INSIDE THE HEAD OF THE CONTAMINATOR

RESEARCH REPORT SEPTEMBER 2020





ABOUT THE CENTRE FOR SOCIAL INNOVATION

Keep Britain Tidy is a leading independent charity with three goals – to eliminate litter, prevent waste and improve local places. We have a long history of successfully delivering campaigns and programmes that have positive impacts for society and the environment at a local, regional and national level.

In 2015, Keep Britain Tidy launched the Centre for Social Innovation, becoming the only UK charity to take a systematic approach to applying behavioural insights to tackle litter and waste issues. The Centre focuses on understanding the root causes of these issues through highquality behavioural insights research and uses this together with behavioural science to design, pilot and scale behavioural interventions. What makes the Centre unique is that we have expertise in both research and behavioural insights *and* litter and waste. We believe bringing these two areas of expertise together is key to tackling the issues effectively.

We work together with private, public and third sector organisations, local authorities' managerial and operational staff as well as communities, to design interventions which are cost-effective, measurable and practical to deliver. In this way, we ensure that the interventions we develop are scalable. To date, over 290 local authorities and other organisations have implemented one or more of our tested interventions.

We have won numerous awards for our work including Nudge Awards 2018, AIM

Nudging for Good Awards 2017 and the Charity Awards 2016.

We are a Company Partner of the Market Research Society and all of our work is conducted in line with the Market Research Society Code of Practice.





ABOUT THIS RESEARCH

The aim of this research is to understand the underlying behavioural drivers of recycling contamination, alongside potential interventions to change behaviours. It builds on previous research¹ which has predominantly focused on understanding the extent and types of recycling contamination.

This research forms part of a wider programme of work that Keep Britain Tidy is undertaking to tackle recycling contamination, which is being carried out in line with our Social Innovation Framework (right). The research sits within the 'Understand' component of the framework. The purpose of this step is to gather new insights into the underlying drivers of behaviours using robust and indepth research.

These insights are essential to improving existing policy and practice but also in

developing new targeted behavioural interventions – which we pilot in the real world, in partnership with local authorities and other stakeholders to gather evidence about what works and what should be scaled for broader impact.

We have developed a series of behavioural intervention ideas from this research which we would now like to take forward for piloting in partnership with local authorities or other relevant stakeholders. Some of these are outlined later in this report.

We also encourage our partners to think about developing their own intervention ideas for piloting, based on the insights from this research. In our experience, it is best to co-design intervention ideas with a range of key stakeholders, such as senior management, communications teams, frontline/operative staff and

¹ WRAP's Recycling Tracker 2019 <u>http://www.wrap.org.uk/content/recycling-tracker-</u> <u>report-0</u> and Resource London Recycling in Flats

Research:<u>https://resourcelondon.org/what-we-do/innovation-and-development/flats-recycling-project/</u>

residents. This helps to ensure that interventions are targeted, cost effective and practical to deliver.

We have developed a series of behavioural intervention ideas from this research which we would now like to take forward for piloting in partnership with local authorities. Some of these are outlined later in this report.



The Centre for Social Innovation Framework



OUR RESEARCH PARTNERS

We would like to thank our nine local authority partners for their contributions to the design and delivery of this research, which helped to make it a success.

We would also like to acknowledge that their financial contribution made this research possible and led to entirely new insights into recycling contamination behaviours that other local authorities and waste managers can benefit from. Our research partners were:

- Braintree District Council
- Darlington Borough Council
- Great Yarmouth Borough Council
- Leicestershire County Council
- London Borough of Haringey
- Luton Borough Council
- Milton Keynes Council
- Northumberland County Council
- Southend-on-Sea Borough Council

We hope you find this research useful and look forward to future collaboration opportunities.



EXECUTIVE SUMMARY

Introduction

The issue of recycling contamination is costing some local authorities tens, if not hundreds of thousands of pounds each year. Inside the Head of the Contaminator is a collaborative research project, conducted with nine local authority partners, which aims to identify and understand what is driving residents to contaminate *and* explore the triggers and barriers to getting people to do the right thing.

Methodology

- 8 x three-day online discussion groups – with 137 participants from across the nine partner authorities.
- Each discussion group focused on a different contaminant – with partners selecting the themes most relevant to them.
- Participants either 'often' or 'always' put the target contaminant in their recycling bin/sack.

Key Insights

- Committed recyclers were some of the worst offenders for contamination

 this group perceive themselves as good recyclers without realising they are getting things wrong and thus rarely update their knowledge.
- People are not seeking out the information they need nor updating their knowledge - instead they are basing their decisions about recycling on assumptions and their own 'rules of thumb'. The information they do encounter is often unreliable or incomplete – e.g. packaging labels.
- Communications that do reach people effectively tend to be proactive, disruptive and meet them where they are, e.g. rejected bins, feedback via bin tags/stickers, through-the-door communications.
- There is a significant amount of uncertainty and confusion about recycling which was generally attributed to confusing and conflicting messages across a range of sources, including the media.

- Contamination behaviours are often driven by feelings of guilt about waste.
- People do not understand that their individual behaviours have an impact and nor how 'the system' works.
- Bin space is driving contamination in certain households.
- Feedback loops are essential to changing to changing behaviour. This includes direct feedback to the household on their specific behaviour, as well as general feedback on recycling performance and issues.
- There is genuine confusion about whether nappies are recyclable.

Next steps

This research has revealed a series of insights and recommendations for how contamination can be tackled effectively. Using these, we have developed a number of intervention concepts to reduce contamination behaviour and will now be seeking partners and funding to trial these.



METHODOLOGY

The research involved eight online discussion boards, with 137 participants recruited from across the nine partner local authority areas. The discussion boards were conducted over three days.

The eight discussion groups each focussed on a key contamination theme (illustrated on page 7). Partners selected the themes that were of most interest to them and participants from their areas were distributed across the groups accordingly.

Participants were recruited using online and telephone 'screener' surveys to ensure that they met the needs of our research and were demographically representative. In this research, only residents who said that they 'often' or 'always' put the target contaminant in their recycling were invited to participate.

The discussion boards asked participants a range of questions to explore their current behaviours and underlying motivations. Day three focussed on participants developing their ideas for interventions that could help to improve the target contamination behaviours. The discussion boards were hosted and moderated by partner agency Flex-MR.

The discussion boards produced large volumes of qualitative data, which was analysed by Keep Britain Tidy using thematic coding in NVivo, a qualitative research software. Illustrative quotes from the discussion boards are highlighted throughout the report. Please note, that quotes are provided as they were written by participants on the discussion board and may contain typos and spelling/grammar errors. Furthermore, some names have been changed from the online usernames given by participants.



THEMED DISCUSSION GROUPS





PARTICIPANT CONTAMINATION BEHAVIOURS

It is interesting to note that the majority of participants in this research were contaminating their recycling with more than one contaminant type. For example, participants recruited into the 'textiles' group were often also putting a range of other contaminant types into their recycling, such as 'hard plastics', cookware, food and garden waste.

The contamination types that participants reported 'often' or 'always' putting in their recycling are shown in the following tables.

It should be noted that these results show the contamination behaviours of those residents who were recruited into the research only. As such, it should not be interpreted as statistically representative of the participating areas, nor England. Nonetheless, we understand from partners that the list is generally reflective of the key contamination issues seen in local areas.

