

# Making recycling work for people in flats: Case studies

January 2020



Produced by Resource London

Resource London is the jointly funded partnership programme created by LWARB and WRAP. It is a support programme for London waste authorities, helping them to achieve recycling targets set by the Mayor of London and national government. It maximises the resources of both organisations for the benefit of London. More information about Resource London can be found on our website - [www.resourcelondon.org](http://www.resourcelondon.org)



Resource London

# Contents


← Use these symbols in the top right corner to navigate the toolkit

These case studies provide further detailed information on the twelve estates that were part of the project. The case studies detail the methodology and results of the project designed to increase the capture of recyclables from purpose-built flats within the Peabody estate.


## Contents

- Key to case studies..... **3**
- Case Study A – Westminster (comparison estate) ..... **4**
- Case Study B – Lambeth (comparison estate)..... **7**
- Case Study C – Westminster (intervention estate) ..... **10**
- Case Study D – Tower Hamlets (intervention estate) ..... **13**
- Case Study E – Tower Hamlets (intervention estate) ..... **16**
- Case Study F – Islington (intervention estate) ..... **19**
- Case Study G – Islington (intervention estate) ..... **22**
- Case Study H – Islington (intervention estate) ..... **25**
- Case Study I – Camden (intervention estate)..... **28**
- Case Study J – Hackney (intervention estate)..... **31**
- Case Study K – Westminster (intervention estate) ..... **34**
- Case Study L – Tower Hamlets (intervention estate)..... **37**
- Contacts and further help ..... **40**





**If you must print, please print double-sided on recycled paper.**



# Key to case studies

## Flats Recycling Package

The Flats Recycling Package was introduced across all 12 estates, including the comparison estates, to bring recycling and rubbish services up to a common quality standard.

The Package included the following:

- ensuring clean and well-maintained bins and bin areas
- appropriate collections to prevent overflows and appropriate recycling capacity (minimum 60 litres per household per week)
- appropriate apertures on recycling bins big enough to accept plastic bags of recycling and with locked reverse lids
- collecting the six main recyclable materials (paper, card, glass, food and drink cans, plastic bottles, and mixed rigid plastics (tubs, pots and trays))
- ensuring clear and visible signage on and above the bins
- convenient location of recycling bins for residents
- a yearly recycling leaflet
- posters highlighting recycling messages displayed in a central location (where possible)
- residents informed of what they should do with bulky waste items.

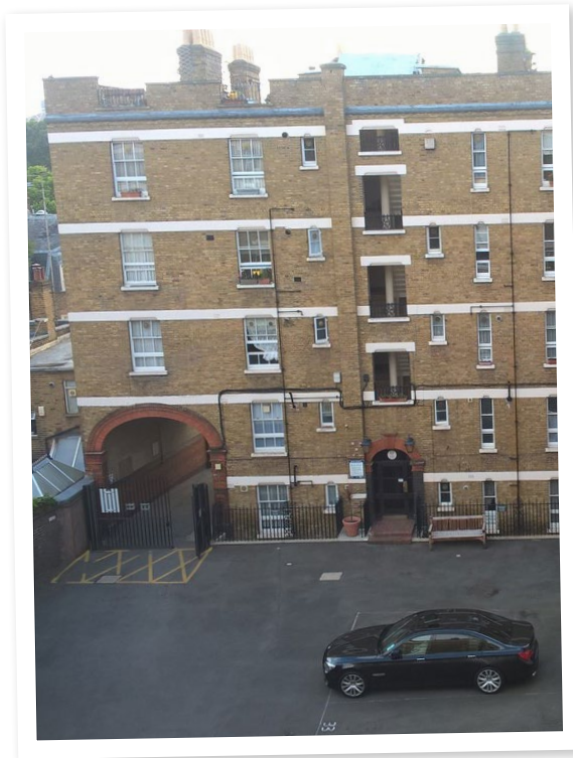
## Resident Feedback

A representative sample of six to seven residents was interviewed on each estate to get their feedback on the project and to show the levels of awareness and engagement with the Flats Recycling Package and the behavioural interventions.

## Behavioural Interventions

Interventions	Description	Barriers to behaviour seeking to address
<b>Additional smaller recycling bins</b>	Smaller bins installed in convenient locations for residents to use on the way in / out of the estate, with clear signage about what can be recycled. Intended to make recycling more visible and enable more frequent deposits.	<ul style="list-style-type: none"> <li>• Residents think recycling feels easier</li> <li>• Residents have a better knowledge of what can and cannot be recycled</li> </ul>
<b>Emotive signage</b>	Signage used in the rubbish bin areas and on chutes, with images of families to encourage residents to think about future generations and encourage them to recycle. Intended to prompt residents to question a 'binning' mindset in favour of being a recycler.	<ul style="list-style-type: none"> <li>• Residents are more motivated to recycle</li> <li>• Residents have a better knowledge of what can and cannot be recycled</li> </ul>
<b>Feedback posters</b>	Posters displayed on estate noticeboards, changed monthly. The posters communicate messages such as praise for residents who recycle, information about what can and cannot be recycled, and what happens to recycling after it leaves the estate. Intended to strengthen social norms for recycling and enhance a sense of involvement in the recycling system.	<ul style="list-style-type: none"> <li>• Residents are more motivated to recycle</li> <li>• Residents have a better knowledge of what can and cannot be recycled</li> </ul>
<b>In-home storage solution</b>	A pack containing a roll of recycling bags and two hooks delivered to residents, intended to help residents manage space constraints on storing recyclables and to minimise the effort needed to transport items to bins.	<ul style="list-style-type: none"> <li>• Residents think recycling feels easier</li> <li>• Residents are more motivated to recycle</li> </ul>
<b>Tenant Pack</b>	A pack delivered to residents with Peabody branding that included a booklet of information about recycling, a notepad and pencil. It was designed to form a 'social contract' between Peabody as landlord and what they expect of their residents / tenants with regards to recycling.	<ul style="list-style-type: none"> <li>• Residents are more motivated to recycle</li> <li>• Residents have a better knowledge of what can and cannot be recycled</li> </ul>

# Case Study A – Westminster (comparison estate)



## Estate details

Estate A is a c.1900 purpose-built development made up of four four-storey and five-storey blocks arranged around a central courtyard. One of the buildings is accessed from the main road and the other three from a quiet residential street. Of the 144 flats, 80% are social housing and 20% are privately rented.

Of all the estates in the trial, Estate A has the highest proportion of residents aged over 55 years and the lowest number under 45 years. Two thirds of residents have lived on the estate for more than six years.

## Estate A: Age profile of residents

Age (yrs)	% of residents
<5	1%
5-14	1%
15-24	7%
25-34	13%
35-44	15%
45-54	23%
55+	40%

Residents say that they like living on the estate for its quiet, central location.

Estate A has two caretakers (Monday – Friday).

There is one bin store in the central courtyard. Before the trial the rubbish bins were kept in the store and the recycling bins located directly outside it.

Rubbish was collected three times per week and recycling was collected weekly.



# Case Study A – Westminster (comparison estate)

## Intervention activity

1

We introduced our Flats Recycling Package for recycling and rubbish facilities in purpose-built flats across the estate. We installed an additional large recycling bin at one of the estate entrances in order to increase recycling capacity and accessibility.

The changes were rolled out in a single day on Thursday 27 September 2018.



# Case Study A – Westminster (comparison estate)

## Results

By the end of the trial, the recycling rate had increased by 36% and the capture was up by 11%. Contamination had reduced by 22%.

## Estate A: Pre and post-trial performance rates

	Pre-trial actual	Post-trial actual	Maximum potential*	Increase / decrease
<b>Recycling</b>	13.6%	18.5%	33.9%	36%
<b>Capture</b>	46.2%	51.5%		11%
<b>Contamination</b>	27.5%	21.5%		-22%

\*Assuming 100% capture of all dry materials currently collected for recycling. If 100% of food waste and dry materials currently collected were captured, maximum recycling rate achievable would be 60.4%

## Successes

Residents said they liked the changes. Some said they had changed their recycling habits as a result. One resident commented that the bins are now more accessible and have wider openings that make it easier to dispose of larger boxes. Another said the information showing what can and can't be recycled had helped to improve her knowledge and confidence in recycling.

*"It's better, because it's just easier. It's literally just a bit closer. That's all it is. It's not a massive difference."* (Resident)

*"I think the new bins are good as they open more widely and make it easier to dispose items including large boxes."* (Resident)

The caretakers and the collection crews said that they noticed there has been less dumping of waste around the bin areas since the installation of the new bins.

## Challenges

There was major refurbishment work going on at the estate during the trial. The caretakers found that they had to clean the bins more frequently than usual because of the dust from the works.

Some of the posters we put up on internal notice boards got covered up by other notices.

We couldn't put recycling bins at the main road entrance because the building opens directly on to the pavement. Consequently, there was no improvement in accessibility for residents living in this part of the estate. They still had to walk round to the main courtyard to dispose of their rubbish and recycling.

Despite a number of attempts, we found it difficult to get stickers to adhere to older rubbish bins that had multiple bumps and scratches.

Three residents, all who had lived on the estate for a long time, didn't notice the changes.

