



CITIZEN PLASTICS RECYCLING BEHAVIOURS INSIGHTS SURVEY 2021



Report by RECUP

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This report has been written by:

Anne Hitch, Head of Citizen & Stakeholder Strategy and

Laura Hutchings, Senior Project Officer

CONTENTS

Foreword	5
Executive Summary	7
Methodology	9
Response Traffic.....	9
Points to Note	9
Plastic Bottles	10
Key Comparisons.....	10
Plastic Drinks Bottles.....	11
Shampoo and Conditioner Bottles.....	11
Cleaning Product Bottles.....	12
Sauce Bottles.....	13
Recycling Preparation for Bottles	14
Bottles, RECOUP UK Household Plastics Collection Survey 2021 - Context	15
Pots, Tubs and Trays (PTT) (margarine, ice-cream, yoghurt pots)	15
Key Comparisons.....	15
Pots and Tubs (yogurt pots, margarine, ice cream tubs, washing powder tubs)	16
Fresh Meat Trays.....	17
Cooked Food or Ready Meal Trays	18
Fruit and Vegetable Clear Plastic Trays.....	19
Pots, Tubs and Trays, RECOUP UK Household Plastics Collection Survey 2021 - Context.....	20
Films & Flexibles	20
Key Comparisons.....	20
Soft Plastics & Wrapping.....	20
Plastic Carrier Bags.....	21
Bread Wrapping	22
Snacks and Crisp Wrappers.....	23
Pet Food Pouches.....	24
Films and Flexibles RECOUP UK Household Plastics Collection Survey 2021 – Context.....	25
Other	25
Toothpaste Tubes	25
Demographic Profiles	26
Variables and Influences	26
Service Provision/Consistency	26
Labelling & Confusion	27
Demographic Influences/Segmentation Indications	27

Messaging	28
Complex Packaging and Cleaning	28
Recommendations/Further Work	29
Pack Claims in Conflict v Local Authority Target Material	29
Claimed and Actual Behavioural Differences.....	30
Plastics Recycling Messaging	30

Foreword

RECOUP's citizen facing arm, Pledge2Recycle Plastics¹ has been engaging with citizens for close to 9 years. Throughout this time communications have centred around delivering to individuals the facts of plastics recycling reducing their confusion.

Pledge2Recycle Plastics is aligned with Recycle Now social norming messages with communications based on the recycling journey and the facts of plastics packaging recyclability. All information is based on the technical work carried out by RECOUP on plastics packaging UK collection, sorting, reprocessing and end market capabilities.

RECOUP have conducted previous citizen behavioural insight studies² including work with Watch Me Think in 2019.³ The Research Study into Consumer Plastic Recycling Behaviour 2019 asked citizens to record themselves recycling plastics and then critique what they did, and why, to camera. This allowed residents to explain the thought process behind their recycling behaviours. At that time, the work concluded the key barriers to recycling are:-

- Contamination concerns from raw meat trays.
- Uncertainty of what constitutes a food tray or food container.
- Reluctance to clean packs or unsure how clean a pack needs to be.
- Uncertainty about removing bottle sleeves, pump, or trigger sprays.
- Recycling bin/container capacity.
- Confusion on pack labelling and symbols.
- Confusion on coloured plastics recyclability.
- Uncertainty of what to do with lids of bottles and tubs or tear off strips.



This work in 2019 formed the basis of ongoing Pledge2Recycle Plastics strategy and core messaging.

In early 2020, as a result of the pandemic, individual behaviours adapted to fit changing work/home patterns, however there was little factual evidence to determine what, if any impact these changing work/life changes had on plastics recycling. Throughout 2020 the issue of climate change and plastics pollution continued to place pressure on how citizens viewed plastics and packaging in general as they tried to make choices based on sustainability credentials. RECOUP was, at this time, keen to understand if any of these external factors impacted positively or negatively on plastics recycling behaviours. The team were also keen to understand if recycling behaviours and perspectives change overtime or remain stagnant. Is there any correlation between these external influences and day to day actions?

The RECOUP UK Household Plastics Collection Survey which in 2020⁴, estimated that around 600,000 tonnes of rigid plastics packaging were not placed by citizens for collection kerbside. The 2020 survey estimated that 59% of plastic bottles, and 33% of plastic pots, tubs and trays consumed were placed for recycling kerbside by residents.

¹ Pledge2Recycle Plastics was previously branded Pledge4Plastics and launched in September 2014. The rebrand took place in May 2018.

² Consumer Attitudes and Behaviour - Plastics Packaging 2016 – conducted by ICARO & RECOUP (Pledge4Plastics), funded by M & S.

³ <https://www.recoup.org/p/348/pledge-2-recycle-plastics-consumer-insight-recycling-study-2019>

⁴ <https://www.recoup.org/p/380/uk-household-plastics-collection-survey-2020>

In 2021 this figure marginally rose to 61% for plastic bottles and 36% for pots, tubs, and trays. RECOUP wondered what was happening to the missing plastics packaging, did citizens genuinely think they were recycling all they could and what else was influencing behaviours in terms of kerbside recycling?

RECOUP developed an informal survey which was hosted on the Pledge2Recycle Plastics website. This was aimed at gaining UK wide insights that could be analysed over time by gender, geographical region, age, and housing type. The survey was launched in October 2020 and remains live. This report is based on the responses up to and including November 2021. 6534 responses were received in that time covering every UK county and across all devolved nations.

Let's cut through the confusion and find out what you recycle

Hi, thanks for taking part in this independent survey by Pledge2Recycle Plastics. We are keen to find out how you recycle your household plastics. First up plastics bottles, how do you recycle your bottles when you are at home?

I never recycle this item

I sometimes recycle this item

I normally put this item in whichever bin has the most room

I am confused about if this item is recyclable or not, so I don't always recycle it

I don't recycle this item if it is dirty and needs cleaning

I try to recycle this item if it is convenient

I recycle this item every time

I don't use this item

Figure 1: Question 1 of the Pledge2Recycle Plastics Citizen Plastics Recycling Behaviours Insights

RECOUP and the Pledge2Recycle Plastics team will use the results and learnings from this report to assist in further plastics recycling communications and to help formulate and develop strategy in this space.

Executive Summary

RECOUP's Pledge2Recycle Plastics brand launched the Citizen Plastics Recycling Behaviours Insights Survey in October 2020. The survey took the form of an informal questionnaire with images alongside questions on recycling behaviours of key items of plastics packaging such as bottles, pots, tubs, and trays and films and flexibles.

Responses were driven through social media (Facebook, Twitter, Instagram); Local Authority websites; e-mails; web searches and a link on the Ocado Retail website.

These results concentrate on the 6534 responses received up until 26th November 2021 from across the whole of the UK.



95% of citizens claim to be recycling plastic drinks bottles every time whilst this drops to 80% of responses for plastic cleaning bottles and sauce bottles.

The key barrier cited for not recycling cleaning products, sauce or shampoo bottles appears to be confusion around recyclability.

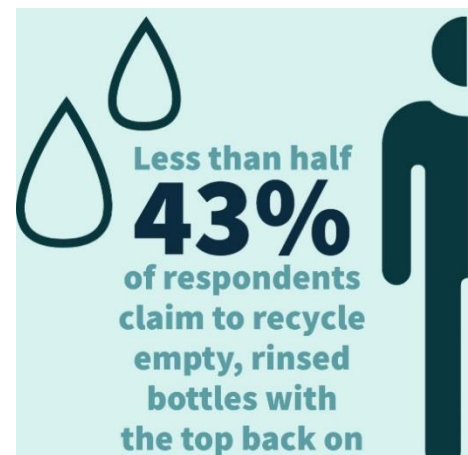


Only 52% of citizens claim to recycle cooked food and ready meal trays with 62% claiming to recycle fresh meat trays every time. The highest claimed recycling rate in the pot, tub and tray fraction was for vegetable and fruit trays at 73%.



Cooked or ready meal trays and films, flexibles seemed to cause the most confusion on recyclability with 13% and 11% respectively.

The more complicated an item of packaging and then the less intuitive it is for citizens to know what to do with the pack. This resulting confusion therefore creates barriers to recycling. Even with the simplest form of plastic packaging, (the drinks bottle), citizens are still unsure how to prepare the bottle and consequently potential recycle is being lost. Less than half of responses claimed to empty, rinse, and replace the lid before recycling.



Older citizens were more likely to say they recycle every time. However, what is not certain is whether their desire to recycle is leading to unintended contamination by placing non 'target' plastic items in their recycling collections despite local advice.

Pack labelling and instruction can also conflict with current collection, sorting and reprocessing capabilities. If plastics packaging is to improve its reputation to citizens of its circular credentials, then pack claims need to be able to be upheld and supported by the value chain. Technical advances in pack design to render packs more recyclable need to match progress in sorting, reprocessing and end markets.

Overall, attitudes have remained stagnant over time with no indications of any sustained behaviour change or changes in declared recycling from October 2020 to November 2021. Work is needed to consider the most effective way to engage, educate, and stimulate the desire to recycle plastics packaging by citizens of all ages. Uppermost in the minds of individuals is convenience and ease of decision making. Recycling should be intuitive with as little fuss and action required by individuals as possible.

Most citizens already have a base understanding of plastics packaging are likely to follow their objective⁵ knowledge, whether it is factually correct or not. Citizens are therefore less likely to be open and willing to accept new information. This represents a challenge for communications when involving a call to action, particularly if existing knowledge is to be adjusted to reflect new and evolving plastics recycling instructions.

⁵ [Drawing on Subjective Knowledge and Information Receptivity to Examine an Environmental Sustainability Policy: Insights from the UK's Bag Charge Policy \(cranfield.ac.uk\)](https://www.cranfield.ac.uk/research/insights-from-the-uk-s-bag-charge-policy)

Methodology

The survey takes the form of a quiz style questionnaire and is relaxed in its approach. The links were advertised across social media, Local Authority websites, as well as a link on the Ocado Retail website.