Contaminant type	Number of participants
Food packaging with food inside	53
Plastic wrapping and film	45
Take-away pizza box (used)	41
Other fabrics or textiles, such as bedding, towels, rugs, curtains, etc.	26
Clothing, bags, shoes and accessories	24
Tissues, kitchen roll, wet wipes	23
Hard' plastic items, such as plastic toys, plastic piping, laundry basket, CD/DVD cases, plastic cookware etc.	20
Toothpaste tubes	20
Plastic carrier bags, bin bags, etc. (empty or full)	19
Drinking glass, cookware glass	18
Plastic pots, tubs and trays	17
Cartons, e.g. soup cartons and juice cartons	15
Food / left over food	15

Contaminant type	Number of participants
Bubble wrap	14
Garden waste	13
Nappies	13
Unfinished drink cans, bottles or cups (e.g. a half full coffee cup)	12
Glass jars and bottles	10
Sanitary products, cotton buds, cotton	6
wool, disposable gloves	
Electrical items	5
Cookware (metal) – pots, pans, saucepans, lids, utensils	4
Batteries	3
Dispose of card and paper in general	3
waste bin	
DIY rubbish	1
Mirror, framed picture	1
Pet litter, pet waste, pet bedding	1



KEY INSIGHTS



THREE BROAD GROUPS IDENTIFIED

Contaminators fell into three groups as follows with people who care deeply about recycling actually being some of our worst offenders:

Committed recyclers

- Perceive themselves as good at recycling, but getting a lot wrong without realising it
- See 'more' as 'more' the more recycling they produce, the better.
- Put effort into washing, crushing, etc.
- High levels of guilt about waste
- Get frustrated with people who don't recycle properly
- Not necessarily updating their knowledge and behaviours with regards to what can/can't be recycled.

About 80% there

- Perceive themselves as 'okay' at recycling, but recognise need for improvement and greater effort
- Allow minor barriers to impact their recycling (putting in time and effort, etc.)
- Need the extra push/incentive to be really good at recycling.

Poor recyclers

- Smallest group in our research
- Often start the weekly/ fortnightly cycle with good intentions, but then start to use the recycling bin as a second general waste bin when bin space or time/effort becomes an issue.

Many of the key behavioural issues we identified in the research were present across all groups. Additionally, people in all groups saw recycling as a positive and clearly understood the benefits of recycling, they just prioritise recycling to different extents.



"I AM DRIVEN TO RECYCLE BECAUSE OF THE IMPLICATIONS TO THE ENVIRONMENT AND THE AMOUNT OF MATERIALS WE ARE WASTING IF WE DON'T. SO FOR ME IT'S A CONSCIENCE MATTER, I WOULD ACTUALLY FEEL GUILTY IF I DIDN'T...OVERALL WE ARE VERY GOOD AT RECYCLING I WOULD SAY." (CARLIES, MILTON KEYNES)

"I DO FEEL POSITIVE ABOUT RECYCLING, I WANT TO TRY AND SAVE THE AMOUNT OF PLASTIC AND WASTE IN THE OCEAN AND SAVE SPECIES. I FIND IT DIFFICULT ON A BUSY DAY WITH CHILDREN AND WORK TO WASH ALL RECYCLABLE CONTAINERS BEFORE PLACING [THEM] IN THE BIN. IF THEY SIT ON THE BENCH TOO LONG I END UP PUTTING THEM IN THE NORMAL WASTE FOR QUICKNESS. [I AM] FAIRLY GOOD AT RECYCLING, OUR BIN IS ALWAYS FULL!" (LARISSA, NORTHUMBERLAND) "I TRY TO DO MY BEST WHERE I CAN... I THINK IT IS OBVIOUSLY GOOD FOR THE ENVIRONMENT BUT IT DOES TAKE A LOT OF ORGANISATION. I AM SOMETIMES UNSURE WHAT GOES WHERE, ESPECIALLY IF I AM IN A HURRY PUTTING THINGS OUT. I TRY MY BEST TO RECYCLE AS WELL AS I CAN" (CAZ, HARINGEY)

"I DO AGREE...A LOT OF TIMES I AM NAUGHTY AND DO PUT NORMAL REGULAR WASTE INTO THE BIN THIS CAN SOMETIMES BE BECAUSE MY NORMAL BIN IS TOO FULL SO [I] WILL BAG THINGS AND PUT THEM INTO THE BOTTOM OF THE RECYCLING BIN. SOMETIMES I WILL ALSO PUT CLOTHES NO LONGER NEEDED IN THERE AS AGAIN I'M NOT SURE... I DO TEND TO ALSO PUT FOOD TINS IN THERE THAT STILL HAVE SOME FOOD LEFT IN SOMETIMES." (AMANDA, NORTHUMBERLAND)



PEOPLE DO NOT NEED TO BE CONVINCED THAT RECYCLING IS A GOOD THING

A surprising finding in this research was that even the worst recyclers saw recycling as a positive and clearly understood its benefits.

'Helping the environment' was overwhelmingly the most frequently reported reason for participants feeling positive about recycling (keeping waste out of landfill, reducing waste, reducing impacts on marine environments, reducing resource consumption, tackling climate change, etc.), even amongst those who also had negative things to say about recycling (e.g. that it was confusing or onerous). The sentiment 'doing my bit' (for the environment, for the planet) was expressed by 39 respondents when discussing their positive feelings towards recycling.

Other positive drivers of recycling included being encouraged by children and other family members (i.e. using their 'pester power'); saving space in the general waste bin; the habit or 'norm' of recycling, for some, the ease of recycling, and cleanliness and hygiene (some saw the process of rinsing containers and separating food waste as 'more hygienic' than putting everything in the general waste bin). These positive factors were identified by a much smaller group of people.

Overall these findings suggest that people do not need to be convinced that recycling is a good thing or that it helps the environment. These factors are now clearly well understood. Rather, as we will see in the following pages, people need to be convinced that their individual recycling efforts do make a difference within the system, and this is where we recommend communications and messaging efforts be focussed.



"RECYCLING DOES MAKE ME FEEL HAPPY WITH MYSELF. I FEEL LIKE I'M CONTRIBUTING TOWARDS SOME PORTION OF CLIMATE CONTROL AND HELPING THE PLANET, EVEN IF IT'S ONLY A TINY PART." (SAM, GREAT YARMOUTH)

"I LIKE TO RECYCLE BECAUSE I FEEL I AM DOING MY BIT TO TRY AND SAVE OUR PLANET, I FEEL GOOD THINKING THAT ALL THE PLASTIC IN PARTICULAR THAT I RECYCLE WILL NOT END UP HOPEFULLY IN OUR OCEANS AND KILL MARINE LIFE..." (JACKIE, MILTON KEYNES)

"THE FACT THAT YOU RECYCLE MEANS YOU ARE DEFINITELY DOING YOUR BIT BY HELPING THE ENVIRONMENT AND THE WORLD WE LIVE IN, YOU CANNOT HIDE FROM THE FACT THAT CLIMATE CHANGE IS HAPPENING SO KNOWING YOU CAN START TO HELP FROM RECYCLING AT HOME." (MARIA, BRAINTREE)



INFORMATION & KNOWLEDGE



PEOPLE ARE NOT SEEKING OUT THE INFORMATION THEY NEED

People are basing their decisions on assumptions

Most participants said that they do not seek out information about recycling. Instead they are basing their decisions on assumptions and their own 'rules of thumb'. People were often making what they perceive to be logical decisions within what could be viewed as an illogical recycling system.

Assumptions around what can and can't be recycled were most often based on material type. Participants said that if an item contained plastic, paper/card or glass (i.e. widely recycled materials) or 'just looked recyclable', then they would put it in their recycling bin or sack.

Many participants also assumed that if an item was recycled elsewhere, or had the

potential to be recycled, it could be recycled in their local kerbside system. This was most commonly related to differences in collection systems across different local authority areas - e.g. when moving to a different area and assuming that the local collection system is the same as the previous. However it also included participants being aware, even vaguely, of specialist recycling services and businesses and the materials they accept, and concluding therefore that these items could – and should – be recycled via kerbside collection. Example include textiles recycling banks and charity textiles recycling, and NappiCycle (a nappy recycling business).

Finally, there was a common assumption that the recycling process will 'sort it out'. This was particularly related to making decisions around emptying or cleaning out food and drink containers, and when dealing with uncertainty. The latter was very much linked to an 'if in doubt, put it in' policy (see following pages), with participants believing that if the item wasn't wanted it would be removed by 'the experts' during processing.



PEOPLE ARE NOT SEEKING OUT THE INFORMATION THEY NEED

People are relying on their own 'rules of thumb'

Contamination is driven by people relying on their own 'rules of thumb' to make decisions around the types and condition of items that can be recycled. This is linked to a general lack of understanding of how the recycling system operates and why certain items cannot be recycled (discussed in the following pages). This insight suggests that providing residents with a new clear and simple set of 'rules of thumb' could be effective in addressing this.