*"I haven't noticed any new types of bins. There has been signage about the construction work going on but nothing about recycling that I can remember."* (Resident)

## Conclusions

Recycling, contamination and capture rates all improved on Estate A. The residents, collection crews and the local authority were positive about the changes, which some residents said made it easier to recycle.

Bin stores need to be monitored regularly and any problems addressed quickly.

# Case Study B – Lambeth (comparison estate)



## Estate details

Estate B is a purpose-built gated development on a quiet residential street. Built in 2009 it consists of 129 owned and privately rented flats arranged in two four-storey blocks.

Nearly half of the people who live on Estate B are aged 35-44 years and just 6% are over 55 years, fewer than on any of the other estates in the trial. No data is available on length of tenure.

### Estate B: Age profile of residents

Age (yrs)	% of residents
<14	Data not available
15-24	2%
25-34	19%
35-44	48%
45-54	25%
55+	6%

Residents say they enjoy living on the estate because it is quiet, friendly and in a good location.

Estate B has a weekly cleaning service but no caretaker.

There are four bin stores at the back of the property. Before the trial, bins for rubbish and recycling were kept in separate stores, some with key code access.

Rubbish and recycling was collected weekly.



# Case Study B – Lambeth (comparison estate)

## Intervention activity

- 1 We introduced our Flats Recycling Package for recycling and rubbish facilities in purpose-built flats across the estate. No additional bins or collections were added.
- 2 To make it easier for residents to access recycling facilities we converted three of the four bin stores to house both rubbish and recycling bins, in clearly defined areas designated by floor markings. The fourth bin store was reserved for bulky waste items.

The changes were rolled out in a single day on Monday 24 September 2018.





# Case Study B – Lambeth (comparison estate)

## Results

Recycling and capture rates on this estate were the highest of all the estates in the trial.

By the end of the trial, the recycling rate had increased by 30% and the capture rate by 17%. Contamination had reduced by 40%, one of the biggest improvements in the trial.

## Estate B: Pre and post-trial performance rates

	Pre-trial actual	Post-trial actual	Maximum potential*	Increase / decrease
<b>Recycling</b>	21.2%	27.5%	35.9%	30%
<b>Capture</b>	65.1%	76.3%		17%
<b>Contamination</b>	16.0%	9.4%		-40%

\*Assuming 100% capture of all dry materials currently collected for recycling. If 100% of food waste and dry materials currently collected were captured, maximum recycling rate achievable would be 62.47%.

## Successes

Residents were pleased with the changes. They said they noticed that the bin stores were cleaner and less cluttered. Some said they thought the changes made recycling easier.

*“Oh, brilliantly yeah. Because before, I mean some of the times you couldn’t get into the bin room just through mattresses etc. so it was just building up, and before if there was recycling, I never knew where it was up until recently.” (Resident)*

The local authority said the floor markings helped to make sure collection crews put the bins back neatly, and in the right places.

## Challenges

We had to design the changes without the benefit of input from a caretaker, as the estate doesn’t have one.

We noticed that residents avoided using recycling bins that had dirty lids.

The communications we displayed on lobby noticeboards and inside bin stores telling residents how to dispose of bulky waste items were not entirely effective. There were continued problems with residents dumping these items in the bin stores. As a result, access to the recycling and rubbish bins was sometimes reduced and the crews were not always able to put bins back correctly after they had emptied them.

In one case, a collection crew unfamiliar with the new reverse lids accidentally damaged some of the bins through mishandling.

*“.. for the new recycling bins they have a reverse lid, so the hinges of the lid are part of the bin and that means they need to be emptied slightly differently...one day when the crew was*

*emptying some of the bins, they actually ripped some of the lids off because they didn’t know how to empty them properly.” (Local authority)*

## Conclusions

Recycling, contamination and capture rates all improved on Estate B. The residents, collection crews and the local authority were positive about the changes.

Collection crews should receive training on how to empty new bins correctly.

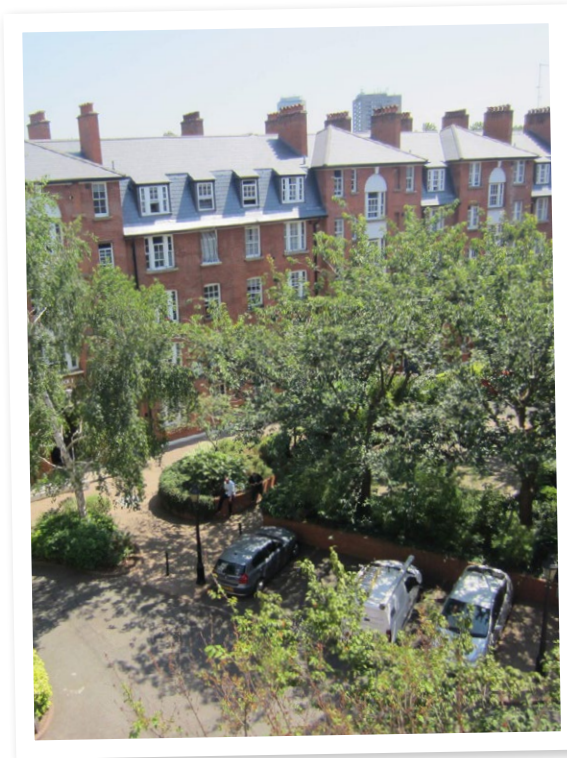
Bin stores need to be monitored regularly and any problems, such as the dumping of bulky waste, addressed quickly.

Bins and bin lids need to be kept clean.

The presence of an on-site caretaker would assist addressing issues easier.

We need to find more effective ways of tackling the issue of bulky waste.

# Case Study C – Westminster (intervention estate)



## Estate details

Estate C was built in 1913. It is a purpose-built gated development made up of 10 five-storey blocks. More than 80% of the 132 flats are social housing. The rest are privately rented.

A third of the people who live on Estate C are aged over 55 years. Two thirds of residents have lived on the estate for more than six years.

Residents say that they like the estate's central location and sense of community. They say it is a quiet and safe place to live.

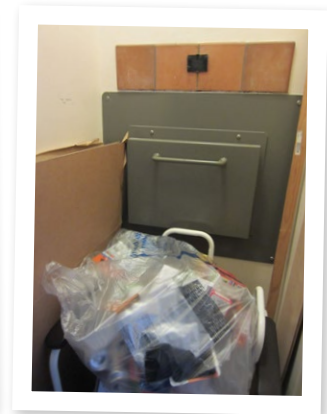
## Estate C: Age profile of residents

Age (yrs)	% of residents
<5	1%
5-14	7%
15-24	11%
25-34	13%
35-44	13%
45-54	20%
55+	35%

Estate C has two caretakers (Monday – Friday).

The estate has rubbish chutes on every floor and rubbish bins in the courtyard for larger bags. Before the trial there were eight recycling bins at six locations around the courtyard.

Rubbish was collected three times per week and recycling collected weekly.



# Case Study C – Westminster (intervention estate)

## Intervention activity

- 1** We introduced our Flats Recycling Package for recycling and rubbish facilities in purpose-built flats and moved the recycling bins to higher footfall locations to make them more accessible.



- 2** We introduced the following three behavioural interventions. The changes were rolled out on Friday 12 and Monday 14 October 2018. The tenant packs were delivered one week later on Friday 19 October.

Interventions	Details	Residents aware	Residents engaged
<b>Emotive signage</b> <ul style="list-style-type: none"> <li>Emotive signage displayed next to the rubbish bins in the courtyard and above every chute hopper.</li> </ul>		Extremely	Not very
<b>Feedback posters</b> <ul style="list-style-type: none"> <li>Feedback posters (changed monthly) displayed next to the recycling bins in the courtyard and at the main entrance to the estate.</li> </ul>		Very	Not very
<b>Tenant pack</b> <ul style="list-style-type: none"> <li>Tenant pack delivered to homes a week after the signs and posters went up.</li> </ul>		Not very	Partially

# Case Study C – Westminster (intervention estate)

## Results

By the end of the trial the recycling and capture rates had both increased by 17%. Contamination was reduced by 44%, the second highest reduction of all the estates in the trial.

## Estate C: Pre and post-trial performance rates

	Pre-trial actual	Post-trial actual	Maximum potential*	Increase / decrease
<b>Recycling</b>	13.5%	15.7%	33.5%	17%
<b>Capture</b>	41%	48.1%		17%
<b>Contamination</b>	42.1%	23.4%		-44%

\*Assuming 100% capture of all dry materials currently collected for recycling. If 100% of food waste and dry materials currently collected were captured, maximum recycling rate achievable would be 58.1%.

## Successes

Residents said they liked the changes, especially the signs, which they said improved their knowledge and confidence about what to recycle. Some said it encouraged them to recycle additional materials and some said they recycled more of the same.

*"I was always in favour of recycling, but it's made it easier for me. First of all, it's just there isn't it? Yes, I'm quite happy with the changes." (Resident)*

Some of the residents said they noticed the feedback posters and appreciated the positive messages they carried about recycled material being used to make something new, such as a picnic bench. They also said the posters were helpful in clarifying what to recycle.

*"It's giving people information on recycling and teaching them slowly how to recycle. Thinks it's a good idea as people will eventually learn more about recycling if they are informed more." (Resident on the feedback posters)*

Most residents were aware of the emotive signage but only a couple of residents had more detailed recall of the messages.