The survey asks about the respondent's behaviour when it comes to the recycling of plastic packaging and covers bottle; pots, tubs, and trays (PTT), as well as films and flexibles. Each question has an accompanying picture of the packaging type to help respondents visualise which plastic packaging format is being referred to. The survey

also asks a range of demographic questions, such as gender, age, postcode, and housing type. These demographics have been used to build a picture of different behaviours between different groups of people.

For this report, responses up until the 26 November 2021 have been analysed, with a total of 6,534. The respondents who said they 'do not use the item' have been filtered out for the purpose of this analysis. This means that all insights gathered are based on respondents who actually use those products.

Response Traffic

While the survey was hosted on the Pledge2Recycle Plastics website home page traffic to the survey was through a number of routes and was split as follows.

- Facebook – 47%
- Ocado Retail – 14%
- e-mail non-specified source - 9%
- Combination of twitter, LinkedIn, and Instagram - 5%
- Local Authority website or communication – 4%
- 13% - came through other sources, including colleagues, friends, workplaces, etc

8% of respondents declined to state where they found the questionnaire.

A small budget was set aside for some social media seeding via Facebook in September/October 2021. In this timeframe over 1800 responses were received through Facebook.

Points to Note

As of April 2021, 100% of Local Authorities in the UK collect plastic bottles for recycling at kerbside, 87% collect Pots, Tubes and Trays, and 13% collect Film. The location of a respondent in the UK will impact their response in categories where local arrangements are different. Of the survey responses who told us their location half of those citizens came from the South East England where 25% of Local Authorities do not accept PTT at kerbside.

The demographic questions were not compulsory, so not all respondents answered these questions, reducing the base available when looking at behaviours based on demographics.

There was an influx of respondents from a single postcode area (PO) (12% of all responses). Of these, 97% are from areas that do not accept PTT at kerbside, therefore the questions related to the pots, tubs and trays categories have seen some influence by this group.

Northern Ireland did not have enough respondents to split out from the base and look at separately.

Plastic Bottles

Key Comparisons

95% of respondents claim to be recycling drinks bottles every time. This confidence waned when it came to other types of plastic bottles, with a smaller proportion saying they recycle every time.



Figure 4: The proportion of respondents who answered each of the bottle questions saying they recycle every time.

Respondents were more confused about whether the other bottle types were recyclable or not. Higher percentages also said they 'sometimes' recycle, suggesting some doubt over whether placing these bottles for recycling was the right thing to do. 'I never recycle this item' as well as choosing to recycle when it is convenient also saw a slight increase for the none-drinks bottles categories.

For all the bottle categories, older age groups (45 and over) were more confident, with a higher proportion compared to the 44 and unders saying they recycle every time. Respondents aged 44 and under were slightly more likely to say they recycle when it is convenient.

When comparing the devolved nations, Wales had a higher proportion than both England and Scotland that said they recycle every time, for all 4 bottle categories.

Plastic Drinks Bottles

Plastic Drinks Bottles had the highest proportion of respondents saying they recycled every time out of all the other plastic packaging formats investigated in this report, with 95% choosing this option.

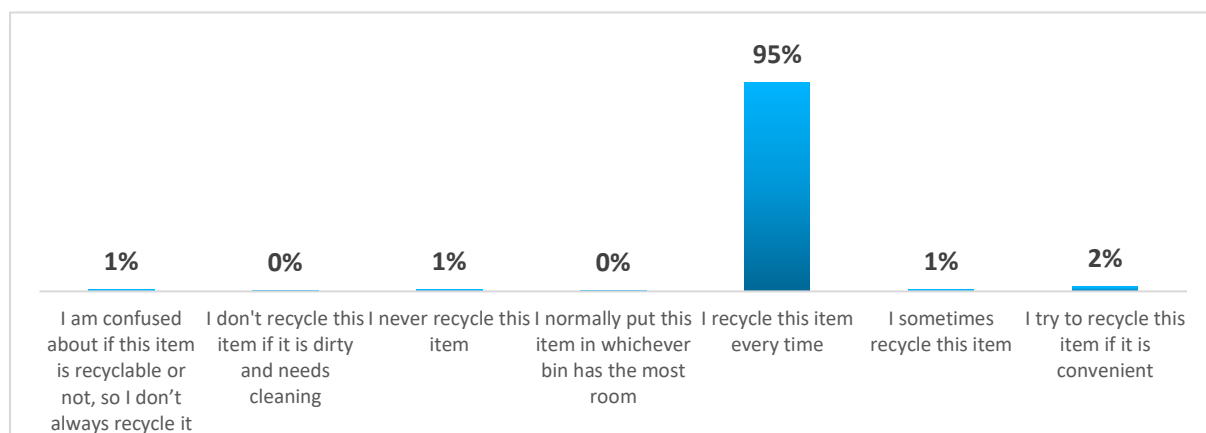


Figure 5: Answer options for the question asking about plastic bottles, with corresponding response percentages. Respondent base: 6461.

The high proportion of respondents saying they recycle every time was seen across all demographic splits that were analysed, with only minor fluctuations.

Females were slightly more likely than Males to say they recycle every time (96% vs 93%). Older respondents were slightly more likely to say they recycle every time, with 96% of 45 and over, compared to 92% of 44 and under. Younger adults (18-24) were more likely than average to say they recycle when it is convenient (9%).

Those who live in a flat were slightly less likely than average to say they recycle every time (93%). Looking at location, the South West of England saw the highest percentage of respondents who said they recycle every time (97%).



Shampoo and Conditioner Bottles

Compared to plastic drinks bottles, shampoo and conditioner bottles saw a drop in the proportion of respondents who say they recycle every time.

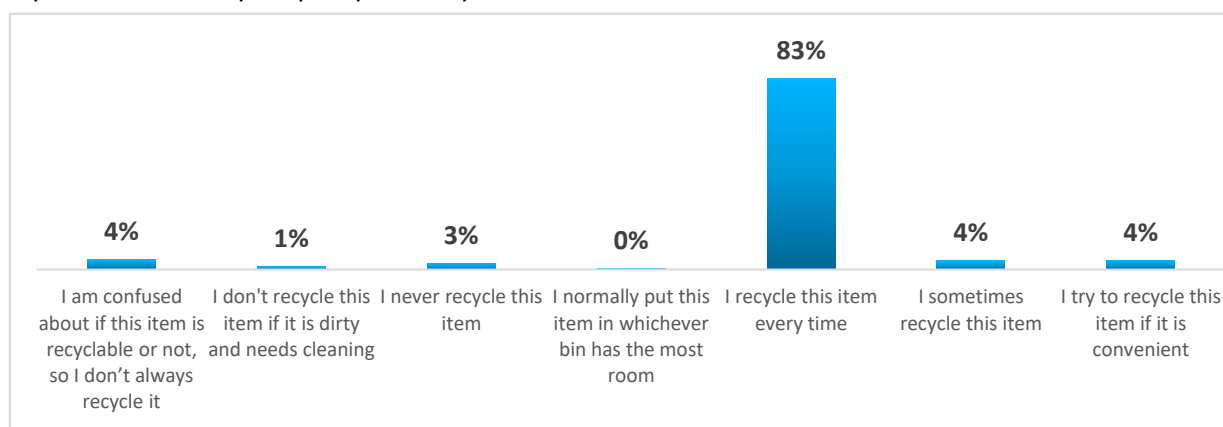


Figure 6: Answer options for the question asking about shampoo and conditioner bottles, with corresponding percentages. Respondent base: 6317.

It was found that the older the respondent, the more likely they were to say they recycle every time. 74% of the 44 and under age group chose this response option, however 86% of the 45 and over age group did – a difference of 12%. In contrast, the 44 and under group were more likely than the older group to say they ‘sometimes’ recycle (7% vs 3%) or that they try to recycle when it is convenient (7% vs 3%).



Those who live in a bungalow were more likely than the average to say they recycle every time (88%), and especially compared to those who live in a flat (81%).

The Welsh saw a larger proportion of respondents saying they recycle every time, with 91% choosing this option, compared to England (83%) and Scotland (84%).

Cleaning Product Bottles

4 in 5 respondents said they recycle cleaning product bottles every time.

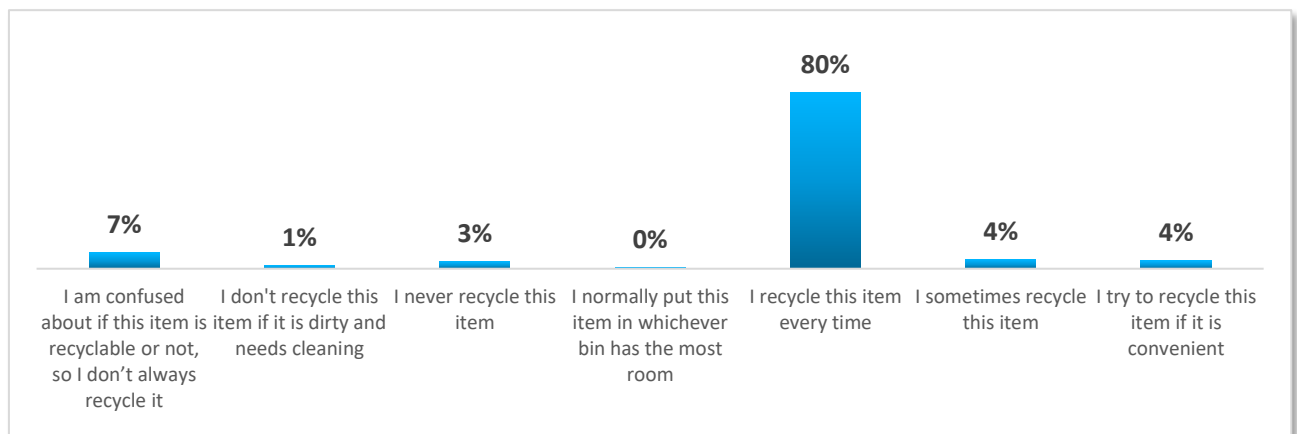


Figure 7: Answer options for the question asking about cleaning product bottles, with corresponding percentages. Respondent base: 6451.

