

metroSTOR Webinar Summary and Transcript

Getting food waste recycling right:

What drives participation and improves performance

23.09.26

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metroSTOR Webinar **Key Learnings**

Food waste recycling is not simply a communications challenge. The strongest message from the session was that participation depends on the whole service experience: how easy the system is to use, whether people understand it, how motivated they feel, and the context in which they are being asked to change their behaviour.

1. Make it easy before trying to persuade people

The starting point for behaviour change is reducing friction. Residents will naturally favour the quickest and easiest disposal route, so food waste recycling needs to compete with simply putting everything into the residual bin. That means thinking about caddies, liners, distance to communal bins, accessibility, cleanliness and how easy the infrastructure is to use.

2. First experiences matter

When food waste recycling is introduced, early experiences can shape long-term behaviour. If the service initially feels confusing, unreliable or inconvenient, residents may disengage quickly and can be difficult to win back. Launching a service well - with equipment available, clear information and reliable collections - is therefore particularly important.

3. The aim is to make recycling routine

Once people establish food waste recycling as part of their everyday routine, the behaviour becomes much easier to sustain. Research referenced during the webinar found that 75% of food waste recyclers in Wales cited it being part of their everyday routine as a reason for using the service.

4. Flats need a different approach

Communal housing introduces additional barriers: limited space inside homes, distance to bins, transient populations, weaker social norms, less ownership of communal areas and little accountability for what goes into shared containers. The design of the building and waste system therefore has a major influence on resident behaviour.

The discussion also highlighted a practical issue that is often overlooked: the journey from the kitchen to the communal bin. Carrying food waste downstairs, particularly in liners that may leak or split, creates a level of friction that simply does not exist in the same way for most houses.

5. Better infrastructure is itself a behavioural intervention

Where communal bins are located, how clean and pleasant they are to use, and whether residents can immediately understand what to do all influence behaviour. A well-designed recycling service is not separate from behaviour change - it is part of it.

6. Knowledge matters - but information alone is not enough

People can know what they are supposed to do and still not do it. However, specific areas of confusion can create significant barriers, particularly around liners, what counts as food waste, food left in packaging and what actually happens to food after it is collected.

The practical lesson is to **simplify and target communications around the points people genuinely misunderstand**, rather than repeatedly giving them broad recycling messages.

7. Food waste recycling still needs to become socially normal

Unlike dry recycling, food waste recycling often lacks visible cues showing residents that other people are doing it. This is particularly significant in flats, where residents may never see neighbours putting out caddies. Building a stronger social norm can therefore help increase motivation.

8. Use moments of change

Introducing a new food waste service can be more effective when it forms part of a wider improvement rather than appearing as another bin residents are expected to use.

David highlighted the ReLondon/Lambeth Fresh Start approach, where food waste was introduced alongside cleaner bin areas, refreshed signage and improvements to the wider recycling system. The intervention achieved a substantial increase in recycling and reduction in food waste within residual waste.

Three questions for anyone designing a food waste service

- **Ease:** Is recycling food waste genuinely easier and more convenient than not recycling it?
- **Knowledge:** Do residents understand exactly what to do, including the points that commonly cause confusion?
- **Motivation:** Does the environment make food waste recycling feel normal, worthwhile and expected?

Those three factors - **ease, knowledge and motivation** - provide a simple framework for reviewing an existing service or designing a new one.

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metroSTOR Webinar **Transcript**

Nigel Deacon

Good morning, everyone. Welcome to today's webinar, Getting food waste recycling right, what drives participation and improves performance. Thanks for joining us.

Food waste is a major focus for all local authorities. And one of the things we wanted to explore today is the difference between providing a service and actually getting people to use it consistently. That distinction, of course, is particularly important when looking at flats and communal housing. We spend a lot of time looking at the physical side of that challenge. But increasingly, I think the question is not just how do we communicate better, but how do we design a service around the way that people actually behave?

So I'm really pleased to be joined today by David Hall, Founder and Executive Director of Behaviour Change, the behavioural science consultancy within WRAP Group. David's got more than 25 years' experience applying behavioural science to sustainability, including extensive work around recycling and food waste. His recent work includes a food waste recycling intervention in Devon, which increased participation by 43%, as well as developing a five-year recycling behaviour change strategy for the Kent Resource Partnership.

Today, David's going to take us through what actually drives food waste recycling, including the importance of ease, knowledge, motivation, habits, and the wider context in which people are being asked to recycle.

David, thanks for joining us. Over to you.