## Challenges

The rigid signs we had made did not fit the convex door of the rubbish chutes and had to be replaced with stickers.

We made multiple interventions on this estate and put up a lot of different posters and signs. This 'cluttering' of communications may have reduced the impact of the messages.

A few people felt the emotive signage wasn't motivational and couldn't see the point of having it.

There were several issues with collection crews putting recycling bins back in the wrong places and, occasionally, the wrong way around so that residents struggled to access them.

There were problems with the locks on two of the notice boards where the feedback posters were displayed.

Despite a number of attempts, we found it difficult to get stickers to adhere to older rubbish bins that had multiple bumps and scratches.

## Conclusions

Recycling, contamination and capture rates all improved on Estate C. The residents, collection crews and the local authority were positive about the changes. Not all residents were aware of the interventions, especially the tenant pack, and this is likely to have limited the potential for impact.

Engagement and training with the collection crew is critical to ensuring the service runs smoothly.

Floor marking should be considered, to designate bin areas.

Steps should be taken to ensure that all signage and stickers are the correct size and fit for purpose to avoid delays at installation and to ensure that signage across each estate is proportionate.

# Case Study D – Tower Hamlets (intervention estate)



## Estate details

Estate D was built in 1910. It is a purpose-built gated development made up of eight five-storey blocks set out in a triangular shape with a playground in the middle. 99% of the 104 flats are social housing. The rest are privately rented.

A third of the people who live on the estate are aged over 55 years. Three quarters of residents have lived on the estates for more than six years.

Residents say that they like the estate's central location and sense of community.

## Estate D: Age profile of residents

Age (yrs)	% of residents
<5	2%
5-14	12%
15-24	15%
25-34	12%
35-44	15%
45-54	13%
55+	31%

Estate D has a caretaker (Monday to Friday).

The estate has rubbish chutes on nearly every floor and one rubbish bin at both main entrances to the estate for larger bags. Before the trial there were five recycling bins at two locations on the main entrances to the estate.

Rubbish and recycling was collected weekly.



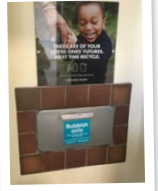


# Case Study D – Tower Hamlets (intervention estate)

## Intervention activity

- 1 We introduced our Flats Recycling Package for recycling and rubbish facilities in purpose-built flats.
- 2 We added one recycling bin, making three at each entrance in total, and provided an additional recycling collection to increase capacity and prevent overflows.



- 3 We introduced the following three behavioural interventions. The changes were rolled out on Tuesday 16 October 2018. The tenant packs were delivered one week later, on Tuesday 23 October.

Interventions	Details	Residents aware	Residents engaged
<b>Emotive signage</b> <ul style="list-style-type: none"> <li>Emotive signage displayed above or to the side of every rubbish chute hopper.</li> </ul>		Partially	Partially
<b>Feedback posters</b> <ul style="list-style-type: none"> <li>Feedback posters (changed monthly) two A1 posters next to the recycling bins; one at each main entrances to the estate.</li> </ul>		Very	Not very
<b>Tenant pack</b> <ul style="list-style-type: none"> <li>Tenant pack delivered to homes a week after the signs and posters went up.</li> </ul>		Very	Not very

# Case Study D – Tower Hamlets (intervention estate)

## Results

By the end of the trial the recycling and capture rate had increased by 29% and 20% respectively. Contamination was reduced by 22%.

## Estate D: Pre and post-trial performance rates

	Pre-trial actual	Post-trial actual	Maximum potential*	Increase / decrease
<b>Recycling</b>	9.4%	12.1%	29.3%	29%
<b>Capture</b>	37.3%	45.6%		22%
<b>Contamination</b>	32.8%	26.2%		-20%

\*Assuming 100% capture of all dry materials currently collected for recycling. If 100% of food waste and dry materials currently collected were captured, maximum recycling rate achievable would be 60.1%.

## Successes

Nearly all residents were aware of the changes to the bin areas and most liked the upgrade, saying this is what had made most difference to their recycling habits. They said the signage made it easier to recycle. Their perception was that a new mixed dry recycling service had been introduced on their estate, which they believed wasn't there before.

*"The signage and direct information which tell you what you can and can't recycle makes the most difference." (Resident on the Flats Recycling Package)*

*"The bins have made most difference. There are more recycling bins and it's cleaner, so it makes you want to recycle." (Resident on the Flats Recycling Package)*

## Challenges

The caretaker noticed that residents were dumping black bags containing recycling next to the recycling bins.

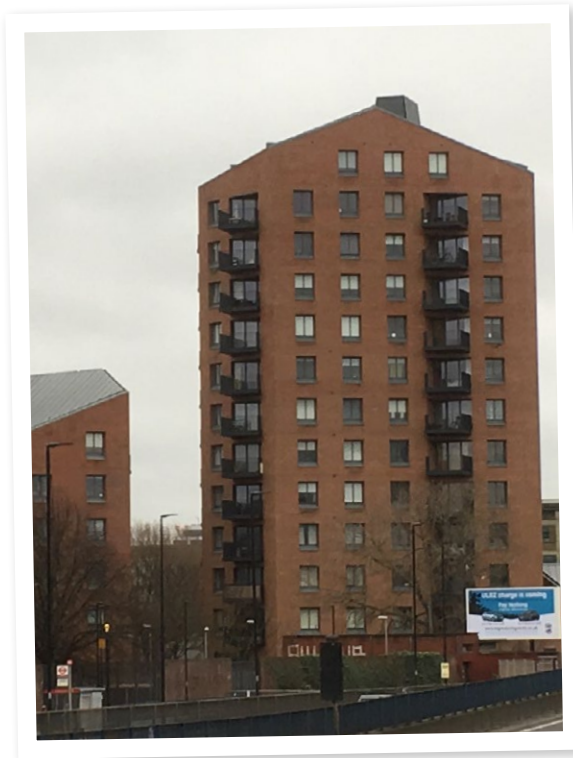
*"I'm not sure if it's made recycling easier for some residents... maybe for some residents. But some residents are lazy and continue to dump recycling bags round by the bins." (Caretaker on the Flats Recycling Package)*

The collection crews described the reverse lids on the large bins as "floppy" and easily damaged.

## Conclusions

Recycling, contamination and capture rates all improved on Estate D. The residents, collection crews and the local authority were positive about the changes. Although most residents were aware of most of the interventions, it appears that this did not always influence their recycling behaviours

# Case Study E – Tower Hamlets (intervention estate)



## Estate details

Estate E is a purpose-built estate located off a busy main road. Built in 2015, it is made up of a 12-storey tower block and four smaller four-storey blocks. 80% of the 109 flats are privately owned and the remainder are for social rent.

Estate E has the highest proportion of younger people, with more than three quarters of residents aged 0-34 years. It also has the smallest proportion of people over 55 years. All of the residents have lived on the estate for four years or less.

Residents say that they like the privacy of the estate and its location, close to transport links.

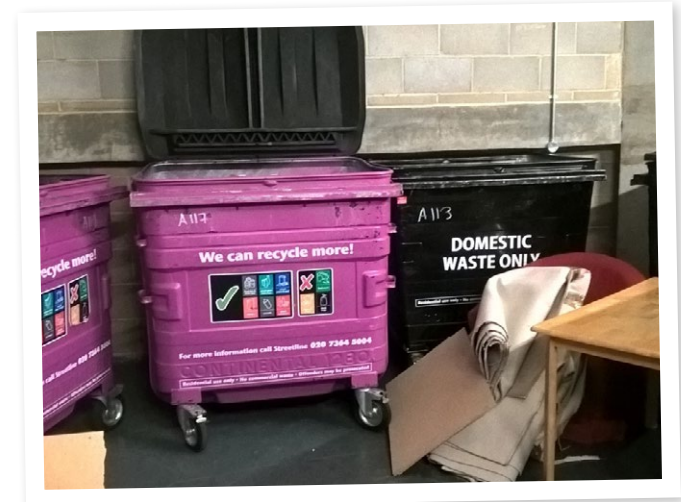
### Estate E: Age profile of residents

Age (yrs)	% of residents
<5	11%
5-14	32%
15-24	7%
25-34	27%
35-44	17%
45-54	2%
55+	4%

Estate E has a caretaker (Monday – Friday).

Each of the blocks has a self-contained rubbish and recycling room on the ground floor which is accessed either via key code or fob.

Rubbish and recycling was collected weekly.





# Case Study E – Tower Hamlets (intervention estate)

## Intervention activity

- 1** We introduced our Flats Recycling Package for recycling and rubbish facilities in purpose-built flats including floor markings in the bin rooms designating recycling and rubbish areas. No additional bins or collections were added.



- 2** We introduced the following two behavioural interventions. The changes were rolled out on Thursday 18 October 2018

Interventions	Details	Residents aware	Residents engaged
<p><b>Emotive signage</b></p> <ul style="list-style-type: none"> <li>Emotive signage (five designs) displayed above the rubbish bins.</li> </ul>		Extremely	Not very
<p><b>In-home storage solution</b></p> <ul style="list-style-type: none"> <li>In-home recycling storage solution delivered to each flat on the same day as the changes were made. Four recycling bag dispensers were installed on main entrances of each block, then moved into the bin rooms a few weeks into the project because of anti-social behaviour.</li> </ul>		Extremely	Extremely

# Case Study E – Tower Hamlets (intervention estate)

## Results

By the end of the trial Estate E had the lowest increase in recycling rate and capture rate of any estate; 11% and 9% respectively\*.