The older the respondent, the more likely they were to say they recycle the item every time. 68% of the 44 and under group chose this option, compared to 84% of the 45 and over age group – a difference of 16%. The 44 and under age group however were more likely than the older group to say they are confused by the item's recyclability (10% vs 6%), they ‘sometimes’ recycle (7% vs 3%), or they never recycle (6% vs 2%).



Those who live in a bungalow were slightly more likely than average to say they recycle every time (84%) but were much more likely to choose that option than those who live in a flat (75%), who were instead slightly more likely to say they are confused (9%) or never recycle (5%).

When comparing based on location, Wales saw a larger proportion than England and Scotland who said they recycle every time (88% vs 80% and 81% respectively) and had a smaller proportion than average who were confused by the item's recyclability (3%). In contrast, North East England had a smaller percentage of people than average who said they recycle every time (71%) but a much larger proportion who were confused by the item's recyclability (16%).

Sauce Bottles

Sauce bottles saw 4 in 5 respondents say they recycle every time.

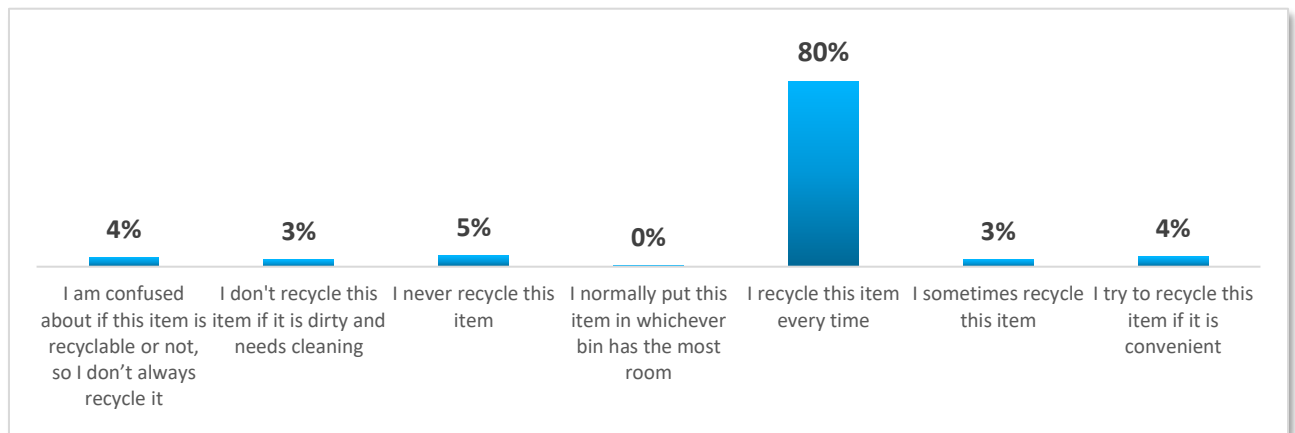


Figure 8: Answer options for the question asking about sauce bottles, with corresponding percentages. Respondent base: 6125.

The older respondents were more likely they were to say they recycle every time. 74% of the 44 and under age group chose this option, compared to 83% of the 45 and over age group – a difference of 9%. The 44 and under age group were slightly more likely than the older group to say they never recycle (6% vs 4%), ‘sometimes recycle’ (5% vs 3%), or would recycle if it was convenient (6% vs 4%) – especially the 25-34s (8%).

Those who live in flats were less likely than the average to say they recycle every time (71%), instead being slightly more likely to say they are confused by the item’s recyclability (9%), or never recycle (8%).

Wales saw a significantly larger proportion than average who said they recycle every time (92%), with no respondents saying they never recycle. Scotland also saw a slightly higher percentage than average saying they recycle every time (84%).

In contrast, North East England had a smaller percentage of respondents who said they recycle every time (73%) but a much larger percentage who would recycle if it was convenient to do so (16%).

Recycling Preparation for Bottles

Less than half of respondents (43%) said they prepare a bottle and its lid correctly for recycling.

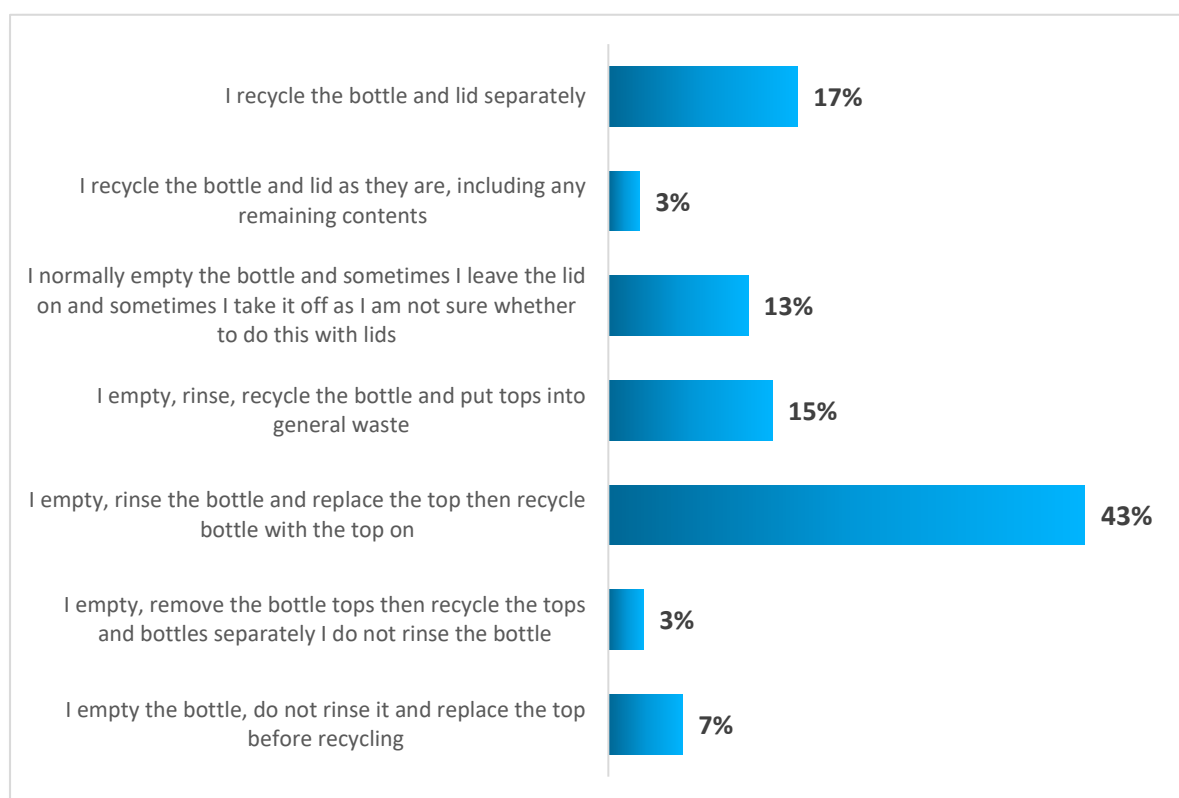


Figure 9: Answer options for the question asking about how bottles and lids are placed for recycling, with corresponding percentages.
Respondent base: 6533.

13% say they are unsure what to do with lids when recycling a bottle.

Males were more likely than the average to say they replace the lid on the bottle but do not rinse it (11%) and were slightly less likely to put bottle tops in general waste (11%).

The 44 and under age group were more likely than the average and the 45 and over age group to say they replace the lid on the bottle but do not rinse it (11%) and are less likely to put bottle tops in general waste (11%). They were also less likely to recycle bottles and lids separately (12%).

Scotland, and especially Wales, were more likely than England to prepare bottles and lids correctly for recycling; (47% and 49% respectively, vs England 43%), however it was still under half of the respondents for each country. It is interesting though that they have higher percentages choosing this option, as none of the Welsh Local Authorities communicate to residents to recycle bottles with lids on, and only 9% of the Scottish Local Authorities do. 22% of Local Authorities in Scotland and 36% in Wales also do not provide any guidance when it comes to emptying and rinsing bottles.

Bottles, RECOUP UK Household Plastics Collection Survey 2021 - Context

The RECOUP UK Household Plastics Collection Survey 2021 found that the average UK household uses over 500 plastic bottles a year and recycles around 325 of them. This leaves around 175 which are not placed for recycling. It also found that the overall household bottle collection rate for 2020 was 61%. However, this directly contradicts what we see in the results of this report, with all 4 bottle categories seeing at least 80% of respondents saying they recycle every time.

PET drinks bottles, most commonly used for both 'On-the-Go' and large drinks bottles, had a collection rate in 2020 of 75%, and natural HDPE drinks bottles, primarily used as milk bottles, had a collection rate in 2020 of 78%. Both of these collection rates are much lower than would be expected with 95% of respondents saying they recycle every time.

Less than half of the respondents to this behaviour survey are preparing bottles correctly for recycling, with only 43% saying they empty, rinse, then replace the lid. This is unsurprising as many Local Authorities are not passing these guidelines onto their citizens. The RECOUP UK Household Plastics Collection Survey 2021 found that only 28% of Local Authorities advise to leave lids on bottles, with 18% actually saying to remove lids. Also, only 73% say to empty/rinse bottles before recycling. Many Local Authorities do not provide any guidance at all with 41% providing no instruction on lids, and 27% not instructing residents to empty/rinse.

Pots, Tubs and Trays (PTT) (margarine, Ice-cream, yoghurt pots)

Key Comparisons

As of April 2021, 87% of Local Authorities in the UK collect Pots, Tubs, and Trays (PTT) at kerbside, and responses are heavily influenced by whether or not respondents are able to place the items in kerbside bins for recycling. In Wales, where 100% of Local Authorities collect PTT at kerbside a higher level of respondents saying they recycle every time, and much smaller percentages saying they are confused about the item's recyclability. In areas where Local Authorities do not collect at kerbside, we see higher levels of confusion.

With most of the PTT categories, older respondents are more likely to recycle PTT every time than the younger respondents. Instead, for most PTT categories, younger respondents were more likely to say they never recycle.

With all responses where region is not considered, we need to bear in mind that 50% of respondents come from the South East England, a region where 25% of Local Authorities do not accept PTT at kerbside, which will impact on the response percentages.