The most frequently reported rule was 'if in doubt, put it in', where if a person feels uncertain about an item, they choose to put it in the recycling instead of the general waste. The behaviour is linked to perceptions that when it comes to recycling, 'more is more'. Participants saw having multiple recycling sacks or a full recycling bin as evidence of how good they were at recycling. Participants also expressed a sense of 'hoping for the best' and that it was 'better to be safe than sorry'. In this sense, they believed that excluding the item was a lost opportunity for recycling, even if the item only had a '50% chance' of being recycled. There was relatively little understanding that certain items placed incorrectly in the recycling could not only undermine their own efforts, but also damage larger amounts of recycling (e.g. where entire loads are rejected).

Other 'rules of thumb' identified included:

- plastic thickness i.e. people felt that thicker plastic was more likely to be recyclable and/or was 'higher quality' for recycling. This becomes an issue when dealing with 'hard' plastics, which tend not to be recyclable via kerbside collection systems;
- the cleanliness of items for example, some participants only rinsed food containers when they felt they posed a hygiene risk (e.g. meat

trays), while others used their own 'cleanliness thresholds' to decide whether something should be emptied/washed before recycling or even put into the general waste instead. This latter 'rule' was not limited to food and drink containers, but included 'clean', 'wet' and 'dirty' nappies (see page 46); and

 the condition of items – particularly with textiles, whereby items considered unfit for charity shop donation were put in the recycling. The main issue here is that participants believed that textiles 'should' be recycled via their comingled sack or bin (further discussed on page 44), however we suggest that there is more general scope to help residents choose whether textile items are suitable for reuse or recycling.



"I'LL BE COMPLETELY HONEST. I'VE NEVER ASKED ABOUT RECYCLING. I JUST THOUGHT IT WAS A COMMON SENSE THING. I JUST THOUGHT IF IT LOOKS LIKE IT CAN BE RECYCLED THEN IT GOES IN THAT BIN." (XAVIER, GREAT YARMOUTH)

"I HAVEN'T ACTUALLY SOUGHT MUCH INFORMATION ABOUT RECYCLING. I'M NOT SURE WHY I HAVEN'T. I KNOW THAT THIS IS SOMETHING THAT I SHOULD ACTIVELY LOOK UP TO CLEAR UP ANY MISTAKES THAT I MIGHT BE MAKING AND I WOULD BE INTERESTED IN LOOKING IT UP IN THE FUTURE." (JESSIE, HARRINGEY) "I HAVE PUT CLOTHES IN [THE] RECYCLING BEFORE BECAUSE YOU SEE OUTSIDE YOUR SUPERMARKETS THEM BIG INDUSTRIAL CLOTHES RECYCLING BINS. NOW THIS CAN BE MISLEADING FOR PEOPLE BELIEVING CLOTHES CAN GO INTO YOUR NORMAL REFUSE RECYCLING BAGS AT HOME AS IT STATES RECYCLING." (NICOLE, MILTON KEYNES)

"I'VE FELT I'VE KNOWN WHAT I NEED TO KNOW, NOT BEEN LEFT WITH ANY REAL QUESTIONS, SO NEVER HAD REASON TO SEEK FURTHER INFORMATION." (CHRIS, DARLINGTON)



THE INFORMATION PEOPLE DO ENCOUNTER IS OFTEN UNRELIABLE OR INCOMPLETE

Packaging labels are a source of significant confusion

In instances where participants did seek out information, this was often from unreliable sources such as packaging labels (most commonly) or Google which often throws up incorrect advice on what to do with items because of the differences in local services.

As has been found in previous research² packaging labels were a major source of confusion for participants, and in many cases it was clear that these were being misinterpreted, leading to contamination (the Green Dot, Mobius Loop and plastic resin code labels were all implied). There appeared to be little awareness of guidance available online³, nor the differences between the symbols. Many participants said that if a packaging label

advised to 'check locally' or did not provide recycling guidance at all, they would tend to base their disposal decision on the item's material type or do whatever they did when last disposing of a similar item.

The new labelling system being developed by the On-Pack Recycling Label (OPRL) scheme seeks to address much of this confusion by moving towards a simple Recycle/Don't Recycle binary labelling approach⁴. The system will discontinue the 'Check locally' and 'Widely recycled' labels, and will instead label an item as recyclable, if it is collected at the kerbside by 75% of councils across the UK. This may have implications for councils that do not currently collect widely recycled items such as plastic pots, tubs and trays. Use of the OPRL is also currently voluntary, meaning the new labelling system will not necessary address confusion caused by absent or alternative recycling symbols used across the range of products and brands sold in the UK. The Government has announced its intention to introduce mandatory binary labelling for recycling as part of its Extended Producer Responsibility reforms (due for implementation from 2023), however it is not yet clear how this will apply to products manufactured overseas.

Overall, it is clear that the way that people use labels to inform their disposal behaviours needs to be addressed. We recommend working with people's instinct to look at packaging by providing specific instructions around how they should be interpreted and acted on.



² <u>https://resourcelondon.org/wp-</u> <u>content/uploads/2020/01/LWARB-Making-</u> <u>recycling-work-for-people-in-flats-full-</u> <u>report_200128-1.pdf</u>

³ See, for example, <u>https://www.recyclenow.com/recycling-</u> <u>knowledge/packaging-symbols-explained</u>.

⁴ These are described in their Evidence Base report, available at: <u>https://www.oprl.org.uk/our-latest-initiative/</u>



TWO LIKE PRODUCTS PURCHASED ON THE SAME DAY FROM THE SAME SUPERMARKET WITH CONFLICTING GUIDANCE ON RECYCLABILITY



SOME LABELS CAN BE EXTREMELY HARD TO READ



EXAMPLES OF LABELS LEADING PEOPLE TO THINK ITEMS ARE RECYCLABLE





"I HAVE NEVER ASKED FOR ANY INFORMATION. I ALWAYS READ THE PACKAGING TO SEE IF IT CAN BE RECYCLED." (JASON, BRAINTREE)

"I WAS INFLUENCED TO PUT TOOTHPASTE TUBES INTO MY RECYCLING BIN. THIS IS BECAUSE THEY ARE PLASTIC AND IT ACTUALLY SHOWS A RECYCLABLE LOGO ON THE BACK OF THE TUBE (AN ARROW WITHIN ANOTHER ARROW), AQUAFRESH BRAND. I WOULD GUESS THAT MANY OTHERS WOULD ALSO THINK THE SAME AS ME TOO." (AMY, LEICESTERSHIRE)

"ALL PLASTIC RECYCLING THAT HAD THE UNIVERSAL LOGO GETS WASHED THEN PUT STRAIGHT INTO THE GREEN RECYCLING BIN OUTSIDE." (WILL, DARLINGTON)

> "MY MAIN GRIPE WITH SOME ITEMS THAT ARE MARKED UP AS RECYCLABLE BUT ON INVESTIGATION ARE CLEARLY NOT." (KEVIN, LEICESTERSHIRE)



THE INFORMATION PEOPLE DO ENCOUNTER IS OFTEN UNRELIABLE OR INCOMPLETE

People are not fully utilising the council website as a source of information (nor directly engaging with council social media)

Only a relatively small number of participants cited the council website as a source of information. Feedback on the local council website was mixed, with many feeling that they were 'tricky to navigate', 'vague' or 'confusing', while some had felt that information provided was easy to find and met their needs.

Prompts for visiting the council website included:

- first moving to an area
- looking up a related service (for example, opening hours of the Reuse and Recycling Centre or locations of local recycling banks),

- seeking clarity on how to dispose of a specific item or material type and:
- in certain areas, ordering new recycling sacks.