## Estate E: Pre and post-trial performance rates

	Pre-trial actual	Post-trial actual	Maximum potential**	Increase / decrease
<b>Recycling</b>	11.1%	12.4%	33%	11%
<b>Capture</b>	38.2%	41.7%		9%
<b>Contamination</b>	34.4%	25.7%		-25%

The in-home storage solution recycling bags were not used by the residents on this estate for recycling, as they were on other estates on which the intervention was introduced. Residents were using the bags for rubbish, with each household using, on average 0.36 bags for rubbish per week. This was just above the average of 0.33 bags recorded across the six estates on which the intervention was introduced.

\* based on 11 of the 12 estates on the trial seeing increases in recycling and capture rates.

\*\*Assuming 100% capture of all dry materials currently collected for recycling. If 100% of food waste and dry materials currently collected were captured, maximum recycling rate achievable would be 60.7%.

## Successes

Residents, building managers, collection crews and the local authority said the upgrade to the waste facilities had been positive.

*"I feel good about the changes as it has made the bin area slightly cleaner than before so it's definitely not worse." (Resident on the Flats Recycling Package).*

The caretaker pointed out that the signs on the bins help overcome language barriers, where English isn't the first language for residents.

*"The signs help people who don't speak English.....with the pictures showing exactly what they need to be putting in the bins...it's better now." (Caretaker on the Flats Recycling Package).*

## Challenges

Lids were damaged on three of the recycling bins and lids were not always locked following collections.

Despite residents saying that they used the recycling bags the waste analysis showed that the recycling bags were not used by the residents for recycling on estate E. This could be because, the dispensers had to be moved from the building entrances into the bins stores because children were throwing bags into the canal.

*Residents weren't using the hooks. Some didn't like how they looked, and some were not sure how to use them. "I used the bags for recycling but didn't want the hooks to stick it on the walls as it won't look nice." (Resident on the in-home solution).*

Some residents said they had seen the emotive messaging.

A few recalled that the message was about encouraging residents to recycle and to look after the environment, but said it didn't make any difference to their own recycling habits. *"I think it was meant to encourage people to look after their family and environment by recycling. I don't find the message too strong." (Resident on emotive signage)*

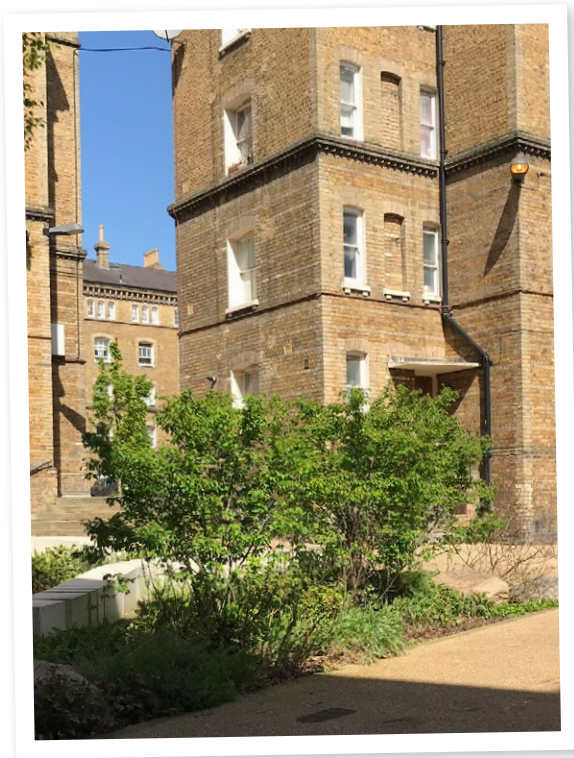
The recycling bins were not always collected.

## Conclusions

Estate E had the lowest increase in recycling and capture rate of all the estates except one (on which rates decreased). This might have been because the estate was quite new, and the rubbish and recycling bin areas were already of a reasonably high standard, so the introduction of the Flats Recycling Package impacted less on these residents.

Recycling bag dispensers are more effective when they are located at the entrances to the blocks than in the bin rooms.

# Case Study F – Islington (intervention estate)



## Estate details

Estate F is a purpose-built estate on a main road. It is made up of nine five-storey blocks built in 1865 around two landscaped courtyards and a neighbouring four-storey 1960s block. Most of the 181 flats are social housing. A few are privately rented.

Estate F has one of the highest proportions of younger residents of all the estates in the trial and fewer older people. More than half are under 35 years and only 15% are over 55 years. A third of residents have lived on the estate for five years or less.

Residents say the estate is friendly, peaceful and quiet.

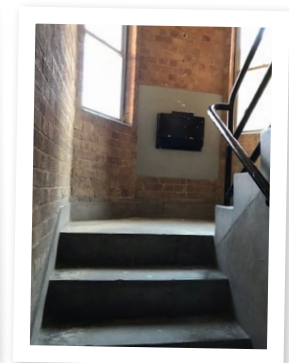
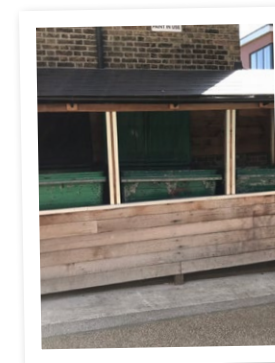
## Estate F: Age profile of residents

Age (yrs)	% of residents
<5	4%
5-14	12%
15-24	14%
25-34	24%
35-44	14%
45-54	17%
55+	15%

Estate F has a caretaker (Monday - Friday).

There are rubbish chutes on the first floor of each main block and on three floors of the 1960s block. The site has two bin stores for rubbish and two for recycling, plus additional recycling bins by the main entrance.

Rubbish was collected twice weekly and recycling collected weekly.



# Case Study F – Islington (intervention estate)

## Intervention activity



1

We introduced our Flats Recycling Package for recycling and rubbish facilities in purpose-built flats across the estate. No additional bins or collections were added.



2

We introduced the following two behavioural interventions. The changes were rolled out on Monday 22 October 2018.

Interventions	Details	Residents aware	Residents engaged
<b>Emotive signage</b> <ul style="list-style-type: none"> <li>Emotive signage displayed on the outside of each bin store and above every chute hopper.</li> </ul>		Not very	Not very
<b>In-home storage solution</b> <ul style="list-style-type: none"> <li>In-home storage solution delivered to each flat on the same day as the Flats Recycling Package changes were made and recycling bag dispensers installed at the main entrance to each block.</li> </ul>		Very	Not very

# Case Study F – Islington (intervention estate)

## Results

By the end of the trial the recycling rate had increased by 19% and the capture rate by 13%. These were the lowest increases in the trial. Although the contamination rate reduced by 24%, it remained the highest of any of the estates in the trial.\*

## Estate F: Pre and post-trial performance rates

	Pre-trial actual	Post-trial actual	Maximum potential**	Increase / decrease
<b>Recycling</b>	9.5%	11.3%	28.6%	19%
<b>Capture</b>	37.8%	42.7%		13%
<b>Contamination</b>	45.8%	35%		-24%

The in-home solution recycling bags were well received. With each household using, on average, 0.59 bags for recycling per household per week. This compares to an average of 0.42 across the six estates on which the intervention was introduced.

Residents were also using the bags for rubbish, with each household using, on average 0.29 bags for rubbish per week. This was less than the average recorded across the six estates on which the intervention was introduced.

\* based on 11 of the 12 estates in the trial seeing increases in recycling and capture rates.

\*\*Assuming 100% capture of all dry materials currently collected for recycling. If 100% of food waste and dry materials currently collected were captured, maximum recycling

## Successes

Residents were pleased with the changes, commenting that the bin areas were much cleaner than before and that they found the new signage helpful in understanding what to recycle.

Collection crews, caretakers and the local authority said they believed the changes were appropriate, non-intrusive and well-implemented.

*“They’re making it easier for people to recycle by having more recycling bins and bags. Everything is there now for you to recycle, so you have to do it.”* (Resident on Flats Recycling Package and in-home storage solution)

About half of the residents said they were aware of the emotive signage on the estate and had some recall of the message. They said it got them thinking about how important recycling is for future generations, reinforcing their recycling behaviour rather than influencing it in anyway.

## Challenges

Some residents said they had not seen the emotive signage, either because the display was not in their eye-line or because they were in a hurry.

The in-home storage pack didn’t fit through most letterboxes and had to be left on doorsteps or sticking out of letterboxes.

Building work on the estate and associated scaffolding interfered with some of the recycling and rubbish collections during the trial, and as a result, recycling bins were sometimes left overflowing. It also meant that the some of the recycling bag dispensers were a little tricky to reach.

For several weeks a residual waste collection vehicle was used to collect recycling which could have caused residents to think that their efforts to recycle were in vain<sup>1</sup>.