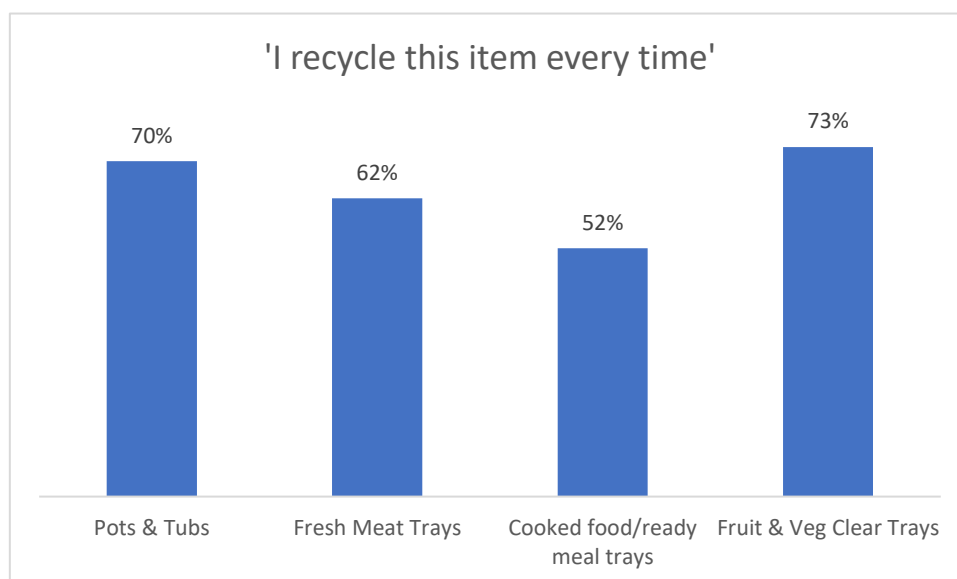


Figure 10: Proportion of responses declare they recycle pots, tubs and trays every time. Respondent base: 6461.

There seems to be some correlation with respondents being more confused/unlikely to recycle PTT that has higher levels of contamination from food. For example, ready meal trays, where the food may be baked on and harder to remove, sees a lower percentage of respondents saying they recycle every time (52%), compared to fruit and vegetable clear trays, which often have minimal food residue, which saw a higher proportion recycling every time (73%). However, this could also be impacted by other factors, such as the colour of ready meal trays as opposed to clear fruit and vegetable trays.

Pots and Tubs (yogurt pots, margarine, ice cream tubs, washing powder tubs)

When asked about generic pots and tubs, 70% of respondents said they recycled every time.

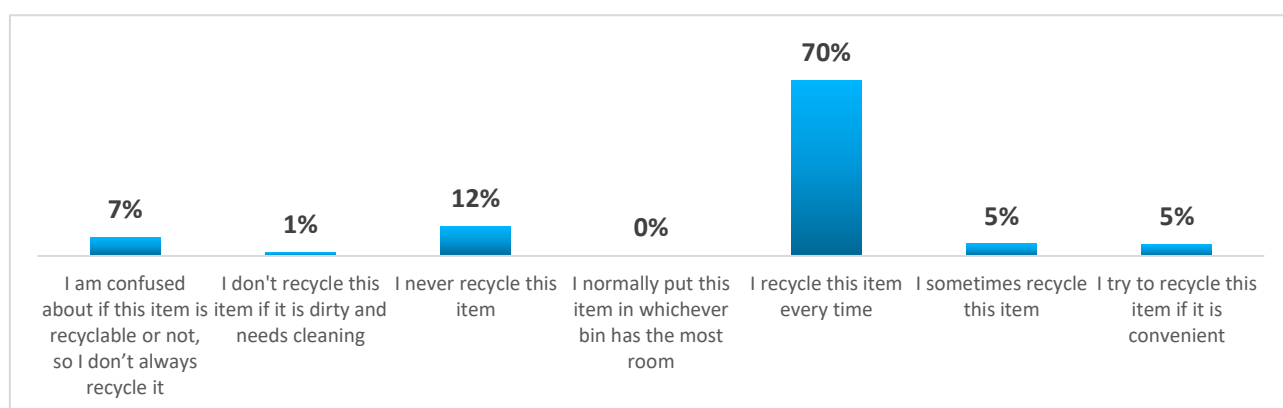


Figure 11: Answer options for the question asking about pots & tubs, with corresponding percentages. Respondent base: 4819.

PTT are accepted for recycling at kerbside by 87% of Local Authorities in the UK as of April 2021, therefore responses can be swayed by whether this option is available to a respondent or not.

The older respondents were more likely to say they recycle every time. 71% of the 45 and over age group said they recycle every time, compared to 63% of the 44 and unders, which is an 8% difference.



Those who live in a bungalow are more likely to say they recycle every time (77%), and those who live in a flat were less likely to (63%). North East, North West, South East, and Yorkshire & the Humber were all less likely to say they recycle every time, with 63%, 50%, 65% and 61% respectively.

North West (15%) and Yorkshire & the Humber (13%) were also more likely to say they are confused about the recyclability of the items, potentially due to differing instructions between Local Authorities in these areas (North West had 36% of Local Authorities not accepting at kerbside, and Yorkshire & the Humber had 32%). Scotland and Wales both saw higher proportions than England saying they recycle every time (85% for Scotland, 94% for Wales, vs 69% for England). This is especially true for Wales, where every Local Authority collects PTT at kerbside.

Fresh Meat Trays

Just under 2 in 3 respondents said they recycle fresh meat trays every time.

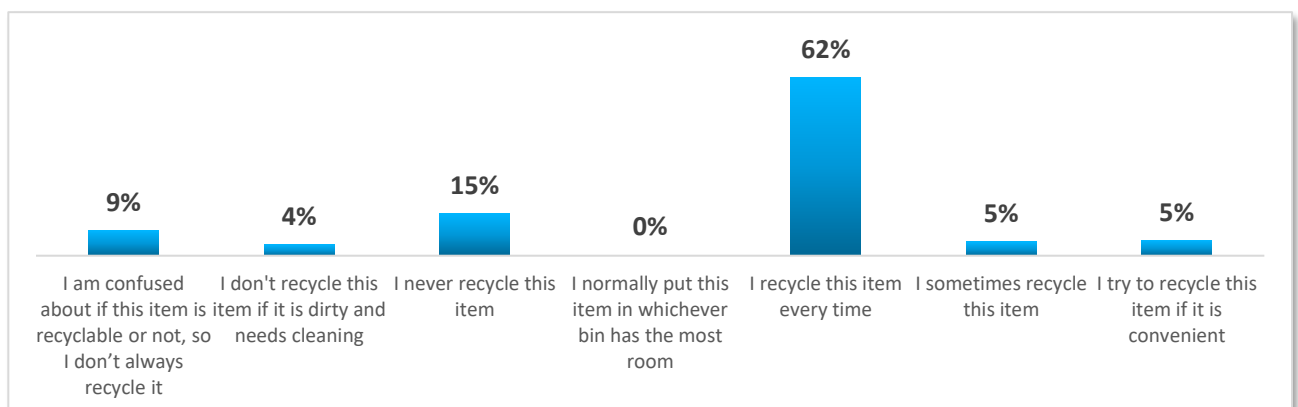


Figure 12: Answer options for the question asking about fresh meat trays, with corresponding percentages. Respondent base: 6158.

PTT are only accepted for recycling at kerbside by 87% of Local Authorities in the UK as of April 2021, therefore responses can be influenced by if this option is available to a respondent on a local level.

The older respondents were more likely to say they recycle every time. 65% of the 45 and over age group chose this option, compared to 55% of the 44 and under age groups, which is a 10% difference.



Those that live in a flat are less likely than average to say they recycle every time (55%), instead saying they never recycle (19%) or that they are confused about the item's recyclability (13%).

In England, the North East, North West, and South East were more likely to say they never recycle, with 19%, 24% and 20% respectively. This could in part be influenced by Local Authorities and residents' ability to place these items in kerbside recycling collections, as the North West and South East are 2 areas with a high proportion of Local Authorities who do not offer this option. North West and Yorkshire & the Humber were also more likely to say they are confused about the recyclability of the items (13% and 12% respectively), potentially influenced by differing instructions between Local Authorities in these areas.

Scotland and Wales both saw higher proportions than England saying they recycle every time (74% for Scotland and 81% for Wales, vs 61% for England). Again, this could be influenced by kerbside collections, as every Local Authority in Wales offers this to residents. Wales also had a smaller percentage than average saying they were confused about the item's recyclability (5%).

Cooked Food or Ready Meal Trays

Just over half of respondents said they always recycle cooked food and ready meal trays.

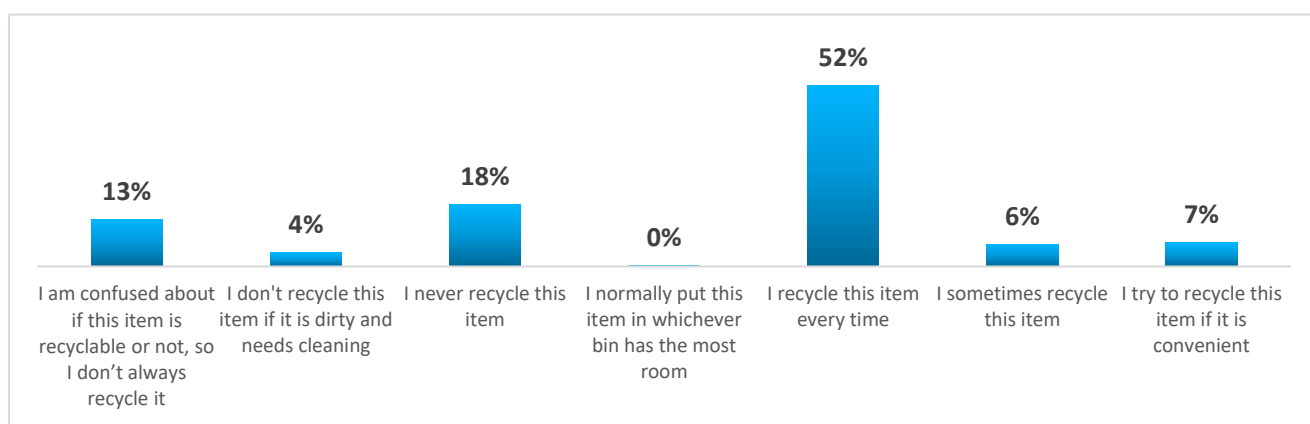


Figure 13: Answer options for the question asking about cooked food or ready meal trays, with corresponding percentages. Respondent base: 4350.

