



wrap

Barriers to Recycling, 17 March 2015

WRAP

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Evidence (1)

Barriers to Recycling Literature Review

- **Update insights on barriers to recycling with a particular focus on:**
 - impact of scheme changes including the addition of new materials,
 - demographic changes
 - the issue of quality
- **Over 130 documents obtained post-2008**
 - WRAP, academia, from LAs, government
- **99 items of evidence deemed 'in-scope' and incorporated in the review**

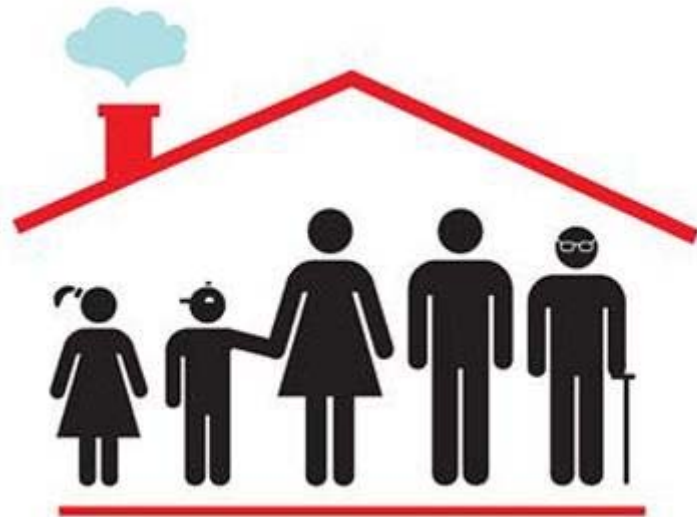
Evidence (2)

3Rs (Recycle, Reuse, Repair) Tracking survey

- Every year since 2011
- Took the place of the Recycle Now Tracker
- Explores (claimed) behaviour, attitudes, knowledge
- Sample of 1,800 for England, conducted online

Four key types of barrier dominate

- **Situational** – system and property type
- **Knowledge** – understanding how to use the system
- **Behaviour** – how people use the system
- **Attitudes** – what motivates people to act



SITUATIONAL BARRIERS

Service and infrastructure Inadequacies of infrastructure & system

- Bin size unsuitable for dwelling
- Bin size inadequate for volumes (overspill gets put into the residual)
- Bin / caddy / liner problems for food

Collection service failures

- No bins / lost bins / 'bust' bins
- Missed collections / weather



Property type

- **Flats and apartments present major obstacles**
 - 'Flats' cover range of very different premises
 - Constraints of internal and communal space
 - Demographics of flat-dwellers
 - Often transient / young / new migrant
 - Often detached from local 'community'
 - Much higher % say they can't be bothered
 - Large minority also say there should be more frequent collections

The growing private rented sector....

- PRS the most rapidly growing tenure - 18%
- Students, young single / couples in transit
- Individuals in challenging circumstances – family break-up, domestic violence, mental health issues
- 'Itinerant professionals' working away on contracts
- Barriers – poor collection infrastructure, mobility, difficult comms channel access

The role of household dynamics

Current model:

Communications

Individual

Other household
members

Effective household
recycling

Household, not just individual, is the 'behavioural unit'

Role of others in household labour

More than one family unit living in an individual property

Role of children (pester power)

Individuals living in more than one property



Right stuff. Right bin.

Simple as.  recycle for Greater Manchester 

We can save £25 million for our public services.

That's how much incorrect recycling costs Greater Manchester every year.

 recycle for Greater Manchester 



KNOWLEDGE BARRIERS

Barriers through a dynamic not static model

Evidence shows there need to accommodate change as a major variable – both *people* and *service*

Residents face regular changes in waste service, and need to regularly re-learn:

- New materials
- New shape and size of containers
- Frequency of collection
- Specifications of wanted / unwanted materials

Population mobility:

- On average 8% of householders mover home every year
- In some areas this can be as high as 30%
- Global population mobility adds to communication challenges

Knowledge barriers: Plastics

- What's accepted
- Rules keep changing
- Differs from place to place
- Types of packaging or types of plastic
- Kitchenware / toys?
- Lids on or off bottles?
- Rinsing or washing?
- Need for separation – e.g. film lids, trigger cleaners
- “It's all gone too far”



Knowledge barriers: Plastics

I always check for the little triangle mark on plastic. If it has this on it I recycle it, but if not I put it in the rubbish bin. It would be helpful to have some information on recycling symbols.



