will be selected at random and contacted to claim their prize!

You must recycle your golden ticket item in the correct bin to be in with a chance of winning!

What happens to your recycling?



Did you know?

- ✓ Recycling a single aluminium can can save enough energy to power a TV for up to three hours!
- ✓ Your plastic bottle could be recycled into anything from a plant pot to a bin to new playground equipment!
- ✓ Recycling a single glass bottle will save enough energy to power a laptop for half an hour!



Thank you for Pre-Cycling...



...and good luck!

Pre-Cycling is a pilot program run by Hounslow Council across some of our high rise properties. Thank you for your participation.

Pre-cycling bags

Residents were provided with two 'pre-cycling' bags, to help them to sort and store their recycling in-home. Residents were also provided with stickers that enabled them to label each bag with the recycling streams they were storing in each one.



These bags were designed to:

- Normalise 'pre-cycling' (the sorting of recycling at home).
- To make the trip to the recycling bin easier each time.
- To build the visual social norm of in-home recycling as the 'done thing'.

Pre-cycling Lottery

Recycling – Golden Ticket ♻️

Name: Postcode:

Email:

PLEASE WRITE IN CAPITAL LETTERS

London Borough of Hounslow Hounslow recycles



- Residents were able to win a prize by recycling correctly through the ‘pre-recycling lottery’, a lottery you enter by recycling!
- Residents were given a number of ‘golden stickers’, which they could write their contact details on and stick onto items in their recycling. Staff at our materials handling facility would then pick out all golden ticket items that they found, and lucky winners would be selected at random.
- As long as the recycling item was in the correct recycling stream, the resident would be contacted to claim their prize.

Hey Three Courts!

Thanks for recycling
– but could you do
even better?

Don't forget to use
your pre-cycling
bags and enter the
lottery to be in
with a chance
of winning!



Posters were put up around bin areas in each estate, which thanked residents for recycling correctly, called out the pre-cycling bags and emphasised the pre-cycling lottery. These helped to reinforce correct recycling behaviours at the point and place of disposal.

Hey Alfred Close!

Thanks for recycling
– but could you do
even better?

Don't forget to use
your pre-cycling
bags and enter the
lottery to be in
with a chance
of winning!

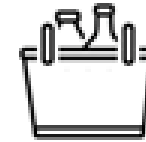


The Overall Journey



Participants receive Participant Pack, including How-To Guide, Pre-Cycling Bags, and Lottery stickers, all designed to fit through a letter box

- ✓ **Equip** residents with the knowledge of what to put in what bin



Participants get in the habit of "Pre-cycling", that is, sorting their recycling in home to make separating waste at the bin area easier to do.

- ✓ **Empower** residents to play their part in Hounslow's recycling services



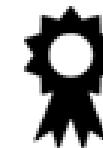
Participants carry their waste to the bin using their "Pre-cycling" bags, with Pre-Cycling lottery stickers attached to certain items of their recycling.

- ✓ **Normalise** "pre-cycling", while making it easier to do



Signage throughout the estate and bin area encourages and reminds participants to "pre-cycle"

- ✓ **Reinforce** the correct recycling behaviours at the point of disposal



Winners of the Pre-Recycling Lottery are selected, rewarding those who have sorted and recycled their waste correctly.

- ✓ **Reward** those taking action, using variable rewards



The Impact: planned trial methodology

Nine estates (1,087 households) were randomly assigned to the treatment condition; these residents received the intervention. A different selection of nine estates (925) was allocated to the control group, which received no intervention.

A bin fill survey and waste composition analysis were carried out by Hounslow Council and Recycle 360 to establish baseline measurements for both groups for the following variables:

- amount of recycling waste (kg/hh/ww)
- amount of residual waste (kg/hh/ww)
- amount of residual waste in the recycling bins (kg/hh/ww)
- amount of recycling waste in the residual waste bins (kg/hh/ww)

The randomised control trial described coincided with the first and second waves of the COVID-19 pandemic, complicating the distribution of Participant Packs and the collection of associated data.

Limitations

Due to capacity constraints, **only four estates participated in the waste composition analysis**, which looked to understand contamination rates of participants recycling

The following limitations impacted the team's ability to collect results for the **bin fill survey**, which aimed to capture volume of waste disposed of by participating estates:

- Resource
- Subjective measurement tools
- Increased volume of waste

There were a number of limitations with the waste composition analysis including:

- The analysis period coincided with the second lockdown in the UK
- Changes in staff meant that the analysis was not carried out in the desired way - a closer group of sites geographically may have helped.

While some changes were anecdotally indicated at two specific sites for the **bin fill survey**, the results were unsuitable for statistical analysis and therefore haven't been included here.

The resulting findings from the **waste composition analysis** are as follows:

Alfred Court and Beaumont Court

Targets	Card	Glass	Paper	Plastic
Before	67.65%	93.72%	94.9%	73.15%
After	78.23%	98.84%	96.72%	66.48%
Change	10.57%	5.12%	2.22%	-6.67%

Kew Court and Pinkham Mansions

Targets	Card	Glass	Paper	Plastic
Before	87.78%	94.24%	94.15%	43.40%
After	61.49%	97.01%	97.20%	39.34%
Change	-26.28%	2.77%	3.04%	-4.07%

The Result

A survey was created to better understand the impact of the interventions for residents. We worked with Ogilvy to develop a short questionnaire for feedback on the precycling bags, posters, leaflet, and golden tickets.

Disappointedly, we did not receive any response to the survey across all sites. This consequently meant that we were unable to gain further insight into the success of the interventions from residents' perspectives.

Lessons Learnt

1. As the first behavioural insights trial undertaken in Hounslow, it was important to involve colleagues from across our waste management services.
2. It was important that the ideas we generated could be adapted across the whole Borough to ensure they offered as much value to changing behaviour as possible.
3. With Ogilvy's help we gained skills in developing behaviourally informed communications and this has informed our new flats recycling leaflet and changed how we communicate with our residents.
4. We are planning on redoing this project in 2022/23, where we will adapt the project with lessons learnt and time wise that it doesn't coincide with a Covid lockdown.

Reflecting on the methodology of the trial, there were also learnings that would benefit future research undertaken by local authorities in this space:

- **Ensure there are sufficient sampling occasions**
- **Allocate additional project management support** – creating detailed templates for team members collecting data and designating specific employee(s) dedicated to the task over time would help to ensure consistent results.
- **Use ward officers to monitor the sites included in the study** – to see how the bins are being used and to ensure that the sites are looking their best to encourage use. Ward officers could also be used to assist with the waste composition analysis, by visiting the depot during the pre and post intervention to check on quality and quantity.
- **Consideration should be given to aligning collection days on any site** – so that all bins types are emptied on the same day. With collection days varying at each location, resident behaviour may be influenced by the availability of specific waste containment volume.
- **Provide ample time for creating the recycling bags** – the pre-cycling bags were not able to be produced as intended, due to time delays and restrictions on the manufacturer's side (due to COVID-19).
- **Include weekly communications designed to build on the intervention** – it would have been helpful to include weekly communications to residents which prompted further action, with encouraging messages like 'how are you getting on?', 'are you using your bags?', and 'have you entered the golden ticket competition?'