It should be noted that in instances where residents do visit the council website, it is often for a specific purpose, meaning they are missing other useful information which could help to correct contamination behaviours. Examples include looking up guidance on how to dispose of more unusual items like wood and paint, rather than looking up or encountering information on items they regularly contaminated with, such as food waste; and using web searches to go directly to a specific page (e.g. to order recycling sacks) bypassing other pages containing information on recycling. It is therefore recommended that councils consider user journey-mapping to identify opportunities along these pathways for getting key messages across in a salient

and timely way and to encourage those residents who already think they are 'getting it right' to refresh their information.

Council social media pages were only mentioned by one participant in Darlington as a source of recycling information, indicating that residents do not tend to engage directly with these pages for this purpose. However participants indicated that social media is a good way to reach them indirectly, for example via local neighbourhood and community groups, and special interest accounts, such as parents groups.



THE COMMUNICATIONS THAT DO REACH PEOPLE ARE PROACTIVE AND DISRUPTIVE

Participants in the research were generally habitual in their recycling behaviours and as indicated in previous pages, in many cases had not updated their recycling knowledge for some years. As might be expected, then, communications that had reached participants effectively tended to be those that were somewhat disruptive and/or met them where they were (rather than requiring the resident to take action i.e. to look up information on the council website).

Examples include:

• Rejected bins and feedback tags/stickers (these are further discussed on page 39)

- Leaflets delivered with recycling sacks
- Information printed on recycling sacks
- New bins/containers (and leaflets delivered with these)
- Changes to collection dates (bin tags, leaflets and even social media posts shared by others)
- Leaflets in post
- Annual collection calendars
- Social media posts shared by noncouncil connections (especially local neighbourhood/community groups)

Participants felt that there was scope for better utilising these channels by providing more detailed or clearer information about how they should dispose of different items.



"THE MAIN INFLUENCE I HAVE FOUND TO DETERMINE WHAT GOES WHERE IS A FOUR PAGE COLLECTION CALENDAR/SUPPORT CARD LEAFLET PROVIDED BY BRAINTREE DISTRICT COUNCIL. THIS IS USUALLY PUT THROUGH OUR DOOR EVERY YEAR AND CLEARLY SETS OUT WHAT GOES WHERE. I AM NOW MAKING A POINT OF KEEPING THIS CLOSE TO HAND ON THE KITCHEN WALL." (MARTIN, BRAINTREE)

"I DON'T SEEK INFORMATION BECAUSE I FEEL I KNOW WHAT GOES IN THE RECYCLING .THE SACKS GET DELIVERED AND THERE IS A LEAFLET IN THEM TELLING YOU WHAT TO PUT IN THEM . IF I'M UNSURE I WILL REFER BACK TO THE LEAFLET." (BEVERLEY, MILTON KEYNES)

"THE ONLY LEAFLETS/CORRESPONDENCE FROM THE LOCAL COUNCIL IS THE LEAFLETS/STICKERS THE BIN MEN LEAVE ON THE WHEELIE BIN" (ROMY, LUTON)



THERE IS A SIGNIFICANT AMOUNT OF UNCERTAINTY AND CONFUSION ABOUT RECYCLING

Almost all participants, including our most confident recyclers, said that they were uncertain about an aspect of recycling. This was generally attributed to confusing and conflicting messages across a range of sources, including the media, alongside imprecise information from councils, differing collection systems across boroughs and perceived changes to advice around what was accepted on the kerbside by the council.

The tables on page 25 show the items and materials that caused participants the most confusion, in order of most to least reported. The table on the left shows responses when participants were asked if there was anything they felt uncertain about when it comes to recycling. Responses overwhelmingly related to plastics and how different types should be treated.

Approximately halfway through the three day discussion board, participants were presented with a list of the types of items their group was contaminating with and asked whether there were any surprises in the list. The results are shown in the table on the right. The fact that these items caused surprise indicates that participants

previously had little inclination that they should not be placed in the recycling. This is particularly true of the items not included in the 'uncertain' list, indicating that participants were generally confident that they could be recycled. We strongly recommend that communications and other interventions aimed at tackling these issues try to focus on one contaminant type or theme at a time, rather than try to address everything at once, in order to reach people more effectively. To this end, councils could consider which of the issues have the greatest impact for them (e.g. in terms of rejected loads and cost) to help with prioritising and focusing their efforts. Some items listed may be relatively low impact as recycling contaminants and thus lower priority for behavioural interventions.



THERE IS A SIGNIFICANT AMOUNT OF UNCERTAINTY AND CONFUSION ABOUT RECYCLING

Items/issues participants were uncertain about
Plastics (generally), plastic film/wraps, plastic trays (punnets, deli meats
etc.), black/blue/brown plastics
Polystyrene
Crisp and confectionery packaging
Lids, labels
Bubble wrap
Plastic carrier bags
Nappies
Poly bags (clothing, postage etc.)
Hard plastics
Cartons
Textiles
DVDs, CDs, tapes
Foil
Broken china
Aluminium trays (used)
Take-away boxes
Envelopes with windows
General household items
Mixed packaging
Glass

Items people were surprised about
Pizza boxes
Cartons
Unrinsed food containers
Plastic film, wrapping, cling film
Drinking glass
Toothpaste tubes
Kitchen roll
Textiles
Nappies
Tissues
Plastic bags
Metal pots and pans
Bubble wrap
Hard plastics, toys
Picture frame with glass
Plastic lids from tray and pots
Cotton wool



THERE IS A SIGNIFICANT AMOUNT OF UNCERTAINTY AND CONFUSION ABOUT RECYCLING

Recycling 'rules' and guidelines that cause confusion included:

- Whether mixed packaging components need to be separated; whether lid should be removed; how lids should be disposed of; whether plastic sleeve labels should be removed from bottles
- Whether containers should be washed
- 'Scrunch' tests (particularly for plastics)
- Size of items that will be accepted (e.g. does foil need to be at least the 'size of a fist'; can items such as plastic lids be too small).

A key insight was that it was not so much the instructions themselves that caused confusion and frustration, but not understanding the rationale behind it. Often the 'why' behind certain rules or requirements are not explained in communications - largely to keep them short and simple. However this appears to be having the unintended effect of making people less capable of making the appropriate decisions when it comes to items or circumstances that aren't specifically addressed in communications. In this sense, people are asked to remember differences in how to dispose of a long list of seemingly similar items, and then expected to make the right decision when it comes to items

not specifically addressed in communications.

There was a clear appetite amongst participants for understanding more about the 'why' of recycling practices and requirements, and many suggested solutions based on this during the codesign session we conducted with them. We suggest that providing residents with a rationale for doing things a certain way will help residents to make better decisions about how items should be disposed of by providing with them with a new logic.



"[I] AM MOST SURPRISED THAT DRINKING GLASS CAN NOT BE RECYCLED... GLASS IS GLASS, I WOULD NOT THINK THERE WAS ANY DIFFERENCE BETWEEN A DRINKING GLASS AND A BOTTLE. THE SAUCEPAN WAS THE FACT THAT IT WAS A METAL OBJECT AND THAT IT WOULD BE BETTER RECYCLED THEN GOING INTO LANDFILL." (TRISH, DARLINGTON)

"I WAS UNDER THE IMPRESSION THAT ALL PLASTIC / GLASS COULD BE RECYCLED, SO JUST CARRIED ON, AND I GUESS ONCE YOU ARE USED TO THE SCHEME, YOU KIND OF GO ON AUTOPILOT AND MAKE ASSUMPTIONS BASED ON OTHER TYPES OF RECYCLING GOING INTO THE BAGS." (CHRIS, SOUTHEND-ON-SEA)

"I WAS QUITE SURPRISED THAT SOME OF THE ITEMS DON'T BELONG IN THE RECYCLING BIN. FOR INSTANCE PIZZA BOXES AS WE PUT THEM IN THERE BUT NOW WE KNOW WE SHOULDN'T THIS WILL STOP. I AM ALWAYS UNSURE IF TO PUT NAPPIES IN THE RECYCLING BIN." (JORD, GREAT YARMOUTH)



MOTIVATIONS



CONTAMINATION BEHAVIOUR IS OFTEN DRIVEN BY FEELINGS OF GUILT ABOUT WASTE

A surprising finding in this research was that contamination behaviours are often driven by feelings of guilt about waste.