David Hall

Thanks very much and great to have so many people joining us today. I'm going to talk you through a brief 101 on behavioural science and how that applies to food waste recycling. It comes from a background of work that we've been doing for many years on what it takes to change behaviour. You see here a few examples of the topics we've worked on, a very diverse range of things, from getting people to switch from cars to buses, through to getting Lime bikes off pavements, litter reduction, healthy eating, getting kids outdoors and enjoying nature, all sorts of different topics. And I'll draw on some of those as I talk you through some principles for applying behaviour change to food waste over the course of the next 45 minutes or so.

Food waste recycling is still a long way from being the norm

David Hall

Food waste is a very big focus at the moment. In theory, everyone in England should now have a food waste recycling collection, even if you live in a flat. We know that in practice that is not necessarily the case. This is somewhere I walk past every day on my way to the station in West London. It's quite a genteel housing estate where they've recently introduced a food waste bin. I've never seen any evidence of that bin being used, either from the usual mess around it or from seeing anybody use it. There's a nice bin in place there now, but there isn't necessarily any strong reason why people should change what they might have been doing for many years in how they get rid of their food waste.

So there is a real behavioural challenge in moving people on from long-established habits. And we know that if we look across the UK as a whole, food waste recycling is still a long way from being the norm. This was a WRAP study that was done last year, looking at what people did with disposing of their food. And that is changing fast, we would hope, but nonetheless, for the majority of people, the most common thing to do is still to put your food waste in the general rubbish bin. And we'll talk a lot more today about what it might take to get people to move on from that behaviour.

So what we're going to talk about today is three things. The first one is fundamental to behaviour change, which is understanding people. Why do people behave in the ways that they do? What explains human behaviour? The second thing, which is particularly important for recycling and waste behaviours, is understanding the context in which people are operating. If they're living in communal properties, for example, what's going on in those properties and what's driving that behaviour.

Finally, I'm going to dive a bit more deeply into the specifics of food waste recycling behaviour, how people behave in relation to food waste and what it might take to change that.

Understanding people

David Hall

This is a fascinating topic. Our start point might be the fact that people don't always do the things that we would like them to do. And they don't always do the things that are either in the best interests of themselves or in the best interests of society or the planet or their communities. I think this is a pretty good example. This is a food waste bin near me, which is provided for flats above shops. As you can see, pretty much the only thing that isn't in there is something that's identifiably food waste. So people are using that for all sorts of different things, despite the fact that it's very clearly labelled, despite the fact that there's actually a litter bin very close to it. And it's interesting, of course, because, in an odd way, people are trying to do the right thing there.

They are trying to put their litter in a bin. They're just not necessarily putting it in the right one. And I think when we think about behaviour change, we need to think about the systems that we expect people to use and what's going on in those systems and what might be driving people to use them correctly or not. One of the other things I notice a lot when I'm out and about is how people respond to road markings. Road markings are a great example of a system that has been designed very thoughtfully and rationally. There's quite a complex set of rules, but we should all know them if we drive. And yet, we walk around the place and we can see that there are lots of people that perhaps aren't quite obeying them in the way that we would want.

So the system in parking is you have a single yellow line, which means you can only park at certain times, depending on what it says on the sign. You've got a double yellow line, where you can never park. And then you've got this hatching which you get at zebra crossings, which means you can't even stop. As I say, we would hope that people understand this. And if you work in a local authority, you work hard to make sure that this is well planned and thought through and communicated to people. And yet, we know that despite that, people aren't always doing the things that we want them to do. So this is something I've noticed at my daughter's school when I walk her there in the morning. So they've created, you could call it a little behavioural intervention of their own.

And the intention of that, is to intervene at a point where perhaps people aren't doing the right thing, where people might be parking on the hatchings. And so as well as intervening at exactly the right spot and at the right time, it's also introducing a bit of additional emotion on top of the rational signals that you're getting from that road marking. So in this case, it's saying parking here endangers the lives of children. That's quite an emotive point. Most of the people parking there have children, are probably driving children to school. So you might think that's quite a clever and well thought through idea. And yet pretty much every day I see something a bit like this.

When I've shown it to people before, they've often commented on the fact that it's a Range Rover, but I can assure you that plenty of other cars are doing that as well. So the point about this is you can design something quite carefully. You can think hard about what might work. But in reality, The only way you're ever really going to know if something works is by trying it. And so a really key principle of behavioural science is testing and learning and seeing what works. But another thing I think that this tells us is that I don't think we should assume that the Range Rover driver is a bad person, just as I don't think we should assume that the person who put the can in that bin earlier is a bad person.