A higher proportion of respondents are saying they never recycle, do recycle when it is convenient, or are confused about its recyclability, compared to the other PTT items which were investigated. This could in part be influenced by food contamination which is more likely to be in higher quantities and more difficult to remove from these items, for example being baked on.



PTT are accepted for recycling at kerbside by 87% of Local Authorities in the UK as of April 2021. Responses could be swayed by whether this option is available to a respondent in their area. This is also influenced by whether a Local Authority will accept black plastic as a target material.

The older respondents are more likely to say they recycle every time. 55% of the 45 and over age group chose this option compared to 37% of 44 and under age group, a difference of 18%. Instead, 25% of the 44 and under age group said they never recycle these items (compared to 16% of the 45 and over age group).

Those that live in a flat are less likely than average to say they recycle every time (46%), and those that live in a bungalow are slightly more likely to choose this option (55%).

Respondents who live in the North West and South East of England were more likely to say they never recycle, with 26% and 23% respectively. This could be because these are 2 of the regions that have a high number of Local Authorities that do not accept PTT at kerbside. The North East, North West and Yorkshire & The Humber were more likely to say they are confused about the recyclability of the items (all with 18%), potentially because of differing instructions between Local Authorities, especially in the North West and Yorkshire & The Humber.

Scotland and Wales both saw higher proportions than England saying they recycle every time (58% for Scotland and 76% for Wales, compared to 51% for England). This was especially the case for Wales, where every Local Authority collects PTT at kerbside. Wales also had a smaller percentage saying they were confused over the item's recyclability (8%).

Fruit and Vegetable Clear Plastic Trays

Just under 3 in 4 respondents said they recycle fruit and veg clear trays every time.

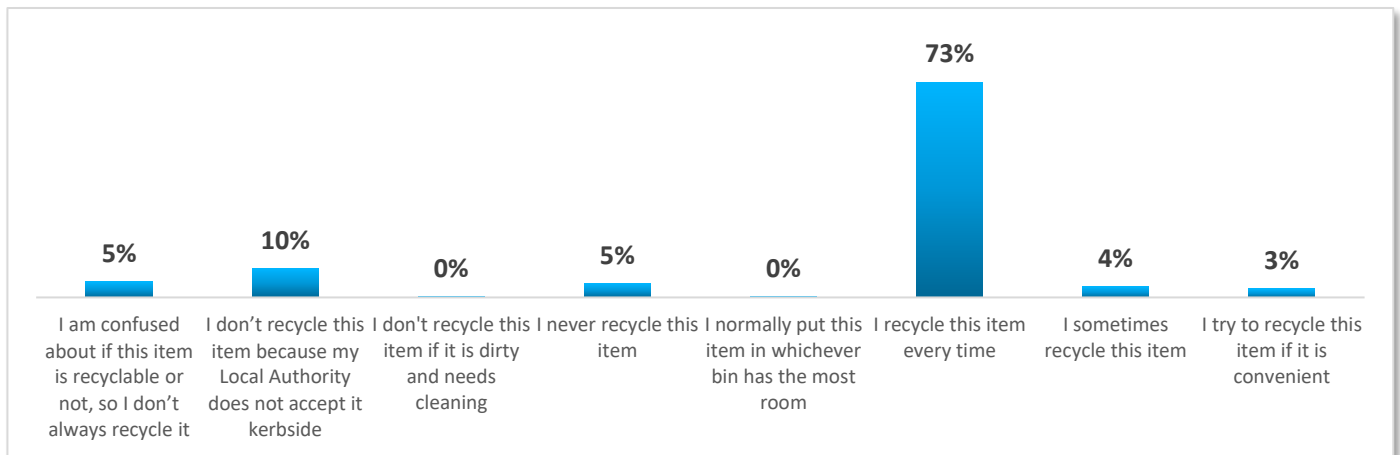


Figure 14: Answer options for the question asking about fruit and vegetable clear plastic trays, with corresponding percentages.
Respondent base: 6417.

PTT are accepted for recycling at kerbside by 87% of Local Authorities in the UK as of April 2021, therefore responses can be swayed by whether this option is available to a respondent or not.

When it comes to fruit and veg clear trays, there was little difference in the answers given by different age groups, with both the 44 and under group, and the 45 and over group seeing similar proportions who recycled every time (72% vs 73%).



Those who live in a flat were less likely than average to say they recycle every time (66%).

The North West and South East of England were less likely than average to say they recycle every time, with 55% and 66% respectively. They were also more likely than average to say they don't recycle because their Local Authority doesn't accept it kerbside, with 24% in the North West choosing this option, and 13% in the South East. This is unsurprising, as they are 2 of the regions with high numbers of Local Authorities who do not accept PTT at kerbside.

Scotland and Wales both saw higher proportions than England saying they recycle every time (87% for Scotland and 86% for Wales, compared to 72% for England). Wales had a smaller percentage than average saying they were confused over the item's recyclability (1%), potentially influenced by the fact that all Local Authorities in Wales accept PTT at kerbside.

Pots, Tubs and Trays, RECOUP UK Household Plastics Collection Survey 2021 - Context

The RECOUP UK Household Plastics Collection Survey 2021 found that the household collection rate for PTT for 2020 was 36%. This is a lot lower than the percentage of respondents who said they recycled every time for each of the PTT categories, with the lowest only dropping down to 52%.

It also found that Wales has a significantly higher collection rate than the other UK countries for PTT, sitting at 55%. This correlates with the fact that for all the PTT categories looked at in the citizen survey, Wales had a higher proportion than average saying they recycled every time. Wales also has 100% of Local Authorities collecting PTT from kerbside, which will influence these results.

Films & Flexibles

Key Comparisons

Only 13% of Local Authorities in the UK accept films and flexibles kerbside as of April 2021., which naturally influences the responses here. Front of store schemes do not seem to be an immediate second choice for those who cannot recycle at kerbside, as the number of respondents choosing this option is relatively low. What is uncertain is where the 16% who recycle every time are taking their material and if indeed this reflects some unintentional contamination kerbside.

Male respondents seem to be less aware of opportunities to recycle films and flexibles , as proportionally, they are less likely to say they use local store collection schemes, or would recycle if they knew how. Male respondents are more likely to state they never recycle, or they don't because of lack of kerbside collection.

Soft Plastics & Wrapping

When asked about soft plastics & wrapping in general, the largest proportion of respondents said they don't recycle due to a lack of kerbside collections.

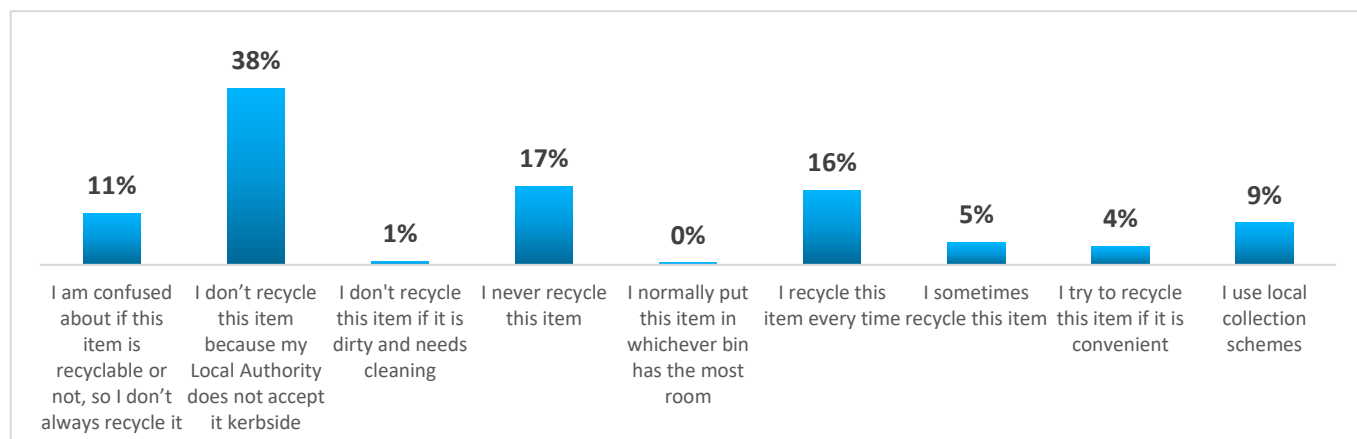


Figure 15: Answer options for the question asking about soft plastics & wrapping, with corresponding percentages. Respondent base: 6504.

Despite only 13% of Local Authorities accepting films and flexibles at kerbside as of April 2021, 16% of respondents said they recycle these items every time. Surprisingly though, only 9% said they use local collection schemes.

Males were more likely than the average to say they never recycle these items (22%).

Younger respondents were more likely than average to say they never recycle, with 37% of 18-24s and 21% of 25-34s saying this. In contrast, the 65 and over group were more likely than the younger groups to say they recycle every time, with 17% choosing this option compared to 12% of the 18-24s and 11% of the 25-34s.



Respondents from the North East and North West of England, as well as Wales, were more likely than average to say the lack of kerbside collection was the reason they didn't recycle, with 47%, 43% and 46% respectively. This is unsurprising as 0% of Local Authorities in the North East, and 3% (1) in the North West, accept film at kerbside. The Welsh were less likely than the average to say they don't recycle due to confusion (6%), instead choosing the lack of kerbside collection (46%).

22% of respondents in Eastern England, and 20% in the South West, said they recycle every time.

Plastic Carrier Bags

Just over a third of respondents said they use local store collection schemes to recycle plastic carrier bags.