As previously identified, participants said that when they are in doubt about whether an item is recyclable, they tend to put it in their recycling rather than their general waste (twice as many participants said they do this compared to those opt for the general waste when uncertain). This was strongly linked to feelings of guilt about waste. Participants expressed a desire of wanting to find *any* alternative to landfill and this often led to them putting contaminants in their recycling in the hope that would be recycled.

This provides a positive starting point for efforts to reduce contamination. Many councils already use messaging to highlight to residents that these behaviours may put their recycling efforts and that of others at risk. To improve the effectiveness of these messages, we suggest that communications recognise and acknowledge residents for trying to do 'the right thing', alongside providing information to correct their misperceptions that the process is managing these contaminants (i.e. by explaining what happens to them and their impacts within the system). "THERE'S ALSO A LOT OF PRESSURE...TO DO YOUR BIT FOR THE PLANET AND SO WE'RE ALL ENCOURAGED TO RECYCLE AS MUCH AS POSSIBLE AND SO WE WOULD RATHER OUT SOMETHING THAT 'MIGHT' BE RECYCLABLE IN THE GREEN BIN RATHERTHAN THE BLACK ONE." (SAM, GREAT YARMOUTH)

"I HATE WASTE, ALWAYS HAVE, SO IF ANYTHING CAN BE RECYCLED I WILL." (EVE, LEICESTERSHIRE)

"THE THOUGHT OF SOMETHING DECENT GOING IN THE LANDFILL IS CRIMINAL!" (SARAH, NORTHUMBERLAND)

"BUT ITEMS SUCH AS TISSUES, KITCHEN ROLL, OLD CARRIER BAGS, PIZZA BOXES ETC, AS FAR AS I'M CONCERNED THEY ARE PAPER, PLASTIC OR CARDBOARD AND I WOULDN'T DREAM OF NOT RECYCLING THEM." (PENNY, SOUTHEND-ON-SEA)



PEOPLE DO NOT UNDERSTAND THAT THEIR INDIVIDUAL BEHAVIOURS HAVE IMPACTS

Linked to the previous insight, the research found that there is a general lack of understanding around what happens to waste collected from the kerbside and of the broader recycling system in general. This contributes to contamination behaviours in a number of ways:

- People do not understand the need to empty or wash food and drink containers, and as such they do not put time and effort into this
- People believe that Materials Recovery Facilities (note participants didn't generally use or know this term but use terms such as recycling 'facility', 'factory', 'plant' or 'system') are capable of breaking items down into their component parts so that the individual material types can be recycled (e.g. this was a perception related to nappies contamination)
- Not understanding why textiles cause issues when placed in co-mingled kerbside collections – i.e. participants

did not understand that textiles need to be recycled separately and did not understand the issues these items can cause during the processing of co-mingled recycling

 Not understanding that the importance of quality recycling over quantity, and that outputs from recycling processes are only as good as what goes in.

Again we suggest that telling people 'why' will help them to build an understanding of how their individual behaviours and efforts have an impact with the recycling system. Many councils already use videos and tours to demonstrate how MRFs operate. Positively, these initiatives were suggested by many participants as something they would find helpful. The effectiveness of these types of initiatives will depend on a range of factors, including how they are promoted and accessed. Additionally, MRFs tours are not practical in some areas. Therefore councils should therefore consider the range of options available to them to help address the underlying reasons for participants wanting these initiatives – i.e. to more fully understand the recycling process and their role in it.

One approach that we highly recommend is using stories from real people to communicate messages. For example, Jane from the MRF sharing stories of how she has been personally impacted by food waste or nappies in the recycling, or positive things that people do that she appreciates, such as rinsing containers out. Behavioural insights research has shown that our response to messages is greatly influenced by the messenger (the messenger effect). We are more receptive to 'humanising' messages that come from people rather than institutions, and we tend to empathise with and remember 'stories'.



Making minor tweaks to messages will also help to build a more effective narrative around the rationale for certain recycling requirements. We recommend introducing a policy of always qualifying recycling instructions with a 'why'. For example, this could be as simple as 'always empty and rinse your food containers, because otherwise they can spoil the paper and card in the recycling truck' – anything that give people a reason to put a little bit of extra time and effort into doing the right thing.



"MY HUSBAND IS UNDER THE IMPRESSION IT ALL GETS WASHED BY MACHINE, SO IT DOESN'T NEED TO BE CLEANED BY US." (PETRA, MILTON KEYNES)

"I REALLY DO NOT BELIEVE THERE ARE ANY CONSEQUENCES OF UNWASHED KETCHUP BOTTLES - ALL GLASS IS WASHED AS PART OF THE RECYCLING PROCESS! EXCEPT THE POSSIBILITY OF CONTAMINATING NON-WASHABLE PAPER AND CARD IF THE COLLECTION SYSTEM INVOLVES CRUSHING." (EVE, LEICESTERSHIRE)

"I WOULD COMMUNICATE THE NEGATIVE EFFECTS OF PUTTING NAPPIES INTO THE RECYCLING AND IF PEOPLE COULD SEE THE PROCESS OF WHAT HAPPENS TO THEM IN THE CHAIN THEY WOULD BE LESS LIKELY TO INCLUDE THEM." (CAZ, HARINGEY)



CYNICISM ABOUT 'THE SYSTEM' DOES NOT APPEAR TO HAVE A MAJOR IMPACT ON BEHAVIOUR

There was some cynicism about whether recyclables are indeed recycled, making some participants question whether their efforts are worthwhile. This was most often linked to media stories⁵ and people seeing their recyclable waste being put in the same collection truck as their general waste (not understanding split back vehicles). For the most part, this did not appear to impact on behaviours – most continued to recycle anyway due to the positive drivers previously mentioned. Cynicism should therefore not be treated as a barrier to recycling or as a driver of negative recycling behaviours in itself. Rather, it is sometimes used as an excuse to rationalise undesirable behaviours or cited as a cause for concern. It is therefore worthwhile taking some steps to address perceptions around this.

One simple approach to addressing perceptions around bin collections is to use dynamic truck signage (e.g. magnetic truck livery or digital signage) to reflect what is being collected on that specific round (for example, in instances where the refuse truck is used to collect recyclable waste).

Beyond this, we strongly recommend providing feedback to the community on their recycling performance as a way to build trust in the system and bring it 'closer to home' for people.



⁵ For example, a recent BBC story investigated UK recycling found dumped on roadsides in Turkey: 'Why is UK recycling being dumped by

"I DO ACTIVELY TRY AND RECYCLE AS MUCH AS POSSIBLE, ALTHOUGH EVERY NOW AND THEN I OBSERVE THE COLLECTORS PUTTING MY RECYCLING BAGS IN WITH THE GENERAL WASTE. AT THAT POINT I THINK TO HELL WITH IT AND I STOP RECYCLING. THIS LASTS A COUPLE OF DAYS, THEN GUILT KICKS IN AND I START RECYCLING." (MARIA, MILTON KEYNES)

"I ALSO HEARD THAT SOME RECYCLING RUBBISH IS TAKEN OVERSEAS AND JUST BURNED, HOW TRUE THAT IS I DON'T KNOW, BUT I REALLY HOPE NOT, THAT WOULD BE SO DAMAGING TO OUR EARTH." (SARAH, NORTHUMBERLAND)



BIN SPACE IS DRIVING CONTAMINATION IN SOME HOUSEHOLDS

Bin space was reported by some participants as a driver of their contamination behaviours, particularly those with children (and especially those in nappies). This is a contamination issue in areas that use recycling bins rather than sacks, as it leads to households using the recycling bin as a second general waste bin.

Participants who reported this issue knew what they were doing was 'wrong', but tended to see recycling and waste management as low priority compared to other life priorities. A lack of bin space was often attributed to reduced collection frequencies and smaller bins, and a small number of participants felt that this was compounded by reduced access to recycling banks (i.e. due to local banks being removed).