What we might need to think about is what else is going on in their lives, what is getting in the way, and what might be the other factors that are driving the decisions they're making. So in order to understand why people are doing things that we might not want them to do and not doing the things we might want them to do, we need to dive a little bit deeper into behavioural science.

And as we go around, we see all sorts of examples, particularly in the litter and waste and recycling world, where people are perhaps doing something a little suboptimal, like putting cups on a shelf, or in this case, a few people put their cups on a bin and then everyone else did, or the classic Christmas tree scenario, which you get with recycling where, come early January, one person puts their Christmas tree on the corner in the street and then that becomes the place where the Christmas trees go as far as the community is concerned. So understanding what's going on there, understanding what's driving those behaviours, looking at the social factors that drive people to copy what others are doing helps us understand how we might start changing behaviour.

So diving into that a little bit more deeply, we've seen these irrational behaviours and understood that people perhaps aren't always doing the thing that we would like them to do. But what lies behind that and how can we explain that? A good starting point is a quote from Daniel Kahneman, the Nobel Prize-winning behavioural economist. He said, humans are to thinking as cats are to swimming. We can do it when we have to, but we'd much prefer not to. If you take anything away from today when thinking about how to design systems and interventions that encourage people to recycle food waste more effectively, keep this in mind.

People just don't like thinking too much and they don't think very hard about most of the things in their daily lives. In fact, Daniel Kahneman also broke down our thinking into two different types of thinking. So he talks about system one thinking and system two thinking. If you've read his book, Thinking Fast and Slow, it's all about this distinction. And what he said is well over 90% of the time, we are in system one mode. And system one mode is that fast, automatic, frequent thinking. It's very intuitive. It's the thinking that we do without realising we're thinking. So we get through our daily lives using that system one brain, rarely stopping to consider things very hard.

System 2 thinking, which is slower, more effortful, more logical, more critical, is something human beings, unlike animals, are capable of doing, but it's also something we do extremely rarely. And I can pretty much guarantee it's not something we really apply when we're thinking about waste and recycling. We're very much in that fast system one mode. And if you look at the world around us, that's not surprising because the modern world faces us with all sorts of choices every day. Think about the typical supermarket where apparently there is something like 30,000 different products you could buy when you go to a supermarket. Of course, we're not going to critically examine every decision. We need ways to help us make fast decisions. And, sometimes those things work, but sometimes they lead to mistakes.

Here's a little example. Look at this Lego bridge and think about what you would do to make it level. If you thought of adding a brick, raise your hand. Plenty of hands. Now put your hands down. Did anybody think of taking a brick away instead? Thank you. I think that illustrates the point pretty well. This is an example of a bias. Both of those options are completely legitimate.

To make the bridge level, you could either add a brick like this or you could take away a brick like that. But what typically happens is that most people think first of adding a brick. Fewer naturally think of taking one away. And that's just an example, one of many biases that human beings are typically prone to. When we want to change or improve something, we often think, what are the extra things I can add to make this thing better? And fewer people typically think about taking things away.

And it's quite good in an organisation to have a mix of people like that, because I think when you're trying to create systems or improve things, to have that mix of different ways of thinking is helpful. But for many, the typical bias is to act. Biases are the first example of one of the things that influences our choices. So biases grow out of mental shortcuts. So those are things that help us make quick decisions. But when they lead to mistakes, we call them biases. So that's the first thing that lies behind some of those irrational decisions we make. Biases are not necessarily a bad thing because we can, to some extent, predict them and design interventions to solve them. The next one is a little bit harder to deal with, which is noise. So noise is just the random variability of life.

It's external things that change how we react and behave. If you're hungry, if you're in a bad mood, if the weather's bad, all of those things might affect how you behave. The don't go shopping when hungry is a classic piece of advice if you don't want to spend money on things that you don't want to buy. Noise is harder to counteract because it's a bit unpredictable. And when it comes to waste behaviours like food waste recycling, we do actually see a surprisingly large number of people who are a bit inconsistent with their food waste recycling. And a lot of that probably is down to noise. It's what was going on in that particular moment.

In some work we did in flats a few years ago with ReLondon, cameras were placed in people's kitchens to understand their recycling behaviour as part of the research. There was one particular person who behaved very inconsistently with her recycling, there was a point in the afternoon where she did some very thoughtful recycling and then later in the evening with pretty much the same product, she just bunged it straight in the bin. And it became apparent when we interviewed her that's because she'd been out for a few drinks and wasn't focusing so much in the evening. We can see that randomness caused by everyday life, which affects people's behaviour. The third thing is habits. Habits are incredibly important.