## Conclusions

Recycling, contamination and capture rates all improved on Estate F, though the improvements were some of the smallest in the trial and the contamination rate remained high at 35%.

The residents, collection crews and the local authority were, on the whole, positive about the changes.

It important to consider the impact of building works on rubbish and recycling facilities and to provide alternative arrangements where necessary to ensure continuity of access for residents and collection crews.

<sup>1</sup> Because of the building work, a narrow access vehicle was needed to collect recycling from the estate. The only narrow access vehicle available was not badged for recycling even though it collected recycling and all material was sent for recycling.

# Case Study G – Islington (intervention estate)



## Estate details

Estate G is a c.1960 purpose-built gated development off a quiet street. It is made up of three blocks of nine, two and three storeys. Most (80%) of the 121 flats are social housing. The rest are privately owned.

A quarter of the people who live on Estate G are under 24 years old. One third are over 55 years. 70% of residents have lived on the estates for more than six years.

Residents say that they like the estate's central location and sense of community.

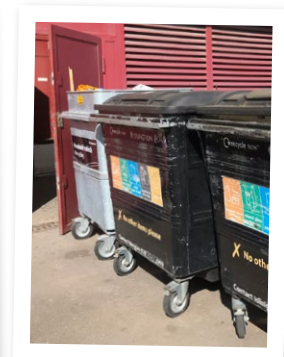
## Estate G: Age profile of residents

Age (yrs)	% of residents
<5	3%
5-14	12%
15-24	11%
25-34	18%
35-44	12%
45-54	14%
55+	30%

Estate G has a caretaker (Monday - Friday).

The blocks all have rubbish chutes on every floor. Before the trial, there were recycling bins by the entrances to the two larger blocks of flats. There were no recycling bins for the two-storey block.

Rubbish was collected twice weekly and recycling weekly.



# Case Study G – Islington (intervention estate)

## Intervention activity

- 1** We introduced our Flats Recycling Package for recycling and rubbish facilities in purpose-built flats and provided six additional recycling bins, including one for the two-storey block. We increased rubbish and recycling collections to twice weekly.



- 2** We introduced the following three behavioural interventions. The changes were rolled out on Tuesday 2nd and Wednesday 3rd October 2018. The tenant packs were delivered one week later, on Wednesday 10th October.

Interventions	Details	Residents aware	Residents engaged
<b>Feedback posters</b> <ul style="list-style-type: none"> <li>Feedback posters (changed monthly) displayed on four notice boards by the block entrances and recycling bin areas.</li> </ul>		Extremely	Not very
<b>In-home storage solution</b> <ul style="list-style-type: none"> <li>In-home storage solution delivered to each flat on the same day as the changes were made and recycling bag dispensers installed at the main entrance to each block.</li> </ul>		Extremely	Extremely
<b>Tenant pack</b> <ul style="list-style-type: none"> <li>Tenant pack delivered to homes a week after the signs and posters went up.</li> </ul>		Not very	Partially

# Case Study G – Islington (intervention estate)

## Results

This was the only estate in the trial that did not improve recycling and capture rates. By the end of the trial, the recycling rate was down by 18% and the capture rate reduced by 12%. The contamination decreased by 11%.

## Estate G: Pre and post-trial performance rates

	Pre-trial actual	Post-trial actual	Maximum potential*	Increase / decrease
<b>Recycling</b>	13.9%	11.4%	28.5%	-18%
<b>Capture</b>	49.3%	43.4%		-12%
<b>Contamination</b>	18%	16%		-11%

\*Assuming 100% capture of all dry materials currently collected for recycling. If 100% of food waste and dry materials currently collected were captured, maximum recycling rate achievable would be 53.8%.

## Successes

Residents were pleased with the changes, saying that the bin areas were easier to access and more attractive and that the signs make it clear what can and can't be recycled. The caretaker said that the bin areas were tidier thanks to the changes.

*"The changes have been really helpful. Everything used to go in the general bin before but the new changes have motivated me to recycle more." (Resident on the Flats Recycling Package).*

Nearly all residents were using the in-home storage solution bags. Some said this had influenced their recycling behaviour.

*"I use the bags for recycling items like water bottles, cartons, cardboard. Easy to just fill the bag up and easy to get them from the dispensers. (Resident on the in-home solution)*

Nearly all residents recalled the feedback posters, if not the detail.

*"I read them as I am going past. I find it encouraging to have posters that say positive things and it makes me feel like I am doing my bit for the environment." (Resident on the feedback mechanism).*

## Challenges

Residents didn't use the hooks from the in-home storage solution.

Some residents said they didn't recall receiving the tenant pack and one said they threw it in the bin because they thought it was a waste of time.

The caretaker reported complaints from some residents that the new recycling bins were too near the entrance to one of the blocks. One of the bins was repeatedly moved by residents.

*"There was a lot of moaning. People don't like change. When change starts coming in they start moaning. Why are the bins being put here, where it's going to go, this and that, but you expect that. Human beings are meant to complain about changes. That's about it." (Caretaker)*

Refurbishment work was going on at the estate for much of the trial causing the site to look untidy and one of the feedback posters was removed by contractors. Some recycling collections were missed during the trial.

The in-home solution pack didn't fit through some letterboxes and therefore had to be left on doorsteps or sticking out of letterboxes.

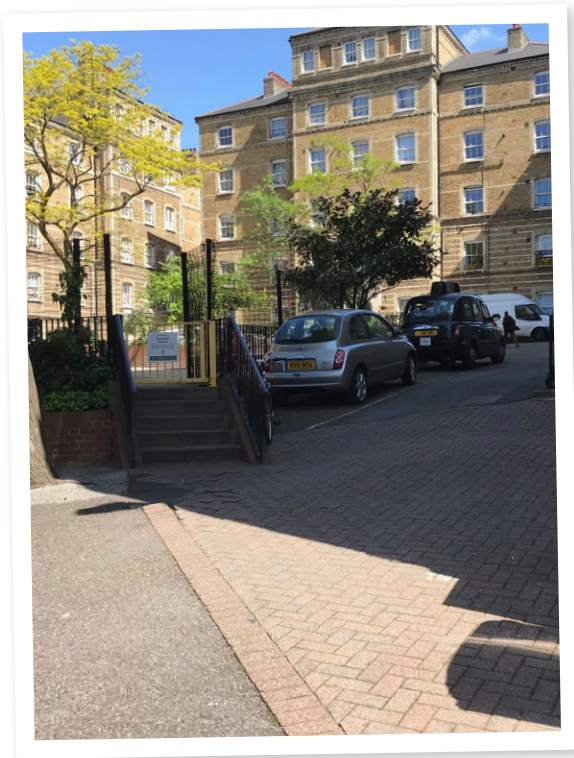
## Conclusions

Recycling and capture rates decreased on Estate G. This is surprising given the additional recycling capacity that was provided. Despite looking into the data and other information it isn't clear why this was the case.

The residents, collection crews and the local authority on the whole were positive about the changes. Not all residents were aware of the interventions or the detailed messages (especially the tenant pack and feedback) and this is likely to have limited the potential for impact.



# Case Study H – Islington (intervention estate)



## Estate details

Estate H is a c.1900 purpose-built development on a quiet road in central London. It is made up of 10 five and six storey blocks. Eight of the blocks are arranged around a courtyard and three are on an adjoining street (remote blocks). Nearly all of the 128 flats are social housing.

A third of the people who live on Estate H are under 24 years old. Just over a quarter of the residents (27%) are over 55 years. Three quarters of residents have lived on the estate for more than six years.

### Estate H: Age profile of residents

Age (yrs)	% of residents
0-4	4%
5-14	13%
15-24	13%
25-34	12%
35-44	15%
45-54	16%
55+	27%

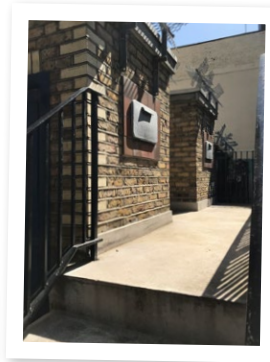
Residents say they like living on the estate because of its quiet, central location.

Estate H has a caretaker (Monday -Friday).

Before the trial, recycling facilities (which included food waste) were limited on the estate, with two of the remote blocks having no dry recycling facilities.

The courtyard blocks have a rubbish chute on the ground floor and additional rubbish bins in a bin store. One of the remote blocks has waste chutes on each of the four floors. The two other remote blocks only have external communal rubbish bins.

Rubbish was collected twice a week and recycling and food waste was collected weekly.



# Case Study H – Islington (intervention estate)

## Intervention activity

- 1 We introduced our Flats Recycling Package for recycling and rubbish facilities in purpose-built flats across the estate. To make recycling more accessible and improve capacity for residents, we installed five additional recycling bins, two in the courtyard and three for the remote blocks.
- 2 We introduced the following three behavioural interventions. The changes were rolled out over two days on Thursday 4th and Friday 5th October 2018 and the tenant packs were delivered a week later on Friday 12th October.



