

metroSTOR Webinar Summary and Transcript

Flash Recycling: What *works* **for flats above shops** 10.06.25

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metroSTOR Webinar Summary

This webinar explored the challenges and learnings from two pilot projects trialling food waste recycling for Flats above Shops (FLASH), delivered by Shelley Holmes (ReLondon) and Lucy Simler (London Borough of Hackney), hosted by Nigel Deacon.

ReLondon FLASH Pilot (Shelley Holmes)

Scope

- Two-year pilot with Hammersmith & Fulham, Islington and Waltham Forest.
- Covered six streets (three with food waste, three with dry recycling only)

Key Interventions

- Resident Packs: 3L caddies, liners, tea bags as behavioural prompts and branded sacks.
- Bin Design: Narrow 35cm-wide bins to fit tight pavements.
- Signage: Lamppost and floor vinyls (sensitive to weather).
- Engagement: Letters, in-person visits, and use of low-carbon couriers.

Outcomes

- High self-reported uptake where food waste was introduced.
- Residents noted tidier streets, fewer foxes and clearer routines.
- Challenges included contamination, missing liners and weather-affected signage.
- Capture rates of 22–28%, averaging 0.65 kg/household/week.
- Positive feedback for cardboard caddies and included liners.

Hackney FLASH Trial (Lucy Simler)

Scope

• Six high streets and 511 properties (Feb–Sept 2023), using six on-street bins.

Infrastructure

- Mix of unlockable and lockable bins (e.g. metroSTOR), 140–240L.
- Avoided red routes, food shops and narrow pavements for placement.

Engagement

- Door-knocking reached 34% of residents, with 91% willing to participate.
- Support materials included stickers, letters, caddies, liners and surveys.

Results

- 2.3 tonnes collected over three months (0.2 tonnes/week).
- 53% still using the service after three months.
- Contamination was widespread except in Old Street (lockable bin); common items included coffee cups and plastic bags.
- Higher dumping rates off the main high street.



Shared Learnings

Contamination Management

- Minor contamination removed by street cleansing teams; heavily contaminated bins collected as general waste.
- Proximity to litter bins can help reduce misuse.

Resident Access and Participation

- Lockable bins reduced contamination but risked lower participation due to card or code requirements.
- Ongoing communication is vital to address tenant turnover.
- Tea bags in starter kits helped reduce behavioural friction.

Manual Handling and Safety

- Bin weights averaged 7kg, within HSE limits and suitable for crews.
- Waist-height bins preferred to reduce lifting risks.

Maintenance and Cleansing

- Jet wash teams were used in the pilots. Future schemes should integrate regular cleaning into borough street care.
- Summer months require particular attention due to odours and hygiene.

Design and Delivery

- Timed collection concerns were addressed by providing dedicated bins for anytime use.
- 30 metres was cited as an advisory walking distance, with flexibility advised for constrained sites.
- Initial lack of lockable bin options was addressed in later trials with simpler catches to balance security and access.

Resourcing and Funding

- High resource demand for infrastructure and engagement.
- Future DEFRA funding availability for such schemes remains uncertain.

Final Remarks

Both pilot schemes confirmed that food waste recycling is possible for FLASH properties when supported by appropriate bin infrastructure, proactive resident engagement and sustained behavioural nudges. Though challenges remain, particularly around contamination, communication and resourcing, early insights are encouraging. Full guidance and resources from the ReLondon pilot will be published by the end of June 2025.



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Nigel Deacon:

Welcome everyone, thanks for joining our webinar on Flats above Shops recycling, one of the first and most challenging areas for local authorities and housing managers. There will be space at the end for questions, so do put those in the chat. You can also let us know in the chat who you are, where you're from and what you hope to take away today and we will make sure those are picked up.

A big thanks to Shelley Holmes and Lucy Simler who are joining us today to share their experience. They have both been working on pilot projects around Flats above Shops, which I found extremely illuminating and we are very pleased to have this opportunity to share their insights with you. I am not one for long introductions, so I will now hand over to Shelley to get us started.