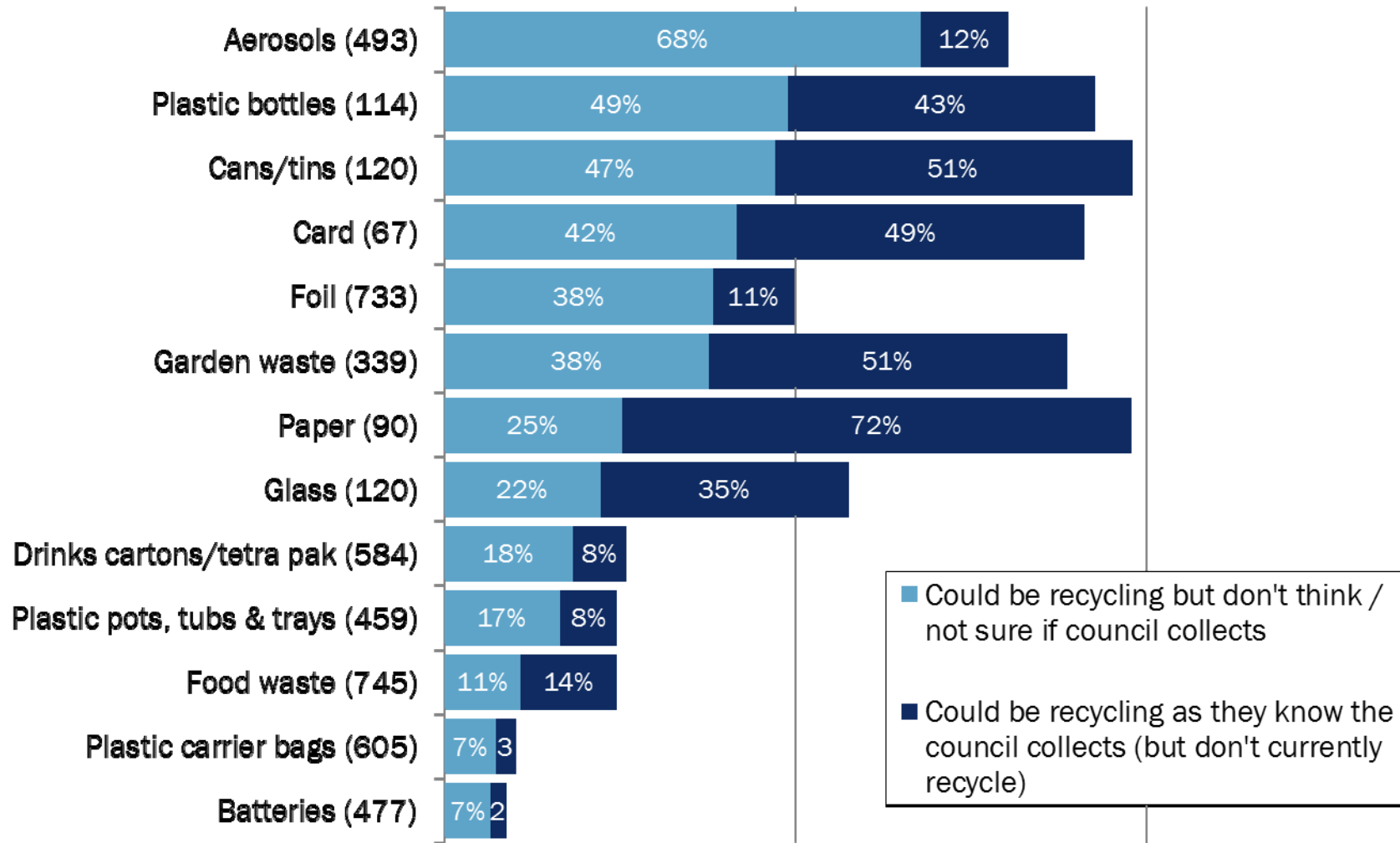
Knowledge barriers: Food

- Poor conceptual understanding of food waste 'recycling'
- The recovery of value (including energy from AD) could be a more persuasive concept.
- Limited perceptual understanding of what is meant by 'food waste' of plate scrapings and vegetable peelings.
- In particular, unopened packaged food is often not seen as 'food waste'
- Issues about how to use the caddies



The proportion of households currently disposing of items in the bin that could be recycling the material kerbside