Interventions	Details	Residents aware	Residents engaged
<b>Feedback posters</b> <ul style="list-style-type: none"> <li>Feedback posters (changed monthly) displayed on six notice boards above the recycling bins.</li> </ul>		Extremely	N/A
<b>In-home storage solution</b> <ul style="list-style-type: none"> <li>In-home storage solution delivered to every flat on the same day as the changes were made and recycling bag dispensers installed at the main entrances to each block.</li> </ul>		Extremely	Very
<b>Tenant pack</b> <ul style="list-style-type: none"> <li>Tenant pack delivered to homes a week after the signs and posters went up.</li> </ul>		Not very	None

The in-home storage solution recycling bags were well received with each household using, on average 0.49 bags for recycling per household per week. This compares to an average of 0.42 across the six estates on which the intervention was introduced.

Residents were also using the bags for rubbish with each household using, on average, 0.30 bags for rubbish per week. This was slightly below the average of 0.33 recorded across the six estates on which the intervention was introduced.

# Case Study H – Islington (intervention estate)

## Results

By the end of the trial, the recycling and capture rate had both improved by more than 90%. Contamination reduced by 54%. These were the biggest improvements of any of the estates in the trial.

## Estate H: Pre and post-trial performance rates

	Pre-trial actual	Post-trial actual	Maximum potential*	Increase / decrease
<b>Recycling</b>	6.8%	13.3%	25.7%	95%
<b>Capture</b>	26.9%	52.6%		91%
<b>Contamination</b>	44.6%	20.4%		-54%

\*Assuming 100% capture of all dry materials currently collected for recycling. If 100% of food waste and dry materials currently collected were captured, maximum recycling rate achievable would be 56.6%.

## Successes

Residents commented that the bin areas were better than before and some said they had noticed that collections were now more frequent. Some residents said they'd seen the annual recycling leaflet. *"The bins have changed drastically. It's neat and tidy."* (Resident on the Flats Recycling Package).

Caretakers and the local authority also felt the bins and signage were a great improvement. The collection crews liked the new bins and suggested they should be used at other estates too.

Residents said they had noticed the in-home storage solution. Those using the bags said they were easy to use and one commented that they wouldn't have recycled had it not been for the hooks. The local authority and the caretaker said they thought the in-home storage solution encouraged residents to recycle.

*"The bags are really easy to use. The rolls outside are topped up regularly by the caretaker. It is convenient to just hang the bags onto the back of the kitchen door. The bags are big enough to fit things in, as I empty it [the bag] out every morning."* (Resident on the bags in the in-home solution).

## Challenges

Of the residents that were interviewed, not everyone read the booklet from the tenant pack or if they did, they didn't take in the messages or information. They also didn't understand the intention of the tenant pack was to convey a 'social contract' between the tenant and landlord.

Not many residents recalled the feedback mechanism or if they did, they did not absorb the messages.

The in-home solution pack didn't fit through most letterboxes and therefore had to be left on doorsteps or sticking out of letterboxes.

There were issues with crews not collecting from all the bins every time and recycling bins carelessly replaced the wrong way round and with the lids unlocked. We alerted the operations team to problems. They then organised additional collections when needed to ensure that bins weren't overflowing.

The feedback posters had to be installed high-up because of protruding brickwork, so a step ladder was required when changing them.

## Conclusions

Recycling, contamination and capture rates all improved on Estate H. The residents, collection crews and the local authority were positive about the changes.

Residents liked the in-home storage solution but most were unaware of the tenant pack and feedback posters. This is likely to have limited the potential for impact.

Consider getting a sample made up of any item to be posted through letterboxes and testing it before sending them to production to check they fit.

Site inventories are important to ensure residents have the appropriate facilities to recycle easily. Key to the success of the project on this estate was the provision of additional recycling bins, particularly at the remote blocks.

# Case Study I – Camden (intervention estate)



## Estate details

Estate I is a purpose-built development on a residential street. Built in 1885, it is made up of eight five-story blocks arranged around a central courtyard. Of the 114 flats, more than 80% are socially rented. The rest are owned or privately rented.

Estate I has a low number of residents aged 0-24 years. Three quarters of residents have lived on the estates for more than six years.

Residents say they like living on the estate because of its quiet, central location.

### Estate I: Age profile of residents

Age (yrs)	% of residents
0-4	3%
5-14	6%
15-24	10%
25-34	15%
35-44	16%
45-54	19%
55+	31%

Estate I has a cleaner (Monday - Saturday).

Before the trial, there were four recycling bins, four rubbish bins and a bin for food waste at the back of the estate. Each block also had a rubbish chute.

Rubbish was collected twice weekly and recycling and food waste were collected weekly.




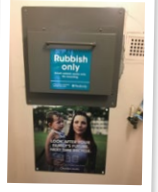
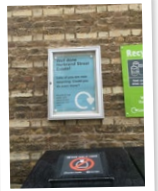

# Case Study I – Camden (intervention estate)

## Intervention activity

- 1** We introduced our Flats Recycling Package for recycling and rubbish facilities in purpose-built flats and added an extra recycling bin to increase capacity.



- 2** We introduced the following four behavioural interventions. The changes were rolled out Tuesday 25 September 2018. The tenant packs were delivered a week later on Tuesday 2 October.

Interventions	Details	Residents aware	Residents engaged
<p><b>Additional small recycling banks</b></p> <ul style="list-style-type: none"> <li>Additional small recycling bins, seven in total, positioned at both entrances and one in the courtyard, emptied twice weekly.</li> </ul>		Extremely	Not very
<p><b>Emotive signage</b></p> <ul style="list-style-type: none"> <li>Emotive signage displayed next to the rubbish chutes in each block and external rubbish bins.</li> </ul>		Extremely	N/A
<p><b>Feedback posters</b></p> <ul style="list-style-type: none"> <li>Feedback posters (changed monthly) displayed next to the large recycling bins and at both entrances, above the smaller recycling bins.</li> </ul>		Partially	N/A
<p><b>Tenant pack</b></p> <ul style="list-style-type: none"> <li>Tenant pack delivered to homes a week after the signs and posters went up.</li> </ul>		Extremely	None

# Case Study I – Camden (intervention estate)

## Results

By the end of the trial, the recycling rate had increased by 40% and the capture rate was up by 58%, one of the biggest improvements in the trial. Although the contamination rate also went up it was still one of the lowest in the trial. There was no difference in contamination rates between the large and small recycling bins.

## Estate I: Pre and post-trial performance rates

	Pre-trial actual	Post-trial actual	Maximum potential*	Increase / decrease
<b>Recycling</b>	11.9%	16.7%	33%	40%
<b>Capture</b>	35.1%	55.4%		58%
<b>Contamination</b>	12.1%	19.5%**		62%

\* Assuming 100% capture of all dry materials currently collected for recycling. If 100% of food waste and dry materials currently collected were captured, maximum recycling rate achievable would be 63.3%.

\*\* overall contamination rate combining large and small recycling bins.

## Successes

The residents, the caretaker, collection crews and local authority were pleased with the changes, especially the new bins and signage.

*"[It's a] million times better, because previously like at the beginning I used to do mistake.... there wasn't any sign or any message for residents" (Resident on Flats Recycling Package).*

Those living on the estate said they liked the convenience of the smaller bins. They said the signs helped them to understand what they can and can't recycle.

*"The smaller bins make it easier for older people to recycle as they don't have to walk as far to the other bins" (Resident on the smaller recycling bins).*

## Challenges

The caretaker reported that some residents had complained about the location of one of the smaller recycling bins near to the playground in the courtyard, which led to the bin being moved.

Whilst some residents were aware of the emotive signage, others were not. Some felt that the messages should be toned down and have a more positive association with recycling.

*"It literally just tells me I'm going to kill my child if I don't recycle." (Resident on emotive signage).*

Some residents didn't recall the tenant pack or notice the feedback posters.

*"There is too much print around and nobody takes any notice of it anymore" (Resident on feedback posters).*

## Conclusions

Recycling and capture rates both improved significantly on Estate I.

The contamination rate got worse, suggesting that more residents were recycling but not always correctly. The waste composition analysis showed high levels of food in the recycling implying some residents weren't washing items before putting them in the recycling bin.

The residents, collection crews and the local authority were positive about the changes. Not all residents were aware of the interventions, especially the tenant pack, feedback posters and emotive signage and this is likely to have limited the potential for impact.

# Case Study J – Hackney (intervention estate)



## Estate details

Estate J is a purpose-built development on a quiet residential street. Built c.2000 it consists of 122 privately owned and socially rented flats (approximate split 50:50) in two ten-storey blocks and four six-storey blocks arranged around a central landscaped courtyard.

Estate J has as high of residents aged 25-44 years and a low number of people aged over 55 years. No data is available on length of tenure.

### Estate J: Age profile of residents

Age (yrs)	% of residents
0-4	Data unavailable
5-14	
15-24	0%
25-34	30%
35-44	48%
45-54	8%
55+	15%

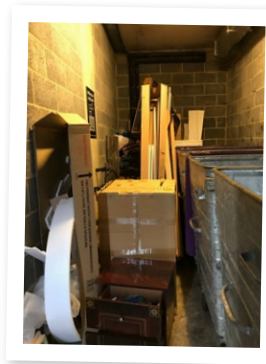
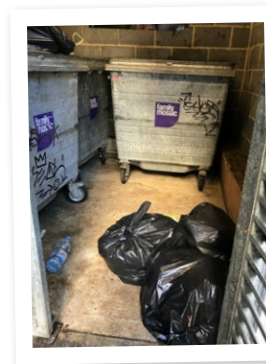
Residents say they like living on this estate because of the sense of community and good transport links.