Households that experience these issues are likely not separating all of their recyclable waste from their general waste and/or are producing excess waste. We suggest that councils identify the relevant households and use targeted interventions to tackle both of these issues simultaneously, starting with simple changes to behaviour that could be considered 'low hanging fruit'. For example, in some areas, there are services in which not all residents are participating, such as food waste recycling, which if used would help with reducing the pressure on the general waste bin.



"I THINK A LOT OF IT IS DOWN TO SPACE. NAPPIES TAKE UP A LOT OF ROOM IN YOUR GREY BIN, THE ONLY TIME I HAVE EVER PUT [A] CLEAN NAPPY IN THE RECYCLING IS WHEN I HAVE RUN OUT OF SPACE IN MY GREY BIN." (LAUREN, BRAINTREE)

"ONLY WHEN MY BIN IS REALLY FULL AND I CAN NO LONGER FIT ANYTHING ELSE IN. I KNOW IT'S INCORRECT TO DO THIS BUT I FEEL WHAT ELSE AM I SUPPOSED TO DO WITH RUBBISH, I HAVE NO WHERE ELSE TO PUT THIS. SO I PUT IT INTO THE OTHER BIN." (AMANDA, NORTHUMBERLAND)

"...WE AS A FAMILY OF FOUR DO STRUGGLE SOME WEEKS AND HAVE TO REQUEST EXTRA BAGS TO GO OUT WITH OUR BIN SO THAT THE BIN MEN TAKE EXTRA LOADS FOR US" (AMY, LEICESTERSHIRE)



SPECIFIC ROUTINES (OR LACK OF) ARE GENERALLY NOT AN ISSUE

The vast majority of participants had a system in place for separating their recyclables from general waste inside their homes (only a small number of participants separated their waste from internal bins once outside). Participants' in-home waste separation systems were generally kitchen-based rather than in different rooms throughout the household, and ranged from using splitbin systems to separate waste through to more informal arrangements, such as storing recyclables on a window ledge until it was taken out. Overall, different systems and routines (or lack thereof) did not appear to have an influence on recycling contamination behaviours. We suggest therefore that rather than focus efforts on trying to get people to use a specific routine to help with recycling, efforts should instead focus on address underlying behavioural drivers, and people will find a system that works for them.



FEEDBACK LOOPS ARE ESSENTIAL

Feedback loops include direct feedback to households on specific behaviours (e.g. bin/sack rejection, stickers on bins, leaflets etc.) as well as general feedback on recycling performance and issues.

Many participants had received a form of direct feedback and this had caused them to change behaviour. Additionally, other participants were aware that neighbours had had their bin/sack stickered or rejected or were generally aware that their council used these types of measures.

There is some evidence to suggest that providing specific feedback on the contaminant type found is more effective than providing general feedback that lists common contaminants but does not identify what the resident has done.

However in some instances, participants said that they believed a certain contamination behaviour was OK because they had never received a sticker or had their bin rejected to let them know otherwise. Therefore we need to be mindful as to how feedback loops are applied and of any unintended consequences which could arise from using feedback loops inconsistently or without wider effective communications.

There was a clear desire amongst participants to hear feedback from their council about their area's recycling performance, and what was being done well and not-so-well by residents. This links with the importance of giving people a 'why' not just to discourage certain behaviours but to encourage others. Previous research suggests that continually updating residents on momentum towards achieving a goal may also be an effective feedback mechanism.

We suggest that local authorities should consider our recommendations with regards to reaching residents via proactive and direct communications, rather than relying purely on council web and social media pages for this.



"I HAD A STICKER WHEN I FIRST MOVED HERE TELLING ME THAT MY BIN WOULDN'T BE REMOVED AS IT HAD GLASS BOTTLES IN IT. THANKFULLY WE CAN NOW PUT BOTTLES IN OUR RECYCLING BINS." (SAM, GREAT YARMOUTH)

"IF I AM UNSURE WHETHER SOMETHING IS RECYCLABLE THEN I DO NOT PUT IT OUT FOR RECYCLE (SIC). I HAVE HEARD YOUR BAG WILL NOT BE TAKEN IF YOU DO, SO I TAKE NO RISK." (FOX, BRAINTREE)

"THERE WILL OCCASIONALLY BE LEAFLETS EITHER POSTED OR ON THE BIN TO TELL YOU WHAT IS ACCEPTABLE TO PUT INSIDE THE RECYCLING BINS. ALSO I HAVE ACTUALLY SEEN THE BINMEN LOOKING IN RECYCLING BINS AND REFUSING TO TAKE THEM [I'M] ASSUMING THESE BINS A FULL OF GENERAL WASTE OR HAVE STUFF INSIDE THAT SHOULDN'T BE. THAT'S ENOUGH TO DISCOURAGE ME FROM PUTTING ANYTHING THAT I SHOULDN'T OBVIOUSLY IN THERE." (LOU, HARINGEY)



SPECIFIC CONTAMINANTS



FOOD AND DRINKS WASTE

There were a number of key drivers identified leading to people putting food waste into the recycling.

Linked to the finding that there is a general lack of understanding of the waste system, many people believed that items would be washed centrally as part of the recycling process. Participants were not necessarily thinking about the consequences of putting food waste into the recycling - such as spoiling other materials or indeed creating an unpleasant problem for individuals working to process the recycling. There were also feelings that using water and energy and their own money to wash items was 'a waste'.

Again, people did not understand the impacts of their individual behaviours and there was a perception that small amounts of any food 'wouldn't hurt'. Interestingly, there was also a perception that small amounts of dry food, such as pizza crusts, was 'okay'. Unsurprisingly the time and effort required, in addition to the 'ick factor' and messiness of cleaning out containers and packaging was driving people to put items into their recycling unwashed. There were also circumstances such as cleaning out the car, where the convenience of 'sweeping' everything into the recycling, including things like half empty drinks bottles, was leading to contamination.



"THERE HAS BEEN SOME TIMES IF I'M HONEST WHERE I'VE HAD A TAKEAWAY THERE WOULD BE SOME FOOD LEFT IN THE BOX AND I'D JUST PUT IT IN THE SACK. THIS IS BECAUSE OF THE EASY IT IS TO DISPOSE OFF." (IMRAN, MILTON KEYNES)

"MY KIDS HAD A PIZZA THAT CAME IN A PIZZA BOX, MOST OF IT WAS FINISHED JUST A FEW CRUSTS LEFT AT THE BOTTOM SO THAT WENT INTO THE RECYCLING BIN. IT'S NOT WET FOOD AND WON'T CONTAMINATE ANY PAPER PACKAGING." (LOU, HARINGEY)

"I THINK I ANSWERED ABOUT THE FOOD PACKAGING WITH FOOD INSIDE IT, SO SAUCE BOTTLES. YOGURT POTS ETC. THE REASON I DON'T WASH THESE OUT IS BECAUSE I ASSUME THERE IS A PROCESS - THAT ALL RECYCLING GETS WASHED OUT BEFORE BEING REUSED, BUT MAYBE THAT ISN'T CORRECT." (DAN, SOUTHEND-ON-SEA)



TEXTILES

As discussed previously, one of the key drivers leading to people putting textiles into their kerbside recycling is a belief that they are recyclable, often linked to knowing that they can be recycled elsewhere (e.g. via textiles banks). People expressed concern about the environmental impacts of textiles (referencing fast fashion and landfill) and a desire to avoid wasting these items, further driving their desire to recycle these rather than dispose of them in other ways.

There was a belief that textiles that were not deemed in good enough condition for the charity shop should be recycled through the kerbside waste system. People felt that they should not 'burden' charity shops with unwanted / unsellable items.

There was also a lack of understanding as to why textiles can't be accepted alongside other recyclables and people were not aware of the impacts that could occur during processing.

Access was also an issue, with people frustrated or confused about what to do with textiles items where either they didn't know about, or have close access to, textiles banks and/or these were full or poorly maintained.

A lack of feedback to residents, including continual collection without rejection also led some people to believe that their behaviour was correct.

In areas with a kerbside textiles collection service, there was some confusion as to whether these should be items in 'good enough' condition for reuse, or items that are for recycling only (i.e. they cannot be reused due to damage).