They're the things that we do automatically without thinking often every day at the same time and in the same place, like cleaning your teeth. Habits are very helpful often for behaviours, but if your habit around food waste, for example, is to just put it in the black bin with everything else, it can be very hard to get out of that habit. Finally, and this is very important for food waste as well, our behaviours are strongly influenced by context. I think we often underestimate this. We think people are consistent in every environment. But we've seen from a lot of our work on littering, for example, that there are lots of people who wouldn't litter in most scenarios, but might litter in some.

And again, when it comes to food waste behaviours, looking at the context people are in and how that might affect the choices they make is really important. We'll come on to talk about that a bit more later. So that's a little bit of a dance through behavioural science and what leads to people behaving in the way that they do.

Understanding contexts

David Hall

The context we're particularly interested in today is communal settings and flats, which we know are particularly difficult ones to get people recycling right in. I want to give you an illustration of what that might mean. So this was some work we did a while ago looking at factors influencing recycling in London. There are other cities, of course, but London is one where we've done quite a lot of work. And there are factors that influence

recycling generically, but then there are factors that might be quite specific to London. Smaller homes, a more transient population, busier lifestyles, higher levels of deprivation, language and cultural barriers, the anonymity of living in a big city.

All of these things are additional barriers and factors that might influence people's behaviour. And it's important to understand those when you're designing interventions. But then when you throw in the extra level of flats in London, and this is something we looked at, then you have perhaps some additional contextual factors to consider. In flats, often the communal space feels a bit uncared for and not owned, and therefore people aren't so bothered about how they might behave there. There might be some distance that people have to walk to the bins. And when you get there, there's a sense that nobody else really cares. There's all of these different factors that potentially might be influencing the context, not just because they are in London, but because they are living in a flat in London.

It's really important to understand those factors when you're thinking about how to create change. There's no substitute for understanding the people and the context where you're working. The pictures on the left are from that research project I was talking about. You can see the different tools and little hacks people use for storing their recycling - hanging it in a bag on the back of a door or keeping it on a shelf in the corner - as well as the things they encounter when they get outside. If the communal bins haven't been emptied and the area has become a mess, that is incredibly off-putting.

Understanding those contextual factors, and the workarounds and behaviours people develop in response, is very important. Another point from the picture on the right is that people put recycling in plastic bags because they need some way to carry it down from their flat. Getting food waste down from a flat can be an even bigger problem if you've got caddy liners and messy, leaky food. Helping people solve those practical problems can be an important part of the challenge.

One final contextual point comes from work we did in Lambeth a few years ago, going around estates and understanding the different factors at play. Every estate is different in its age, building layout and location of bin stores, and all of those things have a significant impact on behaviour. There are still quite a lot of estates in London, at least, with active rubbish chutes. If you've got a chute next to your flat that goes straight down to the bins, getting someone to change that long-established behaviour and instead take recycling and food waste downstairs can be a significant challenge.

So understanding the differences between the estates and what is going on in those individual buildings is important too. So that's a bit of a sense both of what drives human behaviour in general, and then also the contextual factors of working, particularly in communal environments, in urban settings, and in different sorts of buildings. And all of those factors are extremely important for understanding what it might be that we will need to do in order to get people doing the right thing.

Understanding food waste recycling

David Hall

I want to focus on what we know about food waste recycling behaviour and what works to improve it. The first crucial point, particularly with so many people getting food waste recycling for the first time, is that first experiences are incredibly important. In places where participation is low, that often connects to how the service was launched and whether it genuinely felt easy, achievable and desirable. If it feels confusing, inconvenient or unreliable at the start, if people don't understand it or are simply given a caddy without much explanation, it can be very difficult to bring them back into food waste recycling later.

It's very difficult to get people to come back into food waste recycling. And there are also quite a lot of people who try it a couple of times and then lapse very quickly. Getting those early interactions right is incredibly important. And I think investing time and money at that stage to build the system and communicate with people is essential. The next thing to say is, where there are problems with this system or there's friction in the system, it's quite easy for people to lose trust and lapse. So we know that sometimes the service isn't particularly well understood. Again, we've seen in areas where there's been food waste recycling for a long time, some of the basic things in curbside properties, like knowing that it's collected every week, is not always understood. And sometimes also there are additional steps that are created.

You have to order the caddy, you have to go to the library to get some liners or order them in some way. When there are additional steps or additional barriers to taking action, that makes it harder for people to interact. So I think making the information super clear and obvious to people, and if there are things like caddies that you're providing or you're giving people free liners, do that in the easiest and most frictionless way you can. The good news is that over time, once people get used to food waste recycling, it becomes completely routine. The top reason people in Wales give for using their food recycling service is simply that it's part of their everyday routine.