Estate J has a caretaker (Monday – Saturday).

Before the trial, rubbish and recycling bins were kept in five bin stores accessed from the central courtyard.

Two of the stores were for rubbish only, two had recycling and rubbish bins and one of the stores was for recycling only. Residents were also allowed to leave bulky waste items in this store.

Rubbish, recycling and food were collected weekly from all the bin stores. Collection crews sometimes made additional collections when bins were overflowing.



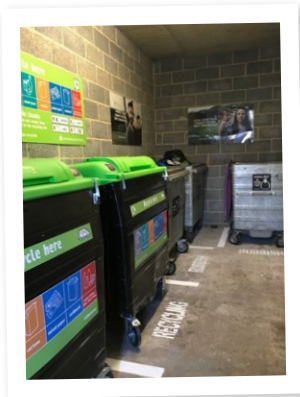
# Case Study J – Hackney (intervention estate)

## Intervention activity

**1** We introduced our Flats Recycling Package for recycling and rubbish facilities in purpose-built flats across the estate.

**2** We had the bins jet-washed and rearranged the bins stores to make sure that everyone had good access to both rubbish and recycling bins. Recycling bins were placed nearer to the entrances of the stores to make them more accessible. We used floor markings to indicate to collection crews and caretakers where each type of bin should go.

We arranged for collection crews to empty rubbish and recycling bins twice weekly, and for bulky waste to be removed every week.



**3** We introduced the following four behavioural interventions. The changes were rolled out on Friday 28 September and Monday 1 October 2018. The tenant packs were delivered a week later on Friday 5 October:

Interventions	Details	Residents aware	Residents engaged
<b>Additional small recycling banks</b> <ul style="list-style-type: none"> <li>Additional small recycling bins, 12 in total, positioned at both entrances, around the courtyard and outside the block furthest from any bin store, emptied twice weekly.</li> </ul>		Very	Partially
<b>Emotive signage</b> <ul style="list-style-type: none"> <li>Emotive signage displayed next to the rubbish bins inside the five bin stores and on the doors.</li> </ul>		Extremely	None
<b>Feedback posters</b> <ul style="list-style-type: none"> <li>Feedback posters (changed monthly) displayed on six notice boards next to or outside recycling bins in the courtyard and at both entrances to the estate.</li> </ul>		Extremely	Not very
<b>Tenant pack</b> <ul style="list-style-type: none"> <li>Tenant packs delivered to homes a week after the signs and posters went up.</li> </ul>		Very	Not very



# Case Study J – Hackney (intervention estate)

## Results

By the end of the trial, the recycling rate had increased by 33% and the capture rate was up by 50%, one of the biggest improvements in the trial. Contamination was slightly reduced.

## Estate J: Pre and post-trial performance rates

	Pre-trial actual	Post-trial actual	Maximum potential*	Increase / decrease
<b>Recycling</b>	8.4%	11.1%	31.6%	+33%
<b>Capture</b>	26.2%	39.3%		+50%
<b>Contamination</b>	33.4%	31.8%**		-5%

\*Assuming 100% capture of all dry materials currently collected for recycling. If 100% of food waste and dry materials currently collected were captured, maximum recycling rate achievable would be 61.1%.

## Successes

The residents, the caretaker, collection crews and local authority were pleased with the changes, commenting that the bin areas were much cleaner than before and that recycling was easier thanks to the new signage.

*“The changes have really helped. The signage is good and where the bins are located it means it is more accessible for residents.” (Local Authority on Flats Recycling Package).*

Some residents said they found the new recycling bins to be a significant improvement on the dirty brush apertures and heavy lids of the old bins. Some said they liked the convenience of the smaller recycling bins being closer to their block.

*“I use them as intended. The [smaller] bins are very easy to use. They have clear signs which are helpful. It tells you what can go in there. There are a lot of bins which is good so that there isn’t overflow. The bins are located in the right places.” (Resident on the additional smaller bins).*

## Challenges

We saw evidence of commercial waste in bins on the estate on a number of our regular visits, which was reported to the local authority.

One resident felt there were too many bins on the estate and some commented that they were often full.

*“Literally within 15 yards of each other and they’re big boxes. They’re big old things. I suppose if you need to recycle, you need to recycle. But they’re not aesthetically pleasing.” (Resident on the smaller bins).*

Residents didn’t recall the tenant pack and didn’t understand its significance as a ‘social contract’ between tenant and landlord.

Although most residents said they were aware of the emotive signage and feedback posters, many did not read them and could not recall the messages. *“I read them once, but I don’t remember, probably for the future I think, something for children’s future I think they are about.” (Resident on emotive signage).*

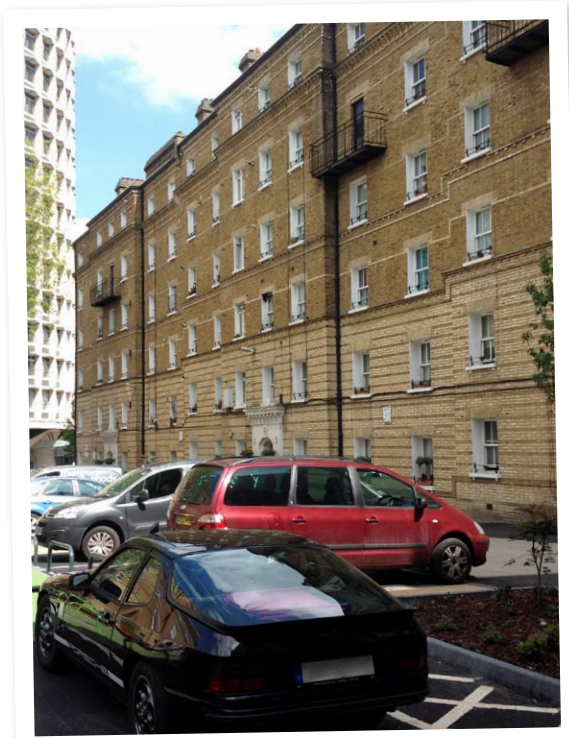
The caretaker reported frequently having to clear up rubbish left on or near recycling bins in the bin stores. One explanation for this may have been that some residents didn’t like going in the bin stores after dark and were deterred from using the rubbish bins because they were at the back of the store.

## Conclusions

Recycling, contamination and capture rates all improved on Estate J. The residents, collection crews and the local authority were positive about the changes. Not all residents were aware of the interventions, especially the emotive signage and the tenant pack, and this is likely to have limited the potential for impact.

Issues in the bin stores such as poor lighting and heavy doors, which could prevent residents using the bin stores correctly, should be addressed.

# Case Study K – Westminster (intervention estate)



## Estate details

Estate K was built c.1900. It is a purpose-built development made up of 11 five-storey blocks around a central playground and community centre. It has an active residents' association. 90% of the 221 flats are social housing, the rest are privately rented.

A third of the people who live on Estate K are aged over 55 years. Two thirds of residents have lived on the estate for more than six years.

Residents say that they like the estate's central location and sense of community but the lack of a lift was a concern for some.

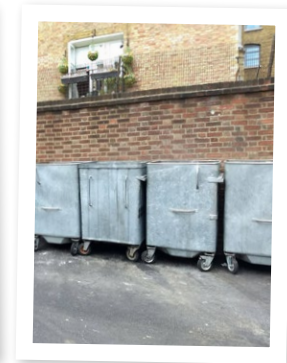
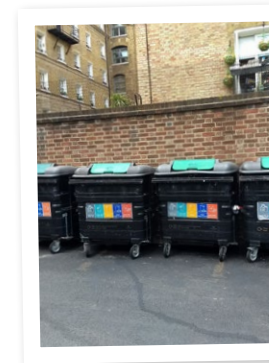
## Estate J: Age profile of residents

Age (yrs)	% of residents
<5	1%
5-14	7%
15-24	11%
25-34	13%
35-44	13%
45-54	19%
55+	36%

Estate K has one caretaker (Monday – Friday).

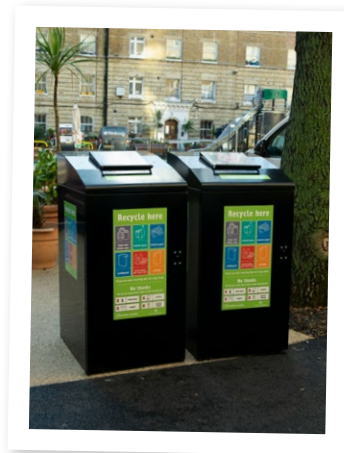
Nine of the blocks have a rubbish chutes on the ground and first floor. Two blocks used to have a rubbish chute on every floor but these have since been closed because of misuse. There are additional rubbish bins in the courtyard. Before the trial there were four recycling bins at one central location in the courtyard.

Rubbish was collected three times per week and recycling collected weekly.



# Case Study K – Westminster (intervention estate)

- 1** We introduced our Flats Recycling Package for recycling and rubbish facilities in purpose-built flats.



- 2** We introduced the following two behavioural interventions. The changes were rolled out on Monday 8 October 2018.