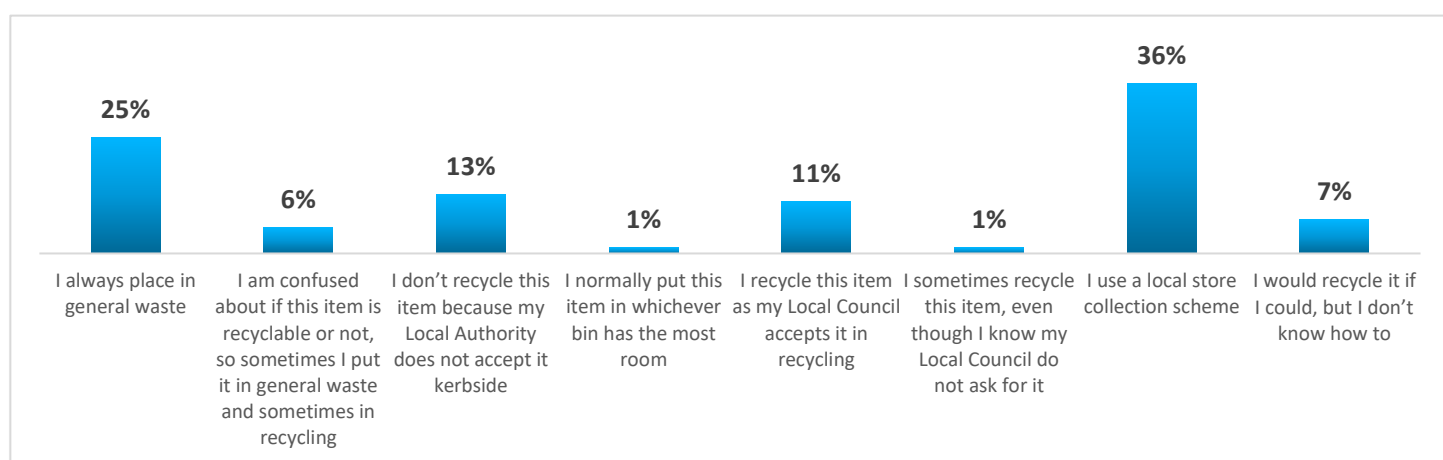


Figure 16: Answer options for the question asking about plastic carrier bags, with corresponding percentages. Respondent base: 1391.

The high proportion of respondents using local store collection schemes could be because they have been offered and established for a lot longer than the wider film schemes, so more respondents are aware of the option to do this. As of April 2021, only 13% of Local Authorities accept films in kerbside collections.

Males were more likely than average to say they don't recycle this item due to it not being accepted at kerbside (18%).



Older respondents were slightly more likely than younger respondents to say they use local store collection schemes, with 38% of the 45 and over group choosing this option, compared to 34% of 44 and unders. The oldest age group of 65 and over were more likely to say they place in general waste (34%). 25-34s had a high percentage who said they would recycle if they knew how (12%).

The North West of England, Yorkshire & the Humber, and Wales were all more likely than average to say they don't recycle as carrier bags are not accepted at kerbside, with 17%, 19%, and 17% respectively. The North West of England instead was more likely than average to say they use local store collection schemes (49%). The East Midlands, London and Wales were more likely than average to say they would recycle if they could but didn't know how (with 14% for East Midlands, 11% for London and 17% for Wales).

Scotland saw a higher percentage than England and Wales of respondents who said they place carrier bags in general waste (34% vs 24% in England and 28% in Wales). They also saw a higher proportion than average saying they place in general waste due to confusion over recyclability (11%).

Bread Wrapping

Just under a third of respondents cited lack of kerbside collection schemes as the reason they don't recycle bread bags.

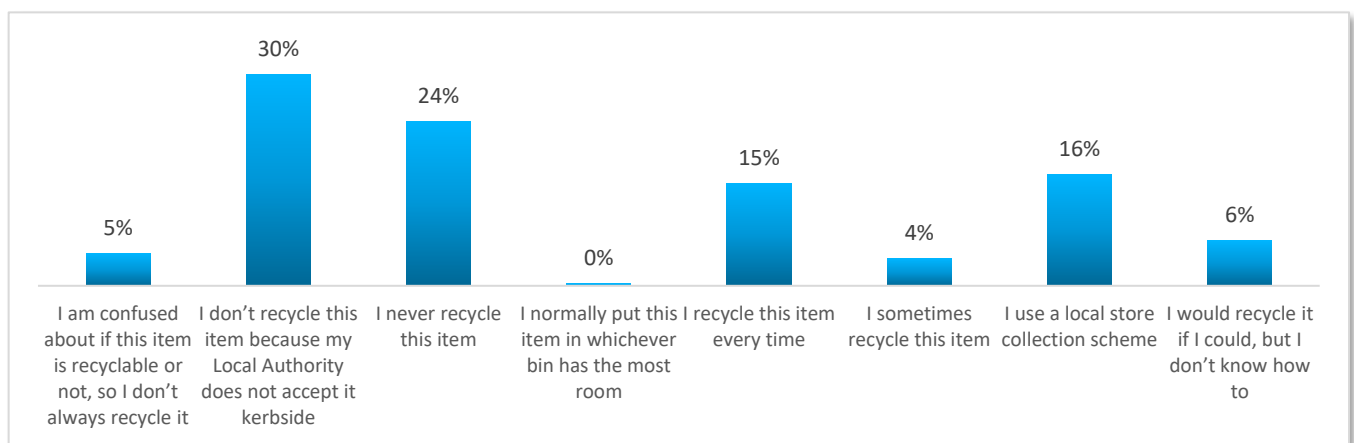


Figure 17: Answer options for the question asking about bread wrapping, with corresponding percentages. Respondent base: 1602.

Bread bags are often made from the same polymer as plastic carrier bags and can therefore usually be placed in the same recycling schemes as the carrier bags. They also often include a label on pack that instructs the customer to recycle at larger stores. However, a smaller percentage of respondents are using local store collection schemes to recycle their bread bags compared to carrier bags. As of April 2021, only 13% of Local Authorities in the UK accept films in kerbside recycling collections.



Older respondents were slightly more likely than younger respondents to say they recycle every time, with 16% of the 45 and over group choosing this option, compared to 12% of the 44 and unders. Instead, the younger age groups were more likely to say they never recycle, with 35% of the 18-24s and 29% of the 25-34s saying this.

Different regions in the UK fluctuated largely when it came to the answers respondents gave, potentially due to whether the area accepts films at kerbside or not. For example, East of England had a smaller percentage who said they don't recycle due to kerbside availability (25%), and a larger percentage saying they recycle every time (24%). This correlates with the fact that the East of England is one of the better regions for availability of kerbside collection of films, with 8 of the 45 Local Authorities in the region offering this service.

Scotland and the England East Midlands region were more likely than the average to say they would recycle if they knew how, with 15% and 10% respectively.

35% of respondents in Scotland and 39% of respondents in Wales said they don't recycle due to the item not being accepted at kerbside. They were less likely than average to say they recycle every time, with 9% and 7% respectively.

Snacks and Crisp Wrappers

Just over a third of respondents said they don't recycle snacks and crisp wrappers due to lack of kerbside collection.

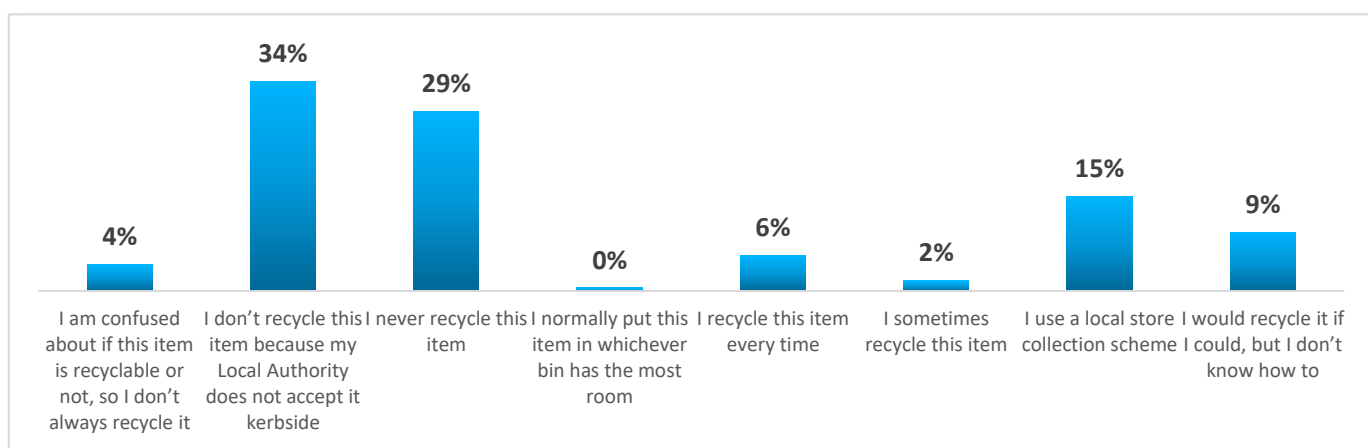


Figure 18: Answer options for the question asking about snack and crisp wrappers, with corresponding percentages. Respondent base: 1632.

Uptake of local store collection schemes when it comes to snack and crisp wrappers is only minimal, with respondents more likely to never recycle. However, 9% said they would recycle if they knew how, suggesting education could help to boost uptake.

Male respondents were less likely than average to say they use local store collection schemes (8%) and were slightly more likely to say they don't recycle due to these wrappers not being accepted at kerbside (38%), as well as being more likely to say they never recycle (37%).



Responses for each of the UK regions fluctuated largely, potentially due to whether the area accepts films at kerbside or not. As of April 2021, only 13% of UK Local Authorities collect films at kerbside.

Scotland was less likely than average to say they do not recycle due to wrappers not being accepted at kerbside (27%) and were more likely to say they would recycle if they knew how (17%). In contrast, Wales was much more likely than average to cite kerbside availability as the reason they don't recycle (47%) and were less likely to say they use local store collection schemes (11%).

Pet Food Pouches

A third of respondents said they don't recycle pet food pouches because their Local Authority does not accept them at kerbside.