Food waste recycling can feel like a disgusting act for people who haven't done it. But once you've got into the habit of doing it, putting food waste into a black bin with everything else can feel equally disgusting, and maybe it's staying there for quite a long time. And so getting people over that hump to the point where it becomes routine and giving people reminders and help along the journey to reach that point is crucial.

The 3 factors that drive food waste recycling

David Hall

And for each of these, I'll give you a little diagnosis of how that works. But also I want to talk about some interventions that we've tried in each of these spaces that hopefully help reinforce them. There is lots of evidence around recycling behaviour showing these are the big factors that drive it. So I think that these are helpful beyond food waste. When you're thinking about changing recycling behaviour in general, I would encourage you to look at these three different factors.

The first is ease: how easy is it to recycle food waste compared with the alternative people might currently be using? The second one is knowledge. Do people fully understand the system? Do they know what they're supposed to be doing? There are some nuances to that which might not be immediately apparent. And then thirdly, motivation. Do people feel it matters? Do they feel anyone else cares? Do they feel it's something they should do? And I'll go through each of these in turn.

Ease

David Hall

Ease is the place to start, and that's where we'd always start with any behaviour. We have to make it as easy as possible for people to do the right thing. Richard Thaler, author of Nudge, puts it simply: make it easy for people to do the right thing. So you've got to remove barriers, you've got to simplify and facilitate the action that you want.

When it comes to food waste, that is potentially quite challenging because currently if the action is just put it in your rubbish bin with everything else and in a flat take it downstairs with everything else, the difference between that and potentially separating it out from other materials, perhaps emptying out packaging if you have food in packaging, taking it to the outdoor bin, etc. It can feel a lot harder for people. So we're starting from a position where perhaps it isn't as easy as it might be. And then another factor there is how easy it then is when you get downstairs. I think this is a pretty good example of a bin that makes it as easy as possible.

Firstly, locating the bin in a place that's really convenient for people as close as possible to the front door of the flats, not somewhere massively out of the way that people have to go to, making it super usable. In this case, the bin, I think, has a pedal that helps you open it. I'm not sure if this is one of Nigel's or not, but I know it's very similar to the ones Nigel uses. But also then the cleanliness and pleasantness of using that infrastructure. If that becomes quickly dirty and disgusting and it's never cleaned and it's perhaps in a bin room that is pretty unpleasant to go into, people are far less likely to use it. A big element of ease is then the outside infrastructure and how that is located and maintained.

So thinking about ease and tools that we've used to make it easier for people to recycle food waste, I think the first one is really simple, straightforward information. So one aspect of ease is just giving people the message in the simplest way possible. Something that's worked very well at curbside properties is these 'No food waste please' stickers on residual bins. WRAP pioneered these some years ago, and they have been used to great effect. Perhaps slightly less effective in communal properties, because that would have to sit on the outside communal bin, by which point perhaps people have already arrived with a bag with food waste in it. But I think really simple salient prompts at the right moment is one way we can make it easier for people to think about what to do.

The next one is just helping people do the right thing. So when we did the project in Lambeth about introducing food waste in flats, we delivered the food waste caddy in a paper bag that had very simple instructions on it. And it also contained a tea bag that we were giving away to people to say, make yourself a cup of tea, read these instructions and then recycle the tea bag. So a helpful approach that sets out the behaviours. In this case, it was a simple one, two, three that didn't overcomplicate things, which is a good start towards making it as easy as possible. And in that case, delivering the caddy to somebody's front door with simple instructions was an important part of the intervention.

Knowledge

David Hall

Knowledge is another really important part of getting food waste recycling right. And I've just got a little exercise for you just to think about the role of knowledge. Think back to everything you ate yesterday and just try and think about all the meals and snacks you might have had. And then think about how many portions of fruit and veg you had yesterday. It might have been one, two, three, four or five. I suspect everyone knows that they should have eaten five portions of fruit and veg. It's very common knowledge. I think over 95% of people know that they should eat five fruit and veg a day.

But when we do this exercise live, what we generally see is that a much smaller minority of people actually achieve that. In the latest UK data, it's only 17% of people who get their five A day. So I think what we know is that knowledge might be important, but knowledge alone isn't enough to drive behaviour. So I think focusing on knowledge alone probably isn't going to get you where you need to, but there are some important knowledge gaps that may well need to be filled on food waste. And I think there are some specific areas that we see where knowledge fails. So firstly, there may well be confusion or misunderstanding about exactly how the system works. If it's in flats, it might not really matter how often the collection is.