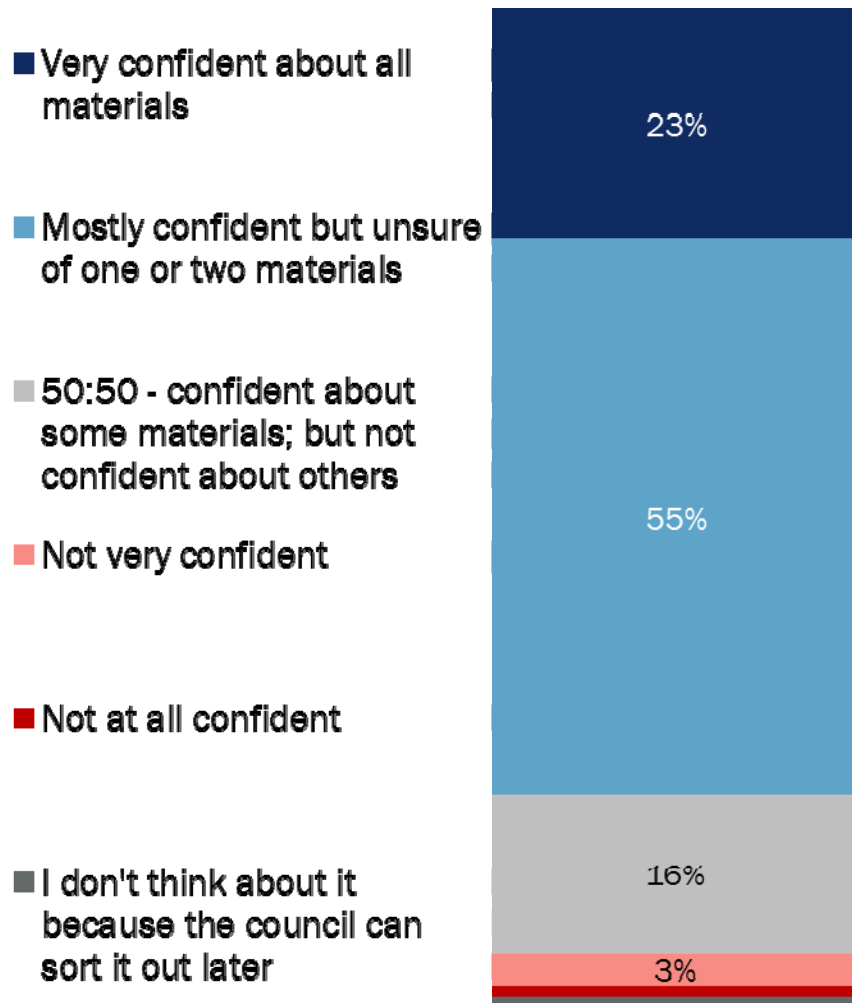
This graph shows the % of households who dispose of materials in the bin (or take it to the tip for food and garden waste) who could be recycling kerbside because the material is collected. NB – the missing part of the bar represents those who do not have a collection service



Confidence over what they can recycle kerbside

17

Q31 – Overall, how confident are you about which materials can be put in the recycling collection and which cannot?