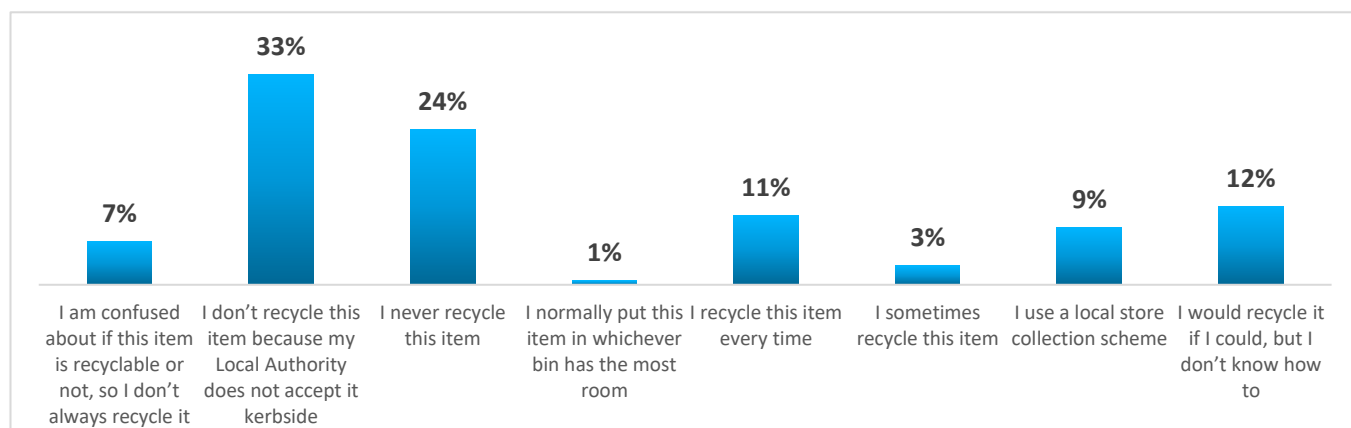


Figure 19: Answer options for the question asking about snack and crisp wrappers, with corresponding percentages. Respondent base: 2847.

Male respondents were slightly less likely than the average to say they use store collection schemes to recycle pet food pouches (6%) and were less likely to say they would recycle if they knew how (8%), instead being more likely to say that they never recycle (29%).

The 44 and under age group were slightly more likely than average to say they never recycle pet food pouches (28%), instead being slightly less likely to say they would recycle if they knew how, especially the 18-24s (6%) and the 25-34s (8%).



Those who live in a bungalow were more likely than the average to say they would recycle if they knew how (16%) and were slightly less likely to say they never recycle (20%).

Respondents from the England West Midlands region were much more likely to say they use local store collection schemes (21%). Respondents from the North West of England were more likely to say they don't recycle as the item is not collected a kerbside (41%) and had a smaller proportion who said they use local store collection schemes (5%). Yorkshire & the Humber respondents saw a larger proportion saying they never recycle pet food pouches (36%) with a smaller percentage saying they would recycle if they knew how (8%).

Looking at a comparison by country, Scottish respondents were less likely than those from Wales or England to say that lack of collection at kerbside was the reason they don't recycle (28% vs 35% for Wales and 33% for England). Instead, a higher proportion of the Scottish respondents than average said they recycle every time (15%) or they would recycle if they knew how (16%).

Films and Flexibles RECOUP UK Household Plastics Collection Survey 2021 – Context

The RECOUP UK Household Plastics Collection Survey 2021 found that the collection rate for plastic films in 2020 was 8%. This includes films that were collected from non-kerbside schemes, such as local store collection schemes. With this being the case, it doesn't correlate with the proportions saying they recycle every time or use local store collection schemes in this behaviour survey.

Only 49 (13%) of Local Authorities accept plastic films at kerbside, and of these, 20 only accept carrier bags. When asked specifically about carrier bags in the survey, 11% said they recycle carrier bags as their Local Authority accepts them in recycling. Again, this indicates to some level of unintended contamination at kerbside via non-target materials.

Other

Toothpaste Tubes

2 in 5 respondents said they never recycle toothpaste tubes.

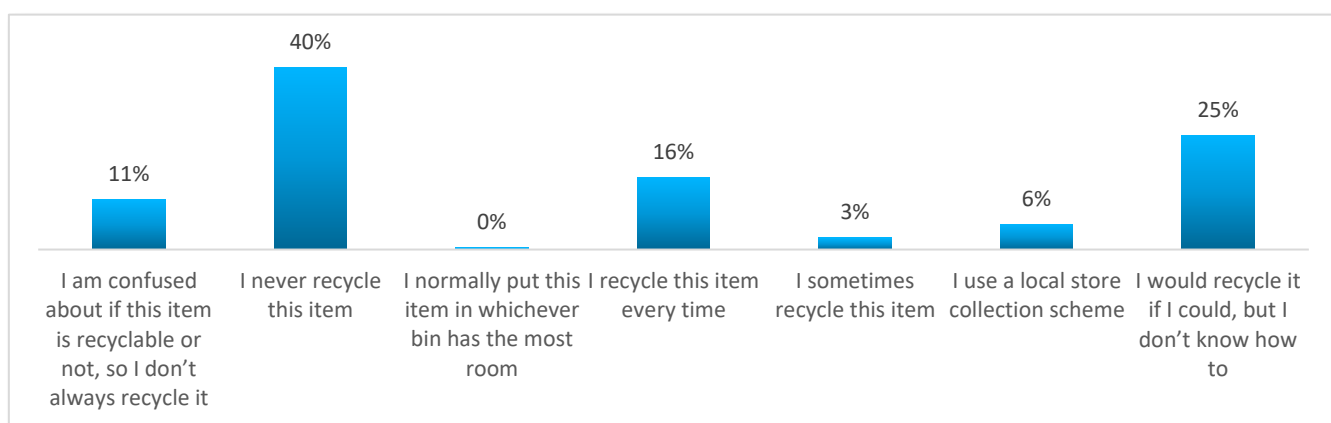


Figure 20: Answer options for the question asking about toothpaste tubes, with corresponding percentages. Respondent base: 4087.

Interestingly, 16% of respondents said they recycle toothpaste tubes every time, despite the fact that the vast majority of toothpaste tubes are unable to be recycled or placed at kerbside for collection. Again, a concern for non-target plastics being placed in kerbside recycling.



Male respondents were more likely than average to say they never recycle (47%) and less likely to say they would recycle if they knew how (19%).

The younger the respondent, the more likely they were to say they never recycle. 44% of the 44 and under group chose this option compared to 38% of the 45 and over age group. This is the most prevalent with the oldest age group, with only 35% of the 65 and over age group saying they never recycle, and 22% saying they always recycle. Those who live in a bungalow were more likely to say they recycle every time (26%).

North East and North West England, along with Scotland, were all more likely than average to say they would recycle if they knew how, with 37%, 34% and 38% respectively. East Midlands, East of England and Yorkshire & the Humber were all more likely than average to say they never recycle, with 48%, 45% and 50% respectively.

The Welsh respondents were more likely to say they recycle every time (28%), whereas the Scottish respondents were more likely to say they would recycle if they knew how (38%).

Demographic Profiles

Throughout all categories, it was noted that there seemed to be some correlation between certain demographic groups and their response choices. It was particularly notable were the relationship between younger respondents and those who lived in flats, as well as older respondents and those who lived in bungalows. It was therefore decided it would be worthwhile to group these together to see if there was a major difference between these 2 groups and their behaviours, in order to provide a generic profile of the respondents.

It was found that almost 1 in 5 respondents aged 34 and under live in a flat. This is double the proportion of respondents aged 45 and over that live in flats (18% vs 9%). It was also found that 16% of 65 and over respondents live in a bungalow, up from 3% of respondents 44 and under.

Overall, the respondents 34 and under who live in flats were less likely to say they recycle every time, instead being more likely to be confused about the item's recyclability, more likely to never recycle, or more likely to say they would recycle if they knew how. This is in contrast to the respondents 65 and over who live in bungalows, who are more confident and are more likely to say they recycle every time, even with more complex items such as toothpaste tubes.

Variables and Influences

Service Provision/Consistency

There is a general belief that the one key barrier to lower than desired plastics recycling rates is the inconsistency in provision across the UK. A criticism of the system being that inconsistencies in recycling rules and provisions across Local Authorities leads to inconsistencies in behaviours and conflict in understanding the items that are suitable for recycling.

The survey places the results of claimed behaviours against the UK household collection rates. With bottle collection rates of 61% and pots, tubs, and tray rate of 36%. And yet every single Local Authority in the UK now collects plastic bottles kerbside, however citizens are still not placing for recycling 39% of what they buy. With 87% of Local Councils supporting pots, tubs, and tray recycling kerbside, this represents considerable coverage of the UK and yet 64% of what consumers buy is not being placed for recycling kerbside.

Being consistent with collection provision does not, it would appear, necessarily bring the desired reward.

Looking at films and flexible packaging whilst only 13% of Local Authorities collect this kerbside. Advances in front of store collection schemes are a step in the right direction, however, only 9% of the survey respondents claim to use local schemes. With 11% of people being confused about whether such plastic is recyclable or not and 38% not recycling because their local authority does not accept any films or flexible packaging, the options for recycling other than kerbside such as front of store is not always taken up.

However, would also appear to be an issue with unintended contamination of kerbside recycling with citizens claiming to recycle items kerbside that are highly likely to be non-target, such as toothpaste tubes, films and flexibles including carrier bags.

Labelling & Confusion

This survey focused on gaining insights on behaviours and therefore did not ask any specific questions on pack labelling or symbols. There were indications when asking about behaviours surrounding pots, tubs, and trays, that a higher proportion of individuals were confused about whether a pack was recyclable.

In reality drinks bottles are more likely to be labelled and this is the highest declared rate of recycling at 95%. The rate of those respondents declaring to recycle every time dip on the more complex items of packaging.

The highest level of confusion however was on food trays and containers which could be due to lack labelling, or uncertainty of what constitutes a food tray, or uncertainty about cleaning. Food trays and containers are more likely to require cleaning before recycling.