"I DON'T SEE WHY THEY CAN'T DO A CLOTHES RECYCLING AT THE SAME TIME AS NORMAL RECYCLING, I ONLY TEND TO THROW CLOTHES, SHOES ETC IN RECYCLING IF THEY ARE TATTY AND NOT NECESSARILY GOOD ENOUGH FOR CHARITY, WE DO HAVE BAGS PUT THROUGH OUR DOOR THAT YOU CAN USE AND PUT OUT FOR COLLECTION, BUT THE COLLECTIONS ARE NOT REGULAR AND I END UP HAVING TO FIND SOMEWHERE TO STORE THE BAGS" (LIZZIE, BRAINTREE)

"I HAVE PLACED TEXTILES IN THE RECYCLE BIN AS YOU ARE NOT ALLOWED TO OUT THE LIKES OF DUVETS OR PILLOWS IN THE TEXTILE BAGS THAT ARE GIVEN OUT. SO WHERE ARE YOU EXPECTED TO PUT THEM. AS I WANT TO DO MY BIT FOR THE ENVIRONMENT AND RECYCLE. I HAVE PLACED THESE ITEMS IN THE PINK SACKS THAT ARE KNOW AS RECYCLING BAGS." (SAM, SOUTHEND-ON-SEA) "I HAVE PUT OLD BAGS OR BEDDING AND SHOES IN GREEN BIN BEFORE THINKING IT COULD BE RECYCLED DUE TO THE MATERIAL." (JASMINE, GREAT YARMOUTH)

"IT WAS THROUGH CONFUSION. I HAD HEARD THAT ITEMS THAT WERE UNSUITABLE FOR CHARITY SHOPS COULD STILL BE USED AND 'RECYCLED' INTO NEW ITEMS. I DIDN'T KNOW THAT THIS WAS A SEPARATE SERVICE. I NOW KNOW THEY ARE NOT PART OF THE COUNCIL COLLECTION." (KATIE, LEICESTERSHIRE)

"NOTHING IN PARTICULAR INFLUENCED ME, IT WAS JUST A LACK OF UNDERSTANDING OF WHAT TO DO WITH TEXTILES WHEN TEXTILE BINS WERE FULL THAT THE NEXT BEST THING WAS TO RECYCLE THEM." (ASMA, HARINGEY)



NAPPIES

One of the most interesting findings from this research is that there is genuine confusion about whether or not nappies are recyclable. Furthermore, this is not, as previously thought, being driven by nappy package labelling. Rather, people are making assumptions about nappy recyclability based on nappy material type (i.e. thinking they are made of paper or plastic which are thought of as recyclable) and/or because they had heard of nappy recycling services elsewhere (E.g. Nappicycle).

Furthermore, there was a perception that clean or wet nappies were acceptable or 'okay' to recycle. Previous messaging on this issue has asked people not to recycle 'used' or 'soiled' nappies, but it is clear that these terms can be confusing and/or open to interpretation, for example, whether a wet nappy is considered 'soiled'.

As with other contaminants, another driver was a strong desire to avoid waste and the impacts of nappies in landfill. We suggest that it important to help people to understand that putting nappies into recycling is in fact inadvertently undermining their wider environmental efforts.

There were some participants for whom a lack of bin space and a desire to get rid of dirty nappies quickly was driving them to put nappies into the recycling bin.

People who were contaminating their recycling with nappies, regardless of driver, included parents, grandparents and other relatives and there were social influences at play. It may be helpful to consider community based social marketing approaches to reach people who use nappies with messages to address confusion. We also suggest that there will be other users of nappies, such as childminders who should also be considered in the development of interventions to target these behaviours.



"I HAVE ONLY EVER PUT CLEAN NAPPIES IN MY RECYCLING AND THIS IS VERY RARE THIS HAPPENS. I THINK THAT CLEAN NAPPIES ARE MATERIAL AND MATERIAL CAN BE RECYCLED OR NAPPIES SHOULD BE MADE IN A MATERIAL THAT CAN BE RECYCLED. I DO THINK THAT WET NAPPIES SHOULD BE ABLE TO BE RECYCLED, I COMPLETELY UNDERSTAND THAT DIRTY NAPPIES CANNOT BE BUT THERE ARE BILLIONS OF NAPPIES EVERY YEAR PUT IN TO LANDFILLS AND THEY TAKE YEARS TO DECOMPOSE." (LAUREN, BRAINTREE)

"I LOOK AFTER MY GRANDDAUGHTER ONCE A WEEK AND WHEN I CHANGE HER NAPPY AND [IF] IT IS CLEAN I PUT IT IN THE RECYCLING BIN. I THOUGHT CLEAN NAPPIES COULD BE RECYCLED." (MO, HARINGEY) "I PUT MY NAPPIES INTO THE RECYCLING BIN AS THEY APPEAR TO BE MADE FROM PAPER, PLASTIC AND MATERIAL ALL OF WHICH I FEEL ARE RECYCLABLE. IF SOILED I DO REMOVE THE WASTE FOR HYGIENE PURPOSES. I HAVE NO IDEA WHY THEY SHOULDN'T BE PLACED IN THE BIN AS THEY ARE MADE FROM RECYCLABLE MATERIALS" (TROY, GREAT YARMOUTH)

"I WOULD ONLY PUT CLEAN NAPPIES IN THE RECYCLING IF MY BABY HAS GROWN OUT OF THAT SIZE AND I DO NOT NEED THEM ANYMORE. I ASSUMED IF UNUSED THESE WOULD BE RECYCLABLE." (KRYSTAL, BRAINTREE)

"I DID ACTUALLY THINK NAPPIES COULD BE RECYCLED AS SO CAN TOILET PAPER" (SAMANTHA, LEICESTERSHIRE)



WRONG CONTAINER

This group explored the issue of residents putting certain types of recyclable waste into the co-mingled bin or sack rather than a separate container provided by the council or a carrier bag provided by the resident. The areas and issues included in this group were:

- Leicestershire (Blaby, Hinckley & Bosworth and Melton only): People who put textiles into the co-mingled recycled rather than in the sack provided by the council (Hinckley & Bosworth, Melton) or by the charity partner MIND (Blaby).
- Luton: People who put glass in the co-mingled recycling instead of the black box provided by the council.

- Southend-on-Sea: People who put textiles and small electrical items (WEEE) in the co-mingled recycling. Textiles should go in the clear sack provided by the council, while WEEE should go in a separate plastic shopping bag provided by the resident.
- Milton Keynes: People who put glass jars and bottles in co-mingled instead of the blue box provided by the council.

Key drivers to people putting items in the wrong container included a general lack of awareness that the item should be placed in a separate container for collection / not knowing how to dispose of the item.

Some people reported running out of space in the separate container provided - this was generally an issue for glass boxes. Furthermore when boxes were lost or damaged, this became a barrier to use.

Overall, people felt that 'recycling is recycling' and struggled to understand why different item types could not be mixed with co-mingled recycling. This again links to the finding that people do not understand the system nor how their individual behaviours can have an impact on it.



"I PUT ELECTRICAL ITEMS, CLOTHING, TEXTILES, GLASS JAR ETC, PAPER IN MY RECYCLING BECAUSE I KNOW THESE ARE RECYCLABLE BUT I'M NOT SURE WHERE ELSE TO DISPOSE OF THEM. I KNOW THEY SHOULDN'T GO IN THE NORMAL BIN SO I SEE IT AS THE NEXT BEST THING." (KITTY, SOUTHEND-ON-SEA)

"MY INITIAL IMPRESSION IS THAT WE PUT GLASS IN THE RECYCLE BIN DUE TO LACK OF SPACE IN THE BOTTLE BOX...WE HOPE THAT IT WILL FIND ITS WAY TO THE RIGHT PLACE VIA THE RECYCLING BIN. THE INFLUENCES ARE JUST THOSE, WE DO NOT HAVE ENOUGH SPACE ELSEWHERE. WE DO NOT DRIVE SO IT WOULD BE IMPRACTICAL TO GO TO A BOTTLE BANK AND WE HOPE THE BOTTLES WILL STILL BE CHANNELED TO THE RIGHT PLACE. TO BE HONEST, I WOULD RATHER THE MAIN RECYCLE BIN JUST TOOK GLASS ALONG WITH OTHER MATERIALS. IT SEEMS ODD TO SEPARATE THE TWO FUNCTIONS." (FRED, LUTON)



NON-TARGET MATERIALS

This group explored the issue of residents putting glass bottles/jars and/or plastic pots/tubs/trays in their co-mingled recycling in areas where these are not collected at the kerbside. Local recycling banks are usually provided for glass in these areas, and sometimes for plastic pots, tubs and trays. Both waste types can usually also be taken to the local Reuse and Recycling Centre.