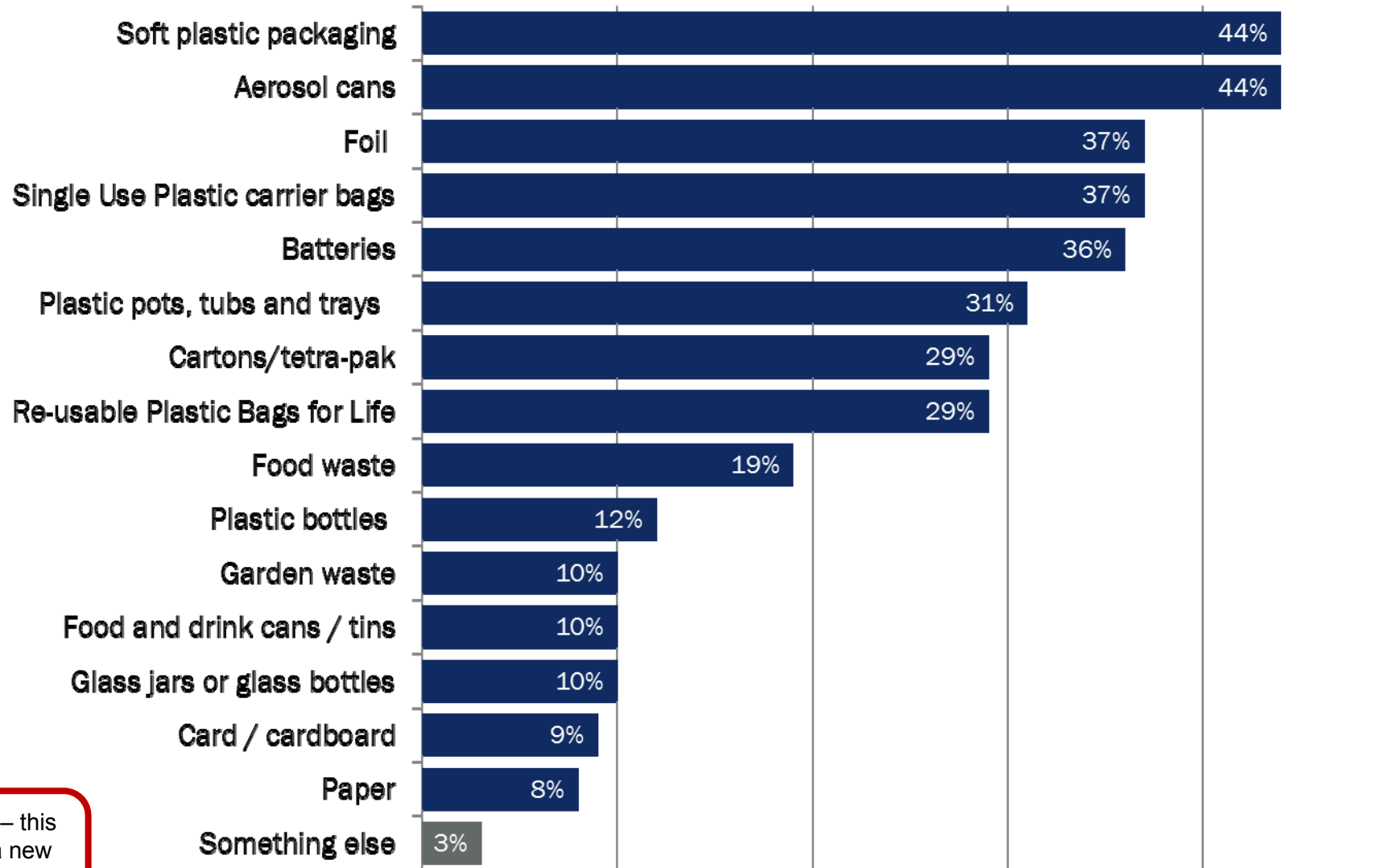
- Younger age groups are less likely to be fully confident. For instance: 36% of those aged 18-24 say their confidence is 50:50 or lower.
- This compares to just 14% of those aged over 45 who say the same.