Shelley Holmes:

Hi everyone, my name is Shelley. I am an advisor in the local authority support team at Real London and I was the project manager for this project for two years. ReLondon, for those who do not know us, is a partnership between the Mayor of London and London's boroughs and we exist to help London transition to a low carbon circular economy. We ran this pilot for two years, focusing purely on flats above shops. The reason for this focus came from borough demand for insight into how to implement food waste recycling, in light of the upcoming requirement by 31st March next year and also to understand how to boost recycling from these property types.

We partnered with Hammersmith and Fulham, Islington and Waltham Forest and across all pilot sites the flats presented in the same way—on street sacks, with time-banded collections where waste can only be placed out at certain times on set days. All had theoretical access to dry mixed recycling, but none had food waste services before the pilot.

We carried out extensive research, including ethnographic research to understand resident behaviours in context. Researchers visited the homes of 30 participants across 10 boroughs, all living in flats above shops with access to dry recycling. The findings highlighted how difficult recycling can be in these properties. Residents were often unsure where to leave waste, lacked signage and bins and were confused by the differences in schedules between themselves and the businesses below. They shared post boxes, meaning mail often piled up and they missed information. Council messaging on bags was ignored and behaviour was largely shaped by what others were doing—if someone dumped a bag by a tree, others followed.

After selecting our boroughs, we identified six pilot streets—three with dry recycling only and three with food waste as well. Most streets had 150 to 200 households, though one had 400. Implementing this was far from simple. We encountered on-street parking and back-to-back vehicles, making collections difficult. We had to consider lamp posts, doorways, cycle lanes, bollards and differing pavement widths. The streets were also contested spaces used by other teams such as e-cargo bike initiatives and transport schemes.

Stakeholder engagement was more complex than expected, with some streets managed by multiple crews with different supervisors. We even had to consult the police and adhere to heritage constraints, which affected bin design.



We brought in a behaviour change agency who proposed five guiding principles. First, internal storage: we offered small 3-litre hook caddies, tea bags to encourage uptake, thicker liners and a tea bag rest. On one street, narrow letterboxes meant we trialled a flat-pack cardboard caddy that could be delivered immediately, with a QR code to request a plastic one. For dry recycling only streets, we provided flat-packed sacks in branded packages, all addressed to recipients.

Second, for external infrastructure, space constraints meant we used slim 35 cm-wide bins, drawing on designs from Hounslow and Newham. We updated lamp post signage and used floor vinyls to show where and when to put out waste. These were effective but weather-sensitive: 2023 was the 17th wettest year on record and vinyls were damaged or washed away.

We engaged businesses six weeks prior, hand-delivering letters in envelopes and attending forums to explain the project and address concerns. We also created countertop cards as visual prompts in cafés.

For distribution, we hired local low-carbon couriers—e-cargo bikes and electric vans—who had the time and knowledge to deliver effectively. A four-stage process was used: direct handover, leave in a safe place, post through the door if possible and if not, leave a "Sorry we missed you" card.

Traditional monitoring was challenging due to mixed street use. We consulted two M&E specialists and used a holistic approach. Results showed potential recycling increases on two streets, though too many factors were at play to be conclusive. High volumes of refuse were recorded—sometimes a 1:9 recycling-to-refuse ratio—suggesting possible commercial misuse.

Floor vinyl compliance was generally good where vinyls stayed in place; where they failed, compliance dropped. Recognition of vinyls varied from 30% to over 90% depending on weather and condition. Some businesses kept the promotional materials up, others removed them quickly. Residents reported that the interventions helped them put waste out at the correct time and place. Many said they recycled more and had changed the location of their waste presentation. Claimed food waste service use was high on all three streets offering it. Residents appreciated the compact caddy, found it easy to use and particularly liked the liners. The main negative feedback was confusion over how to get more liners or reluctance to pay for them.

The flat-pack cardboard caddy trial was a success: no one disliked it and three-quarters of users went on to request a permanent caddy.

Food waste capture was measured with bin spot checks and weights. We estimated a 30% maximum capture rate based on previous trials in purpose-built flats. The street with reliable weights showed a 22% capture rate, while another borough achieved around 28%. This equated to 0.65 kg per week per household and an average bin weight of 7 kg. About 93% of bins contained food waste, but contamination was present every time—mainly minor street litter, but occasionally significant. Contamination management is vital for success.

On delivery, residents showed high recognition of receiving the recycling packs, particularly in streets where flat-packing enabled posting through letterboxes. Streets C and F, which relied on in-person caddy delivery, had the lowest success.