Interventions	Details	Residents aware	Residents engaged
<p><b>Additional small recycling bins</b></p> <ul style="list-style-type: none"> <li>Additional small recycling bins, eight in total, positioned at the main entrance and several in different locations in the courtyard, emptied three times weekly.</li> </ul>		Very	Partially
<p><b>In-home storage solution</b></p> <ul style="list-style-type: none"> <li>In-home storage solution delivered to each flat on the same day as the Flats Recycling Package was introduced and recycling bag dispensers installed at the main entrance to each block.</li> </ul>		Extremely	Not very

# Case Study K – Westminster (intervention estate)

## Results

By the end of the trial the recycling rate had increased by 41% and the capture rate by 28%. Contamination increased by 13%. There was no difference in contamination rates between the large and small recycling bins.

The in-home storage solution recycling bags were well received, with each household using, on average, 0.46 bags for recycling per household per week. This compares to an average of 0.42 across the six estates on which the intervention was introduced.

## Estate K: Pre and post-trial performance rates

	Pre-trial actual	Post-trial actual	Maximum potential*	Increase / decrease
<b>Recycling</b>	11.7%	16.5%	34.5%	41%
<b>Capture</b>	40.7%	52%		28%
<b>Contamination</b>	14.2%	16%**		13%

Residents were also using the bags for rubbish, with each household using, on average 0.42 bags for rubbish per week. This was the highest level recorded across the six estates on which the intervention was introduced.

\*Assuming 100% capture of all dry materials currently collected for recycling. If 100% of food waste and dry materials currently collected were captured, maximum recycling rate achievable would be 61.2%.

\*\*Overall contamination rate combining large and small recycling bins.

## Successes

Residents, collection crews, the local authority and building managers were happy with the Flats Recycling Package. Residents said they felt the bin areas were much better and were easy to use. Some commented that there were fewer overflows than before.

*"The recycling bins are a good change. The bin area is a lot cleaner as the bins aren't overflowing anymore." (Resident on in-home storage solution)*

Nearly all residents questioned were aware of the in-home solution and some were using the bags that had been provided. Residents said the bags have made it easier for them to recycle and that they are easy to fit in the bin.

The local authority was very positive about the in-home storage solution and said they could see it working in a number of other estates across the borough. *"I liked this one - I have sent it to colleagues in my team and they like it too. It is of interest to us because the flats are small, we think it could work in a number of locations." (Local authority on the in-home storage solution)*

Some of the residents, the caretaker and the waste collection crews said the small bins have made it easier and more convenient to recycle because they are located on the walking routes that people use to enter and leave the estate. The caretaker said the additional small recycling bins meant there were now fewer overflows in the recycling bins.

*"I have no problem using the smaller bins and find them easy to recycle in them. It has improved how I recycle and it motivates me to separate waste by putting recycling items in the recycling bins." (Resident on the small recycling bins).*

## Challenges

The delivery of the smaller recycling bins onto the estate led to several resident complaints about their locations, that the bins were ugly and that they were not consulted beforehand.

*"It didn't go down well with residents. The residents are very proud of the central area, there is a vegetable garden and a play area.... The residents felt the bins were intrusive. It may have been beneficial to consult residents beforehand, maybe they would have been more supportive of smaller bins" (Local authority on the smaller bins)*

The in-home storage solution didn't fit through the letter boxes.

We found it difficult to get stickers to adhere to older rubbish bins that had multiple bumps and scratches.

Initially the collection crews reported significant contamination in the smaller bins but this improved over time.

The external rubbish and recycling area was always a mess on Monday mornings including dumped rubbish bags and large cardboard boxes. We had an extra rubbish bin installed, which has helped to improve the situation.

## Conclusions

Recycling and capture rates improved on Estate K, but the contamination rate got worse, suggesting that more residents were recycling but not always correctly.

The residents, collection crews and the local authority were positive about the changes.

Early engagement with residents about forthcoming changes, especially bin location, is critical to ensuring a smooth roll-out.

# Case Study L – Tower Hamlets (intervention estate)



## Estate details

Estate L was built in the 1880s and a new block added in 2014. It is made up of 11 five-storey blocks, seven of which are built around a courtyard with a playground in the centre and four separate blocks located on an adjoining road. Most of the 158 flats are social housing. A few are offered for affordable rent.

Estate L has one of the lowest numbers of over 55 year olds and one of the highest number of under 35 year olds. Two thirds of residents have lived on the estate for more than six years.

Residents say that they like how friendly, peaceful and quiet the estate is.

## Estate L: Age profile of residents

Age (yrs)	% of residents
<5	4%
5-14	18%
15-24	15%
25-34	19%
35-44	18%
45-54	14%
55+	12%

Estate L has two caretakers (Monday – Friday).

Seven of the blocks have rubbish chutes on every floor. Three of the blocks have rubbish chutes on the first floor only. There are external rubbish bins next to the three separate older blocks for larger bags. Before the trial there were five recycling bins on one side of the courtyard. The new block has no chutes. It has a bin store on the ground floor for rubbish and recycling.

Rubbish was collected twice weekly and recycling collected weekly.



# Case Study L – Tower Hamlets (intervention estate)

## Intervention activity

1

We introduced our Flats Recycling Package for recycling and rubbish facilities in purpose built flats and added two additional recycling bins so that there were three bins on each side of the courtyard to increase capacity and make them more accessible. Following the changes recycling was collected twice weekly.



2

We introduced the following two behavioural interventions. The changes were rolled out on Wednesday 10 October 2018.

Interventions	Details	Residents aware	Residents engaged
<b>Additional small recycling bins</b> <ul style="list-style-type: none"> <li>Additional small recycling bins, ten in total, positioned at the three main entrances to the courtyard and emptied twice weekly.</li> </ul>		Extremely	Extremely
<b>In-home storage solution</b> <ul style="list-style-type: none"> <li>In-home storage solution delivered to each flat on the same day as the Flats Recycling Package was introduced and recycling bag dispensers installed at the main entrance to each block.</li> </ul>		Extremely	Extremely

# Case Study L – Tower Hamlets (intervention estate)

## Results

By the end of the trial the recycling rate had increased by 34% and capture rate by 17%. Contamination was reduced by 30%, one of the highest of all the estates in the trial. The contamination rate for the small recycling bins (35.1%) was nearly 10% higher than that for the large recycling bins (26.6%).

## Estate L: Pre and post-trial performance rates

	Pre-trial actual	Post-trial actual	Maximum potential*	Increase / decrease
<b>Recycling</b>	5.8%	7.8%	26.8%	34%
<b>Capture</b>	26.8%	31.5%		17%
<b>Contamination</b>	42.7%	29.8%**		-30%

The in-home solution recycling bags were well received, with each household using, on average, 0.60 bags for recycling per household per week. This compares to an average of 0.42 across the six estates on which the intervention was introduced.

Residents were also using the bags for rubbish, with each household using, on average, 0.25 bags for rubbish per week. This was the lowest level recorded across the six estates on which the intervention was introduced.

\*Assuming 100% capture of all dry materials currently collected for recycling. If 100% of food waste and dry materials currently collected were captured, maximum recycling rate achievable would be 59%.

\*\*Overall contamination rate combining large and small recycling bins.

## Successes

Feedback on the Flats Recycling Package from the residents, building managers and the local authority was very positive.

Residents said they appreciated the cleanliness of the bin areas and the new signage. One resident described the bin areas as being 'a disgrace' before the changes were made. Another, who admitted to leaving bags of recycling outside for someone else to pick up, now uses the bins provided.

*"I've noticed that there is a change on how bins are treated as there was a lot of smell around the bin area before, but it has now reduced. I find the information provided on the [bin] is useful."* (Resident on the Flats Recycling Package)

The in-home storage solution was used by most of the residents interviewed. *"I've found the [in-home] pack good and helpful for recycling. I stick the hooks on door outside and finds the bags big enough, but aren't strong enough as they can easily tear up. I pick up new bags easily when they run out."* (Resident on in-home storage solution)

The smaller recycling bins were also well received. Residents said they found it easier to dispose of recycling because of the location of the new bins near to where they live or en route in and out of the estate. Thanks to the new signage, residents were clear on what could and could not be recycled.

## Challenges

There were some issues related to the in-home solution. For example, the caretaker reported that residents didn't like the way that the bag dispensers were fixed on to the 150 year old building. One resident suggested that bags should be stronger.

Collection crews did not always put the recycling bins back correctly and one of the smaller recycling bins was graffitied.

Waste chute signs were too large for the chute doors and had to be replaced by smaller ones.

## Conclusions

Recycling, contamination and capture rates all improved on Estate L. The residents, collection crews and the local authority were positive about the changes.

Check the size of new signs and make sure they are appropriate for all areas.

# Contacts and further help

---

**Please contact Resource London for more information:**

**Project enquiries**

[gemma.scott@lwarb.gov.uk](mailto:gemma.scott@lwarb.gov.uk)

07732 681850

**Communications enquiries**

[violetta.lynch@lwarb.gov.uk](mailto:violetta.lynch@lwarb.gov.uk)

07732 681820

**For general information visit: [www.resourcelondon.org](http://www.resourcelondon.org)**