But things like liners, things like caddies, some of the practicalities of the system, it's very important for people to understand that. The second one is about knowing what counts as food waste. You might think it's obvious, but sometimes people assume certain items like bones might not be included or tea bags. There's often things that people don't understand or forget to put in the food waste. And then the third area of knowledge, which I wouldn't overestimate as a driver of behaviour alone, is that we do see a widespread misunderstanding of what happens to food waste once it's recycled and people not really understanding the environmental negatives around food waste going into landfill and people not really knowing what recycling means when it comes to food waste. That can be a barrier to action.

When we do research, we ask people about their understanding and their knowledge, we often find that there's quite a lot of uncertainty about liners, what kinds of bags you are and aren't allowed to use, and that does vary from system to system. And also what to do about food that's in packaging. The reality is you should take it out of the packaging, put the food in the food waste recycling and the packaging elsewhere. People don't always understand that and they often default to then putting the whole thing in their residual waste. And as I said, also, often people don't know what happens to food waste or why it particularly matters, essentially people think of recycling as a process of turning something back into the thing it was before. And food waste doesn't quite work like that.

So people's understanding of that and therefore people's sense that it matters can be quite poor. And then in turn, the understanding of why it might matter to the council, why it might be a money saving thing to do, all of those things are perhaps not particularly well understood. So if we're thinking about tools that we can use to increase knowledge of food waste recycling, I think there's two things I would point to. Many of you might have been aware that it was recycle week last week, so there's lots of activity going on in recycling. And one of the things that WRAP have done very successfully during Recycle Week over the last couple of years has been about simplifying and chunking messaging.

Rather than talking about recycling in general, they talked about very specific items, which are the items people tend to miss or forget to recycle. And by breaking it down in that way, by chunking it up into the specifics, people get the message much more clearly. So I think thinking about that in the context of food waste, this is for dry recycling, but thinking about chunking it down to the simplest list of things that people need to know and presenting those one by one can be a far more effective way of building people's knowledge. The second one, this is an intervention we did in Newcastle-under-Lyme earlier this year. This picked up particularly on the areas that we knew people were confused about from the research that we'd done.

We knew people were unsure what kinds of bags they could use, whether they needed specific compostable bags - which in this case they didn't - what foods could go in, and how often the collection was. We did a really simple bit of communication that was about communicating all those three things in one. In this case, it was a sign on lampposts. And we saw a 44% increase in capture of food waste recycling in that location when we did that. So that's knowledge.

Motivation

David Hall

So motivation, as I said earlier, is about making people feel they should do something. Traditional motivational approaches might include punishments and incentives, such as fines or rewards. I don't think we're in the business of doing that when it comes to food waste. So we're more in the business of creating persuasive arguments, showing people what others are doing, appealing to people's emotions, using tools that can encourage people to comply more with the food waste recycling. And when it comes to motivation, we know that there are some quite significant barriers around food waste recycling. I mentioned earlier that there's this 'ick factor' that people might have. They think it's going to be smelly and horrible.

They think it might lead to more pests or people might have had a bad experience. So they might overfill a caddy liner and it breaks. If you're in a flat, and you try and carry some food waste downstairs and that goes wrong, that's a pretty unpleasant experience that might well put you off. So there is this ick factor which can put people off. There's also, I think with food waste particularly, as I said earlier, it's still not a majority behaviour in the UK. Unlike dry recycling, which most people would now recognise that the vast majority of people are doing dry recycling. There are lots of cues and signals out there on packaging, etc. Food waste recycling is not yet established as a norm. People probably don't see it that much. There are fewer visible prompts.

If you don't see people putting caddies out on your street and so on, you might be less aware of it. And I think this is particularly the case in communal settings. If, like my picture at the beginning, there's a bin on the way out, you might have no idea if other people are using it or not. And therefore it doesn't necessarily feel like it's a normal, widespread behaviour. So what tools can we use to increase motivation? I think the first thing is there are all sorts of ways that we can build that social norm. We can make it seem more common and more widespread. This was an intervention we did a few years ago in Norwich, where we put hangers only on the bins of people who hadn't put a food waste caddy out. And the message on the hangers was more and more people in Norwich are recycling their food waste.

So even if it's not yet a majority behaviour, you can use this idea of what we call dynamic norms, which is showing that more and more people are doing something to build that sense of motivation. Another example, which Nigel mentioned, was work we'd done recently in Devon. Another way of motivating people is to interrupt an existing journey and make the message hard to miss. It was deliberately salient and to the point. In this case, in homes where people had not put out a food waste caddy, we lightly taped over their bin with a message that said, no food waste, please use your food waste caddy. That was an interruption to the journey. It was a big motivator to get people to rethink and do something differently.