Resident interviews six months on showed positive long-term changes: residents appreciated the addressed packs, the convenience of food waste services, the tidier streets, fewer foxes and the clearer structure. However, we still struggled to reach those less motivated to recycle. Some confusion arose when vinyls were removed due to weather and there were gaps in awareness around how to access more sacks. Resident feedback was overwhelmingly positive, with very few complaints.



Challenges included engaging a hard-to-reach population, managing diverse stakeholders and coping with weather-sensitive infrastructure. Some bins were stolen and future projects must consider bin security.

Overall, the project demonstrated that motivated residents will engage with food waste recycling when given the right tools and support. Success depends on early engagement, following behaviour change principles, designing from the resident's perspective and regular monitoring.

We have now published guidance on our website, including tick sheets (mostly London-specific), but adaptable to other authorities. The final report is due by the end of June. Practical tips include working with GIS teams to map occupancy accurately, checking access routes and carry distances and factoring in pavement conditions and signage needs. That's it from me! Thank you.

Nigel Deacon:

Thank you, Shelley. That is a really thorough piece of work and interesting that the same old thorny challenges always arise, do they not? Contamination and how you approach those people who are not really motivated to do it. So, Lucy, over to you.

Lucy Simler:

Thanks Nigel. Hi everyone. I'm Lucy Simler. I'm a recycling officer at the London Borough of Hackney. We have also done a Flats Above Shops—FLASH—food waste trial. I'm going to describe the original FLASH food waste service that we have in the borough, what we did for the trial including the locations and the units we put in place, the communications we carried out, monitoring, the outcomes, lessons learned and what the next steps are.

The original FLASH service covered around 6,500 flats above shops in Hackney, which make up about 6% of our housing stock in this dense urban borough. These properties had a time-banded collection twice a day, every day, for waste and recycling, but no food waste service. At the time, 90% of estate properties and all our street-level properties had a food waste service. Around 160 FLASH properties used a nearby Hackney Housing communal food waste bin and some had access to the street-level service if their entrance faced a side road.

For the trial, we ran food waste collections from February to April 2023 at five sites, with a sixth site added from July to September using a lockable bin. Across six high streets, 511 FLASH properties were given the option to recycle food waste using six on-street bins. Before the trial, we considered different options for bin types. Standard caddies caused issues on smaller high streets, including obstruction, theft and contamination. Communal estate-style bins avoided spillage and allowed for monitoring but, without locks, were vulnerable to misuse by businesses and non-residents. So we aimed to use lockable bins where possible to reduce contamination. We contacted several suppliers and because this was one of the first trials of its kind, they provided bins free of charge. metroSTOR was developing a key card-operated bin, which wasn't ready at the trial's start, so that site came later. Bin costs ranged from about £500 for unlockable to £1,500 for lockable models. These housed either 140- or 240-litre internal bins, with features such as foot pedals or slam locks.

We selected a mix of high streets across Hackney to reflect different demographics and usage levels. Placement required careful consideration: red route restrictions needed TfL approval, bins had to avoid blocking bus stops or narrow pavements and we kept away from food businesses to minimise complaints. Some bins were placed near existing recycling points and one, on Wilton Way, had to be positioned away from the high street due to space constraints.



For communications, we worked with North London Waste Authority, who supplied stickers and staff to support door knocking. We posted letters to nearby properties, then carried out two rounds of door knocking to deliver caddies, liners, a leaflet and, where relevant, key cards. A short survey was conducted during the first visit, with a prize incentive. If residents were not home, we left a letter and leaflet and in some cases, where safe and not a fire risk, left caddies and liners in communal hallways. A follow-up survey was carried out three months later.

Our door knocking achieved a 34% contact rate, slightly below the 40% target. Of those we reached, 91% wanted to participate and 51% of residents overall had access to the service either through direct contact or by picking up a caddy from their building. 6% completed the survey. Responses were generally positive. In the first survey, all respondents expressed confidence, willingness and a belief that food waste recycling was worthwhile. The follow-up survey showed slightly reduced usage: 53% said they still used the service and 6% said they never had. Some found it unpleasant or forgot and many were unsure if neighbours were participating. Feedback suggested a need for cleaner bins and reminders that others were taking part.