The areas and issues included in this group were:

- Braintree: Glass is not collected, but plastic pots/tubs/trays are collected at the kerbside. Recycling banks are available for glass.
- Luton: Plastic pots/tubs/ trays are not collected at the kerbside. Glass is

collected at the kerbside in a separate box.

 Northumberland: Neither plastic pot/tubs/trays nor glass are collected at the kerbside. Recycling banks are available for glass.

The key drivers of this behaviour were largely the same as those identified for other more general contamination behaviours and included:

- A lack of awareness that the item cannot be recycled locally. As might be expected, this was often linked by participants to differences in recycling systems across different boroughs.
- Not looking up information on local recycling – participants generally

made the assumption that the items could be recycled on the kerbside based on the material type and the fact that the items are widely accepted on the kerbside elsewhere.

- A lack of understanding as to *why* these items cannot be recycled via the local kerbside collection.
- Confusion around the differences between plastic bottles, which are collected in the areas at the kerbside, and plastic pots, tubs and trays.
- Limited access to recycling banks / unwillingness to use recycling banks.



"AM CONFUSED ABOUT GLASS. WHY CAN'T IT GO IN OUR RECYCLING BAG? IT'S A RECYCLED ITEM SO WHY CAN'T WE PUT THEM INTO A BAG?" (AGI, BRAINTREE)

"WHAT I PUT IN THE DIFFERENT BINS IS WHAT I HAVE READ ABOUT AND WHAT I BELIEVE IS RECYCLABLE. THIS IS ALSO FROM WHAT WE SEE ON THE TV AND IN NEWSPAPERS WHICH ENCOURAGE US TO RECYCLE. IF THERE WAS MORE ADVERTISING/ MEDIA UPDATES ON WHAT ADDITIONAL ITEMS COULD BE RECYCLED THEN THAT WOULD ALSO HELP." (STEVE, LUTON)

"I LIVE IN NORTHUMBERLAND. I KNEW THAT GLASS SHOULDN'T BE PLACED IN RECYCLING, BUT NOT PLASTIC POTS AND TUBS. IT IS CONFUSING THAT PLASTIC BOTTLES ARE ACCEPTABLE BUT THAT CLEAN PLASTIC TUBS ARE NOT. THERE IS A BOTTLE BANK A SHORT DRIVE AWAY AS AN ALTERNATIVE FOR RECYCLING." (SHAUN, NORTHUMBERLAND)



RECOMMENDATIONS & POTENTIAL SOLUTIONS



RECOMMENDATIONS

This research has identified a number of key insights which can be used to inform policy and practice to reduce recycling contamination. Keep Britain Tidy makes the following recommendations:

- 1. People know that recycling is a good thing therefore, rather than trying to convince people of this, focus messaging on how their individual actions make a difference within the context of the 'recycling system'.
- 2. Use feedback loops to reinforce positive behaviours and tackle negative behaviours.
- 3. Use personalisation and stories to tell and show people why certain behaviours matter.
- 4. Give people a new set of 'rules of thumb' to address confusion, perceptions that 'more is more', reliance on packaging labels, etc. and which help to build capacity to recycle correctly i.e. through encouraging people to update their knowledge more frequently.
- 5. Assume that residents don't currently visit council web or social media pages use targeted and direct communications and engagement to meet people where they are, however create longer term objectives to drive traffic to council websites.
- 6. Design communications for salience to help them stand out and encourage people to update their recycling knowledge.
- 7. Use 'compassionate' communications acknowledge that recycling is confusing and then help people to get it right.
- 8. Optimise webpages for search engines such as Google (e.g. using specific terms and layout approaches) there are a number of guidelines and services available online for this.
- 9. Continue to address cynicism about recycling processes to ensure this can't be used as an excuse e.g. via signage on trucks and community-level feedback.
- 10. Use creative ways to engage people (quizzes, ask people for their ideas, conduct surveys).
- 11. Use targeted interventions to tackle problematic behaviours.



SOLUTIONS SUGGESTED BY PARTICIPANTS

As part of the research, we talked to participants about what solutions they thought would be useful in changing behaviours and reducing recycling contamination. Through this a significant number of ideas were generated. These included:

- Better communications
 - More targeted and direct communications (postal, targeted social media advertising, stickers on bins, outdoor advertising)
 - Community-based social marketing
 - Interactive communications approaches (quizzes, sticker sheets for bins)
 - Using images, colour coding, simplifying messaging
 - Dynamic messaging on collection trucks

- > Videos
- Messages at retail outlets
- Prompts and reminders of what to do by text and email
- Using specific messaging approaches (tell people why, show people what can be made, personalised/humanised messaging, environmental messaging)
- Using different messengers most said 'the council'; others included celebrities, influencers, Keep Britain Tidy, central government, local volunteers/champions
- Changes to council services
 - more frequent collections, bigger bins
 - separate bins for different waste streams
 - > subsidised internal bins

- nappy collection service, monthly collections of textiles and WEEE
- change from sacks to wheeled bins
- Schools and adult education (including MRF tours)
- Face-to-face engagement (workplace education, door-stepping, roadshows, surveys)
- **Rewards and incentives** (council tax, social incentives, community prizes, social recognition)
- Utilising feedback loops (direct and general feedback regarding positive and negative behaviours)
- Pay As You Throw schemes
- Deposit refund and retailer takeback schemes



SUGGESTED BEHAVIOURAL INTERVENTIONS

The Centre for Social Innovation is expert in developing effective interventions using behavioural insights and wider frameworks. Previous examples of interventions we have developed included:

We're Watching You: A glow-in-the-dark 'watching eyes' poster intervention to prevent dog-fouling based on the insight that people tend to allow their dogs to foul under cover of darkness. This achieved a 46% reduction across 17 local authority pilot areas and has now been scaled through over 100 partners.

Social Impact Stencils: This intervention addressed our research insight that flytipping is perpetuated by the fact that flytipping often collected quickly and without repercussion, and involved stencilling flytipped sites with a message highlighting the social impacts of the behaviour. This achieved a 67% reduction across four pilot sites and we are now preparing to scale the intervention nationally. *Two Bag Challenge*: This intervention, currently being piloted, asks residents to produce no more than two bags of waste, using behavioural insight approaches and messaging. Initial results have seen a 50% reduction in households presenting more than two bags of waste (2,026 households across two pilot areas).

Interventions to Tackle Contamination

Using this research we have developed a number of intervention concepts which we think will be effective in tackling recycling contamination behaviour. These include:

- Targeted feedback loops which address contamination at household and/or community level
- Development of new 'rules of thumb' which focus not on single materials, but general principles and which build the capacity of residents to recycle correctly for example, getting them to

update their knowledge from reliable sources

- Salient in-home communications to disrupt habitual behaviours and target in particular, those committed recyclers who do not currently update their recycling knowledge
- In-situ and/or guerrilla marketing campaigns targeting specific contaminants in hotspot areas
- Updates to current language and communications using the insights identified in this research
- Use of values-based and personalised messages from MRF and crews to encourage people to recycle correctly
- A new user-tested nappy campaign which addresses current confusion about recyclability

We will be seeking partners and funding to conduct pilots of recycling contamination interventions from September 2020 onwards.



GET IN TOUCH

For more information about this research or our wider work, please contact:

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