And we saw a very significant, I think it was 43% increase in food waste recycling participation as a result of that. Not quite sure how that translates into flats. That's not something we've thought about yet, but I'm sure that there's other ways you can interrupt journeys and make that food waste option stand out more to people.

Creating a moment of change

David Hall

I've referred a few times to the project we did in Lambeth, and that was a project with ReLondon. And that was all about increasing participation in both recycling and food waste in flats. We introduced food waste for the first time into a bunch of flats and we also completely rethought the recycling system. And the whole idea about it was a fresh start. So we were telling people, there's a new rethought system, it's going to make it much easier for you to recycle. The bins are nice and clean. There's small electricals recycling, there's signage to point people to the bins. And as part of that service, we introduced the new food waste caddy that was, as I said, delivered to people's doors in a paper bag. And bringing all of that together in one moment of change that talked about a fresh start was extremely effective.

We saw 150% uplift in recycling as a whole and a massive decrease in food in the residual waste and strong use of the food waste caddies that we'd given people. That's one example of an attempt to bring all of it together.

Your questions?

Nicola Watts

There are a couple of questions that I put in the chat. We're rolling out food waste in flats, and I was interested in how you might suggest getting the caddies to people. You mentioned that in Lambeth you delivered them to the doorstep, but was there any engagement at the front door, or were they simply left on the doorstep?

David Hall

There was an attempt at engagement. The teams delivering the caddies were properly briefed and able to explain them to people, but a lot of people were out. The caddy was delivered with a door knock and an attempt at a conversation, while the paper bag also contained instructions and a small leaflet. So it was a self-contained intervention that people could understand even if they weren't home, but we would definitely advocate a conversation where possible. That's quite labour intensive, but I think the rewards of that are pretty significant.

Nicola Watts

Thank you. My second question was about the provision of a free liner and whether it should be compostable or plastic. I know there are pros and cons to both, but I think the one thing I've read about is the improvement in contamination you could get with a compostable liner and that potentially a plastic one sends that message that you can accept other plastics or plastic packaging. Have you got any insight into plastic versus compostable liners?

David Hall

It's a really good question. I think, the evidence is that if you give people free liners, they're more likely to comply. And I think I would certainly advocate doing that at the beginning, even if you can't continue doing that forever. On the liners point, the treatment facility may well have a point of view on what liners they will accept. I think being able to accept any bag is probably preferable. And what they did in Newcastle-under-Lyme is they provide a thin plastic non-compostable bag that you can order, but also they say you can use any bag. To me, that's probably the gold standard of making it easy for people. So if they don't get round to or can't find or didn't get hold of the provided bags, they can use any bag.

Compostable liners are quite expensive and, particularly in flats, if they fail and cause a mess, that's a bit of a disaster. I would favour allowing any bag and providing bags as well, but I know that's not always possible.

Steve Cramoysan (Cllr)

I've got two questions. The first is on the communal side. In my district area, some feedback I picked up from social media was, oh, well, the council dumped the, and this is their characterization, they dumped these plastic bins near my front door, near the front door, around the side, and I'm not sure what they're for, and we're not going to do this, and so on. Bearing in mind the previous discussion, what do you see as the gold standard for trying to engage with people in a communal setting so that they know what the bins are for and actually engage with the service? So that's the first question. What would you say is the gold standard?

David Hall

I think the example I showed at the end - the fresh start example - is a good one. I'm not saying do it exactly like that, but there were a couple of important things going on. First, it was used as an opportunity to refresh the system as a whole. Rather than simply saying, 'we're introducing this new thing', the bins were cleaned up and there was new signage. Even just cleaning the bin room in a communal setting makes a difference.

David Hall

If you can say to people, we're smartening things up, cleaning up and improving the system, and point to other changes that make their experience better, that really helps. Food waste recycling done well can also help where there are pest problems, which often occur in communal settings. If you can communicate it as part of making the whole environment nicer and cleaner, with food waste recycling as one part of that, I think that's positive.

The other thing is whether the caddies were put in the right place. At the basic level, putting one right in front of somebody's door so they can't miss it, with a clear, simple leaflet inside - or even a sticker on top - is really important. Alongside that, notice boards and posters around the building are helpful too.

Steve Cramoysan (Cllr)

I like that idea of freshening up the residual bin as well. It gives you a clear comparison. One issue in communal settings is that you have a kitchen caddy and an outside food waste bin. You don't want to bring the outside bin into the building, so residents have to carry the contents of the caddy down several stairs. There are practical problems with that: bags can split on the stairs, and if that happens you may lose the resident. In a house, where you can put the bin just outside the back door, it's much easier.