Weekly monitoring showed 2.3 tonnes of food waste collected over three months, averaging 0.2 tonnes per week. This equated to about 21 kg per household annually—slightly below estate levels but half of what street-level households produce. Dumping was generally low. Wilton Way, the off-high street bin, had the most, while Old Street, with the lockable bin, had none. Contamination was present at all sites except Old Street and Wilton Way had two rejected loads due to high contamination. Examples included plastic bags, coffee cups and general litter. A follow-up in September found slightly reduced tonnage but no rejected loads and only one instance of dumping. Residents used their own bags, often unaware that they could request compostable liners from the council.

Lessons learned included strong resident support, but challenges with space on high streets, high resource demand for engagement and the need for ongoing communication as residents move frequently. Lockable bins proved effective in preventing contamination. Funding constraints remain, as Defra funding was not secured, so future expansion may involve using Hackney Housing bins or extending the walking distance to 5 minutes. Borough-wide communications will focus on leaflets and social media, with caddies and liners available on request. If future funding becomes available, more on-street units will be added. Thank you. Here are my contact details.

Nigel Deacon:

Thank you. See, that is what is really interesting. So, just having a look through some of those points, Shelley has been busy answering some of those – thanks, Shelley. There was a point about the weight of food waste and any implications around manual handling. Shelley, just comment on that?

Shelley Holmes:

Yes, that is fine. That is something we considered right at the start of the project. Obviously, we do not want crews doing anything they should not be doing, or encouraging them to do anything unsafe. So we calculated the likely weights based on the 30% food waste estimate. We looked at how far the bins would be, what the weight of those bins might be and also the size of bins used – using WRAP's weight-to-volume ratios etc. That gives you an idea of how heavy a food waste bin might be if it is, say, 50% full.

That really helped us plan how many bins we were likely to need on the street, how many people in the area, how many might use the bins and what the likely weights would be. Everything was run by the operations teams.



On that point, I forgot to mention in my presentation – in a previous one I gave, someone asked why we did not use lamppost bins. The reason was, firstly, TfL would not allow bins to be mounted on their lampposts – which is fair enough. But secondly, there were concerns about crews lifting bins from shoulder height, particularly if the bin was heavy. So we chose not to do that.

Our operations teams lifted from the ground – all of the bins we used were roughly at waist height, give or take. That meant we could follow HSE guidance on manual handling, which I think is about 20 kilos at waist height. Most of our bins averaged around 7 kilos.

We rarely got any that were super full – physically they could not be any fuller due to bin size. So in terms of manual handling, that was fine – but it was something we took seriously right from the start.

Nigel Deacon:

Yes, good, thank you for that. Lucy, I am guessing you only used wheeled bins. Just a point on that – did you only use 140s or did you use 240s? Because 240s are probably nudging towards...

Lucy Simler:

It was 240s, yes – but these bins and housing units were very similar to the ones our crews were already using for estate food waste collections. I was just checking through the monitoring. Our fill rates were never more than 40 or 50%, so the bins never got that full. We did the monitoring at the start to see if we needed to increase collections from weekly to, say, twice a week – but during that period we saw the bins were not as well used as expected. So a weekly collection, with up to 50% fill rate, was fine.

Nigel Deacon:

Yes, good, thank you. There was quite a bit around contamination. First of all, if contamination was identified, what procedure kicked in? Who dealt with that? Shelley, for your project?

Shelley Holmes:

Yes, that is fine. We probably had a similar experience to Lucy. We expected some contamination and learned from Islington, who were among the first, alongside Hackney, to trial food waste bins on-street. One of their key learnings was to try to put a litter bin next to your food waste bin. But on the streets we were working on, that just was not possible – they were so tiny and already full of other infrastructure.

So, we had an agreement with the street cleansing operatives. They have their own patch and they are there all day every day. They know the street like the back of their hand. So we asked them – if it is just a coffee cup or can, could they remove it so it can still be collected? That is no more effort than if it was litter on the floor.

But if contamination was severe, it was collected as general waste. Most of these streets in London – and I suspect Hackney is the same – have refuse collections at least once a day. So it just meant it could be picked up by a passing crew. It varied by location. Some bins were always contaminated, others only had an occasional item. Following WRAP's advice, if you can locate a litter bin next to your food bin, do it. The food bin is the one you want residents to use and that can help manage contamination.