When it comes to items such as some flexible packaging and more complex plastics packs such as toothpaste tubes (which are a non-target item for UK Local Authority kerbside collections), the answers are even more complex. 16% of respondents said they recycle every time, with 11% being confused and 26% saying they would if they could but don't know how to.

Some technical advances have recently been made and some toothpaste tubes are now produced in a single/mono polymer rendering the pack technically capable of being recycled. These mono material packs are starting to include an instruction that the tube is recyclable, yet this is not a target item for Local Authority kerbside collection due to the issues and challenges for with sorting, capture, and end markets.

RECoup previously carried out a case study highlighting the issues relating to capture, sorting, and recycling of toothpaste tubes in a Recyclability by Design 2020 Case Study of Beauty and Personal Care Products⁶.

Demographic Influences/Segmentation Indications

The responses indicate that the older age groups are more likely to try to recycle plastics packaging every time as are those people who live in a bungalow.

The younger respondents were more likely to say they never recycle. In all categories the older respondents (45+) said they were more likely to recycle every time.

Those who lived in flats were in general more likely to be confused about recyclability and more likely to never recycle. In general, these respondents were also more likely to be under 34. The question remains whether the fact that they were less likely to recycle every time was to do with the service provision, which can be less convenient for flat or apartment residents or the communications not resonating with the younger age group.

Male respondents in this survey were 47% more likely to say they never recycle toothpaste tubes.

⁶ <https://www.recoup.org/p/173/recoup-reports>

Messaging

Recycling plastics packaging is not intuitive. For the majority of citizens, it is not something that is instinctive due to the many different, shapes, sizes, colours, and combinations that plastics packaging is produced. Packs also need to contain product and nutritional information as well as conveying brand and being fit for purpose; recycling messaging has to compete with all these other pre-requisites. The more complicated the pack the more respondents to this survey were confused and the more likely they did not recycle.

There was an increase in the number of respondents claiming that they would recycle if they knew how to rise in the more complicated items of packaging, with 25% of respondents claiming they would toothpaste tubes if they knew how to. 11% also said they were confused about toothpaste tube recyclability.

The same trend appeared with pet food pouches (7% were confused and 12% would recycle if they could).

Confusion also rose when it came to cooked food or ready meal trays which could be due to contamination and cleaning concerns or the fact that many trays in this category are coloured plastic including black and black is often a Local Authority non-target item. The move away from the 'check locally' instructions on OPRL labelling to a binary system should help to reduce confusion in this category over time.

However, it should be noted that there may be items that will continue to confuse if the OPRL label shows 'recyclable' but the item such as black plastic, toothpaste tubes, not only can this add to confusion, but it can also add to contamination. WRAP, Plastics Tracking Survey 2021, Behaviours, Attitudes, and Awareness around Plastic Waste⁷, where 27% of their respondents said they placed toothpaste tubes for recycling kerbside when they were not accepted. The report stated "that results show that the past year has seen increases in contamination with toothpaste tubes, thin plastic carrier bags and bubble wrap/plastic packaging.

Complex Packaging and Cleaning

It is quite an obvious assumption to make that the less complex the pack the more likely it is to be recycled.

Looking at the simplest plastic packaging, the plastic bottle with overall 95% of respondents claiming to recycle the drinks bottle, as the pack became more complex, required more consideration to the top, or contents to clean only 80% of respondents declared they recycle sauce bottles every time – a drop of 15%.

⁷ <https://wrap.org.uk/resources/report/recycling-tracker-report-2021-behaviours-attitudes-and-awareness-around-recycling>



70% of respondents declared that they recycle pots, tubs, and trays every time. However, this drops to 62% with fresh meat trays and only 53% with cooked trays. When recycling clear fruit and vegetable trays 73% of respondents said they recycle every time.

Figure 21: example of cooked food tray.

The easier it is to recycle the more likely it is citizens will follow this through. Pre-cleaning and preparation of the pack remains a barrier. We have to ask ourselves how likely it is that citizens will take the time and effort to clean trays such as the image above before recycling and if the request to do so acts as a barrier.

Recommendations/Further Work

Pack Claims in Conflict v Local Authority Target Material

The aspirations of the eutopia of consistency in collections can only be effective if it is matched with consistency in pack design and labelling. Whilst labelling on the pack and the 'target/non-target' materials for recycling via Local kerbside collections continue to conflict so will the citizens understanding and therefore confusion.

Ahead of any consistency legislation while we still have 13% of Local Authorities not collecting pots, tubs and trays kerbside citizens will continue to be confused as items such as meat, fruit and veg trays, margarine tubs, ice-cream tubs etc carry clear recyclable labelling instructions where that conflicts with local instructions. These items are currently supported for capture and sorting by UK infrastructure unlike more complex plastics packaging and therefore could form 'easy wins' in terms of increasing plastics collected for recycling kerbside.

However, as some pack designs develop, particularly in terms of flexible plastics and with a move away from laminated flexibles to mono solutions packs may be declared 'recyclable' as this may be possible in terms of technical capabilities however this will continue to be in conflict with local instructions as sorting and capture capabilities remain a challenge. Whilst it is difficult to move all parts of the value chain forward with synergy, with collaboration and communication across all sectors should be encouraged to minimise confusion.

Making it as simple and easy for consumers to recycle is key and whilst some residents are prepared to use alternatives to kerbside collection for the recycling of films and flexibles, others are less willing.

Kerbside consistency in line with waste management capabilities is essential.

Claimed and Actual Behavioural Differences

Although 95% of responses to the survey claimed to recycle plastic drinks bottles every time this should be put against the context of the plastics percentages collected kerbside. Although this report is based on the survey input online the communications to the team would indicate that long termed sustained behaviour can be quite different. The RECOUP UK Household Plastics Collection Survey 2021 indicates that around 75% of plastic drinks bottles purchased were being placed for collection. This is set against a time during the pandemic when on-the-go or away from the home recycling behaviours would be minimal.

All responses should be put against the context of claimed behaviours against actual kerbside collection rates. A 95% claimed recycling rate of plastic drinks bottles should manifest itself in a higher than 75% for PET bottles and 78% natural HDPE. Citizens declaring to recycle every time bottles from the kitchen and bathroom such as shampoo bottles (83%) and cleaning product bottles and sauce bottles at 80% are much higher than the 45% non-drinks bottles collection rate as per the RECOUP UK Household Plastics Collection Survey 2021.

There is a need to understand the relationship between claimed and actual behaviours which may shed light on the changes needed to achieve desired plastics collection rates.

Plastics Recycling Messaging

Despite the focus on improving recycling education, pack labelling and the drive for consistency, there has been noticeable transformation in plastics recycling behaviours over recent years. The RECOUP 2020 UK Household Plastics Collection Survey 2020 reported collection rates for plastics of 59% for plastic bottles, 33% for pots, tubs, and trays, and 7% for film. In the 2021 report this had marginally increased to 61% plastic bottles, 36% pots, tubs, and trays and 8% film.

Looking at citizen barriers to recycling and confusion the same challenges remain as identified in the insight work carried out in 2019. This prompts the question of whether citizens are open to and willing to respond to plastics recycling messages or calls to action.

Communicators continue to compete against the myths and attention seeking headlines of the UK media. Plastics packaging issues have been reported across all media channels with criticism of recycling effectiveness from challenges on black plastics, recycling exports, to the issues of ocean plastics and plastics pollution. This negative messaging sows the seed of doubt in the mind of the citizen and makes it even harder for individuals to be open and responsive to the call for action.

Recycling is also a process that is part of an individual's objective knowledge⁸ and is stored in a person's memory without whether it is correct or not. Thus, citizens often think they know more than they do about the topic. The challenge here is how to encourage an individual to be open to adjustments in their subjective knowledge, i.e., what they think they know about the topic and thus correct and adjust their behaviour, so their objective knowledge becomes factually correct and accurate.

⁸ [Drawing on Subjective Knowledge and Information Receptivity to Examine an Environmental Sustainability Policy: Insights from the UK's Bag Charge Policy \(cranfield.ac.uk\)](https://cranfield.ac.uk/research/insights/drawing-on-subjective-knowledge-and-information-receptivity-to-examine-an-environmental-sustainability-policy/)

The delivery methods of plastics recycling messages continue to be via the Local Authority or Waste Partnership in line with the local recycling contracts. Thus, small increases in recycling behaviours are seen alongside service changes. However, as we move towards consistency in kerbside collections, we must ask the question if this should remain the primary route to deliver plastics recycling awareness and drive behaviour change.

RECOUP and the Pledge2Recycle Plastics team are currently leading on a project across 13 Kent Councils⁹ with Kent Resource Partnership to seek answers to the relationship between recycling communications and behaviour change. The project is aimed at turning Kent into a 'Live Lab' to understand if the existing methods of communicating with individuals and communities on plastics recycling can be effective.

The project is supported by the plastics recycling value chain with Innovate UK grant support and industry partners. Results on this work are due to be in the open domain July 2022.

RECOUP feel the analysis of the work in Kent will shed light both on actual recycling tonnages, quality of recyclate and contamination, understanding and perspectives by residents.

Early indications from the engagement so far are that when we spend time and effort to explain to citizens the recycling journey; the importance of the instructions and why; what happens to material once its collected; how its sorted; and the products that are already in the high street made from plastics packaging they have may have recycled, then citizens understand and are more likely to adopt long-term behaviour change. This also supports INCPEN's¹⁰ recent study showed understanding the recycling journey can be a key motivator to positive recycling behaviours.

⁹ <https://www.recoup.org/news/8115/recoup-win-innovate-uk-funding-for-plastics-recycling-communications-research>

¹⁰ [Lack of information on what happens to recyclates after collection risks undermining public confidence in recycling – INCPEN](#)



REcycling of Used Plastics Limited (RECOUP)
Registered Charity No: 1072029 & Company Registration No: 02435729
1 Metro Centre, Welbeck Way, Woodston, Peterborough, UK, PE2 7UH
t: +44 (0)1733 390021 e: enquiry@recoup.org w: www.recoup.org



@Recoup_UK
@pledge2recycle

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