If it splits there, it isn't such a big deal. But how do you deal with that in a flat where you may have two floors to get down? You don't want to be carrying a biodegradable bag that could split. Have you seen any good solutions?

David Hall

I think that's an extremely important point, and I'm not sure the perfect answer to that problem yet exists. People are working on it; we're thinking about it and we'd like to do more. But I think the first thing to say is it does connect to the whole bags question, because I think what bag you're asking people to use and therefore how likely a disaster is, is part of that. And biodegradable bags are the worst from that point of view. As you rightly say, in theory you could take your food waste caddy downstairs and empty the caddy itself. But people in flats are typically on their way out. They take the recycling on their way out. So they don't want to then be carrying the food waste caddy with them.

So I think in the long term, we either need to think about giving people something they can take stuff downstairs in or a much more robust bag that there's no chance of failure, but maybe that has some environmental consequences we're not very happy with either. Or maybe even a sharing system, where you actually can take a caddy downstairs and then hang it up and take another one up when you go back up. So I would be slightly concerned about whether people really would comply with a scheme like that very well. But I think there's some innovation required to help people with that journey from their upstairs caddy to the bins downstairs. I think the other thing is whether you can do it on landings, whether you can have individual smaller bins on landings.

But I definitely think there's some work needed to innovate because I don't think the answers exist at the moment.

Steve Cramoysan (Cllr)

That's helpful - it shows we're not alone in struggling to find a gold-standard answer. My other question is more relevant to rural settings where we've got a lot of people who've got compost heaps and hot boxes and similar systems. And they say, oh, I don't need to do food waste recycling. I've got a hot box. Is there a position on that? Do you have a position on that which is better from the environmental standpoint?

David Hall

In Devon, the example I showed earlier, that was the situation. It was a semi-rural environment with lots of people who had gardens and were already composting. Many started out by saying, 'We compost, so we don't need to use the food waste service.' Composting is good, but it doesn't cover everything you might want to dispose of - bones, eggshells or avocado stones, for example. The people who lived in my house before me had a wormery and I'm still finding avocado stones they left behind. I think the answer is that you should do both. A food waste collection is still useful for those extra items.

It's then up to you what you put where. You don't want to be too accusatory towards people who are composting because they are already doing the right thing. I'm conscious of time and think we might have time for one more question. I'll put my email in the chat, and I'm very happy for people to contact me afterwards with specific questions or follow-ups.

Laidlaw, Duncan

I work in a borough just outside of London, so I know quite a lot of the work that you've done with ReLondon across London. My question is: you can go into a bin store, clean it and make it look lovely once, but how do you deal with managing agents when you don't own these blocks and you have no control over what happens in them and you have managing agents who maybe don't see bin room cleanliness or upkeep as such an important factor as you do? I'm glad you're pausing there as well.

David Hall

It's slightly beyond my area of expertise because we typically look more at resident behaviour, but the same principles apply. Whether it's a council-managed service or not, there is now an expectation that everyone has a food waste collection, and the managing agent is required to deliver that. I think a combination of carrot and stick is probably required. Thinking about the knowledge and motivation factors we discussed earlier, you might reasonably assume that not all managing agents have a particularly good understanding of what they're supposed to do and how to do it correctly.

Skilling up managing agents and giving them the right information is probably an important part of it - perhaps through workshops and webinars rather than simply sending information out. On the motivation side, there may also be a role for firmer, enforcement-led elements, although I don't know how much power local authorities have in this space, alongside approaches that show managing agents they are in the minority if they're not doing the right thing.

Laidlaw, Duncan

I'd say we have very little power because it's all private estate. Unless it's an environmental health concern and we can use a CPW or something similar, there is very little we can do to compel a managing agent to maintain the bin store in a condition that residents want to use. We don't have the funding to keep cleaning bins, nor is it our responsibility. We've offered a food waste service in my borough for years and delivered it to pretty much all properties, but with flats the issue is the level of engagement. We can supply information to residents and do all of that, but when they come down to their bin store and it is not kept in a condition that encourages the right behaviour, all of that work falls down.

Nigel Deacon

Excellent. Thank you, David. I really appreciate all you've shared. And thanks to everyone who's taken the time to attend and for the questions you've put in. Just to confirm, we will be sharing the slides, recording and a summary over the next few days. Really appreciate it. Enjoy the rest of your day.

David Hall

Thanks, everyone. Nice to meet you.