There was also a question in the chat about responsibility – because it is on-street, in the public realm, it is definitely our responsibility to clean. There is no managing agent, no resident to write to – it is our job to manage it, especially in busy areas near cafés in summer. You need procedures in place to clean and clear these bins.



Nigel Deacon:

Yes, good. Lucy, anything to add?

Lucy Simler:

We also got our street cleansing operatives on board. We told them about the trial and asked them to keep a lookout, especially for the bins they could open, to check for contamination and dumping.

As Shelley said, for a small amount, we could just remove it. We did most of the checking ourselves, but we also told them to remove a bottle or coffee cup if needed. If contamination was above the threshold – I think around 20% – we got the street cleansing crew to clear it as waste. We also tried to put the bins next to our gold recycling bins, which had waste and recycling sides, to reduce contamination.

Nigel Deacon:

OK, good. Change of tenancies – keeping the message live. Did you run it long enough for that to become a challenge? How did you deal with that?

Lucy Simler:

Because of other projects going on, we did not have time to do much communication, unfortunately. But as we roll out more widely, these households will get new communications. Once we go borough-wide, we will carry on with regular communication. We did some follow-up monitoring in 2024–25, but not much communications since. We were focused on other things. But yes, with rollout coming, wider comms are planned.

Nigel Deacon:

Yes, good. Shelley, did you observe any need for additional cleansing where bins were used alongside the vinyls?

Shelley Holmes:

Yes. Each borough had its own process for cleaning the bins. It is definitely something you need to consider. For any London boroughs on the call – I have been in contact with TfL to try and get exemptions or prenotification for cleansing food waste bins on their highways. At the moment, if a London borough collects on a red route, there are lots of restrictions. I am trying to make sure no one gets fined for trying to clean a food bin in summer. But yes, each team needs to decide what works operationally.

Think about what to do if food is spilled – can your street cleansing teams report that? You are likely to need more cleaning in summer. These bins are in public areas – they must be clean and usable, for residents and to maintain the look of the public realm. The toolkit is really about thinking ahead: how are we going to manage this, what is the process?

Nigel Deacon:

Did you have a cleansing service in place? How often?

Shelley Holmes:

Yes, the jet wash team usually did it, since they have the right licences and equipment. In our project it was more ad hoc – the bins were only out for eight months. But if rolling this out longer term, it would be worth planning for more regular cleaning in the summer – maybe monthly or as needed, depending on bin type and borough capacity.



Nigel Deacon:

Lucy, did you have a cleaning programme?

Lucy Simler:

We clean estate bins on a cyclical programme and those bins were included. If a resident complained, they were cleaned ad hoc. With the rollout, we have to ensure those bins are included in the estates cleansing process so they are not missed.

They will get regular cleaning, to encourage use – people are concerned about using dirty bins. The main focus was during the three-month trial. After that, with limited resources, we responded to issues as they came up.

Nigel Deacon:

Yes. Excellent, thank you. Interesting question around the 30 metre travel distance – whether that can be extended. What is your view on that, Shelley? I was thinking it is probably advisory.

Shelley Holmes:

I think it is advisory, yes. It is in the Building Regulations – I think Part H, though I can never quite remember – and it says ideally 30 metres. But as Lucy said, sometimes that is just impossible. There is too much street furniture, too many obstructions. So, locate the bins as close as you practically can. If you can do 30 metres, great – if not, do the best you can.

Nigel Deacon:

Yes, I would agree. That is good. Does anyone want to raise a hand and come in with more questions or observations? We are close on time, but do not let that stop you.

Chris Mastricci:

A quick one on the flat-pack compost bins and the tea bags. Do you think that little nudge or invitation to participate helped – especially with tea bags – in breaking down barriers, since doorstepping is hard?

Shelley Holmes:

Yes. That came from a previous ReLondon project – Flats 2. They recommended it as a way to get people started. Our leaflet said: use the tea bag we delivered, pop it in your food bin – voilà, you have recycled your food waste. It is about making it feel like an everyday action – not something big or scary. Everyone drinks tea or coffee. So yes, cheap and cheerful, just a simple way to encourage participation.

Chris Mastricci:

Yes, it starts the process in a non-smelly way. I think that is a really good idea.

Nigel Deacon:

I like that – good. Thank you. Paul, do you have a question?

Paul Yeatman:

Yes – what were the challenges with managing your lockable bins and the cards? What was the turnover like? And how did you stop them from getting into the wrong hands – for example, businesses?



Lucy Simler:

We did not have a formal process to stop residents passing on the cards. We provided cards at the start and, if someone contacted us saying they had lost theirs, metroSTOR gave us replacements.

That was only for one of the bins. It is quite a busy area in Old Street and there are likely other food businesses nearby that could have used it – but if the bin was not contaminated and had food waste and the tonnage looked right, we would not question it. So it is very difficult to know if they were being misused.

Paul Yeatman:

Difficult to know – but what was the actual turnover of keys or cards?

Lucy Simler:

Very low – we have not had many requests at all. Often, people moving in were not even aware the service existed – unless the previous resident had passed it on or told them to contact Hackney. If we did a survey now, we would probably find fewer residents were aware of the service or using it.

That is been the difficulty with FLASH properties – we do the engagement, we deliver the comms, we doorknock – and a year later, many residents have moved. So the low number of card requests shows we are not reaching those people.

Paul Yeatman:

Yes. And were the cards bin-specific? If you had two lockable bins, would you only have one card? We have a high-density area near student accommodation. For other waste streams, we have communal collection points with 1100-litre bins – like the European model – and we direct residents to "their" bin. But really, they can use any of them. Now, we are not a big inner-city borough – we are in Plymouth – but for that area, on-street bins might work better than issuing individual caddies. I was wondering whether you had experience of multiple bins and how that worked?

Lucy Simler:

No, we only had the one type of bin. But we are moving away from keycard access bins. If we had multiple lockable bins, we would probably just issue a standard card that could open any of them.

Paul Yeatman:

In our area, it is not lots of businesses – more converted housing, HMOs, etc. We are preparing for rollout now – and for those kinds of areas, individual caddies might not work well. Funding permitting, shared on-street bins could be a better solution. Thank you.

Nigel Deacon:

Yes, interesting points. There is no easy answer when it comes to access control. At metroSTOR, we have been focusing more on app-based solutions. That has a lot of advantages – you can monitor and track who is using the bins and when.

It has drawbacks, too. A simple keypad code can leak out – but then you can just change the code and say, "2026 is the new code" and reset everything. No easy answers – but definitely potential solutions. We have the app working in Washington, DC – around 4,000 registered users, collecting 25 tonnes a month. So yes, it can work.



Paul Yeatman:

Just a supplementary – do you think having the card or code reduced participation slightly? If people did not have it? Or is it hard to say?

Nigel Deacon:

Lucy - do you want to come in on that?

Lucy Simler:

Looking at the tonnage, it was slightly lower in Old Street. That might be because fewer residents were using the bin – but it is difficult to compare directly. I think the bigger issue is when new residents move in and do not know the service exists, or how to access it. At the time of initial monitoring, that was less of a problem. But after a year or more, it becomes hard to say.

Paul Yeatman:

Yes – just wondered if you ever heard someone say, "I forgot my key, so I just used another bin." Human behaviour kicks in.

Lucy Simler:

Yes, we did some follow-up monitoring – including door knocking in Old Street – but contact rates were low. We were not able to get much feedback.

Nigel Deacon:

I did a quick calculation – based on households and tonnage – and Old Street was probably collecting 80% less than other areas. Could be other factors, but I thought, you know what – I will take that if it means clean material. Slightly reduced volume, but clean.

Lucy Simler:

I think contact rates were lower in Old Street too. It was harder to access properties – so fewer residents were probably using it.

Paul Yeatman:

Yes, with only one bin, it is hard to make comparisons. But I just thought you might know. Ultimately, the goal is to get food waste out of other streams. If we start impeding access – is it worse if someone uses the "wrong" bin, or better than them throwing it in general waste?

Nigel Deacon:

Agreed. Well, that has been really excellent. Thank you, Shelley. Thank you, Lucy. Really appreciate the effort you both put into this and everything you have shared. Thanks also to all attendees – great engagement. I hope you are taking away some useful tips. I think this will apply to any flat neighbourhoods, not just Flats Above Shops. Have a great rest of your day.