NB – this is a new question for 2014

Base: All, UK (2,176), 3Rs survey Feb 2014

Which items are they less confident about?

Q31a – Which items are you less confident about being able to put in the recycling collection? MULTICODE



NB – this is a new question for 2014



Base: All who are not completely confident about what they can recycle, UK (1,639), 3Rs survey Feb 2014



ATTITUDINAL BARRIERS

*AND
THE
BENEFITS?*

Relationship with the community

- Link between receptiveness to recycling requirements and the strength of their positive relationship with their community
- This is true of both their feelings towards their neighbourhood and their council
- Some evidence of success of community reward schemes
- Trust is important. Commitment undermined by perceptions that “it all goes to China anyway” or “we’re doing the council’s job for them”

Relationship with the council

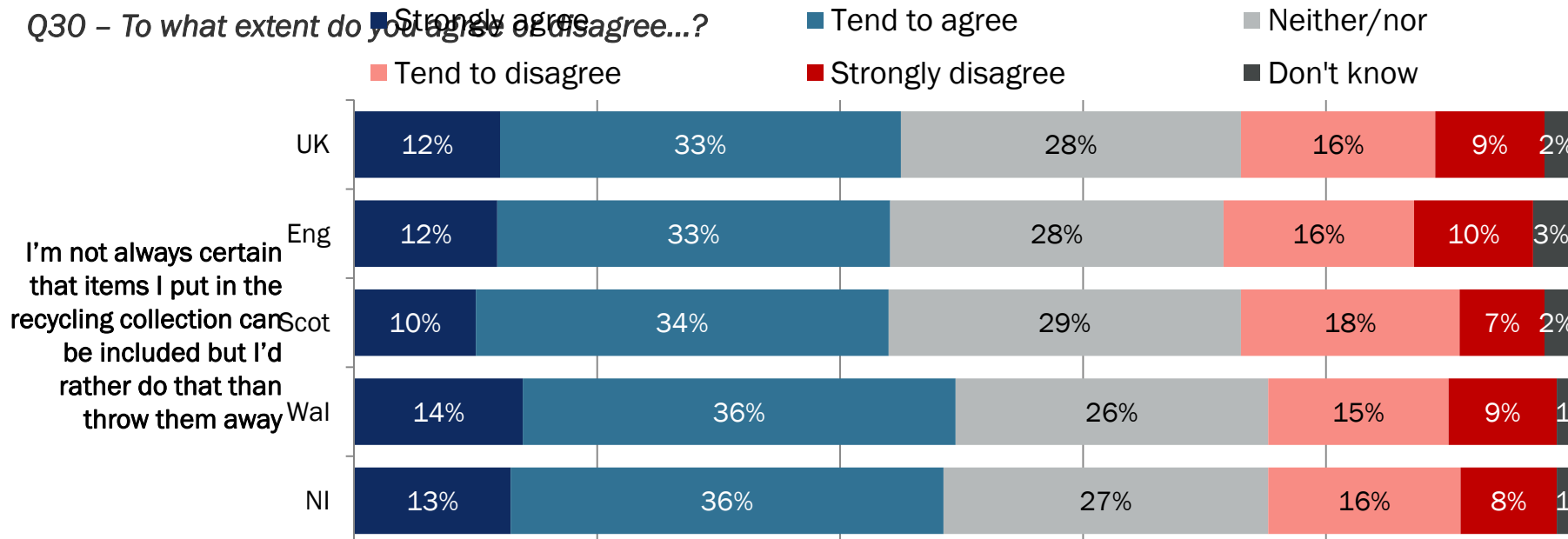
If you could see that that money is getting put back into the community, then you would think that is great, it might just be a bit more of an incentive.

We pay you for the service and yet we have to do all the leg work! This is too much to expect of people. We cannot all be experts in recycling, the whole system needs to be simplified and less strenuous too.

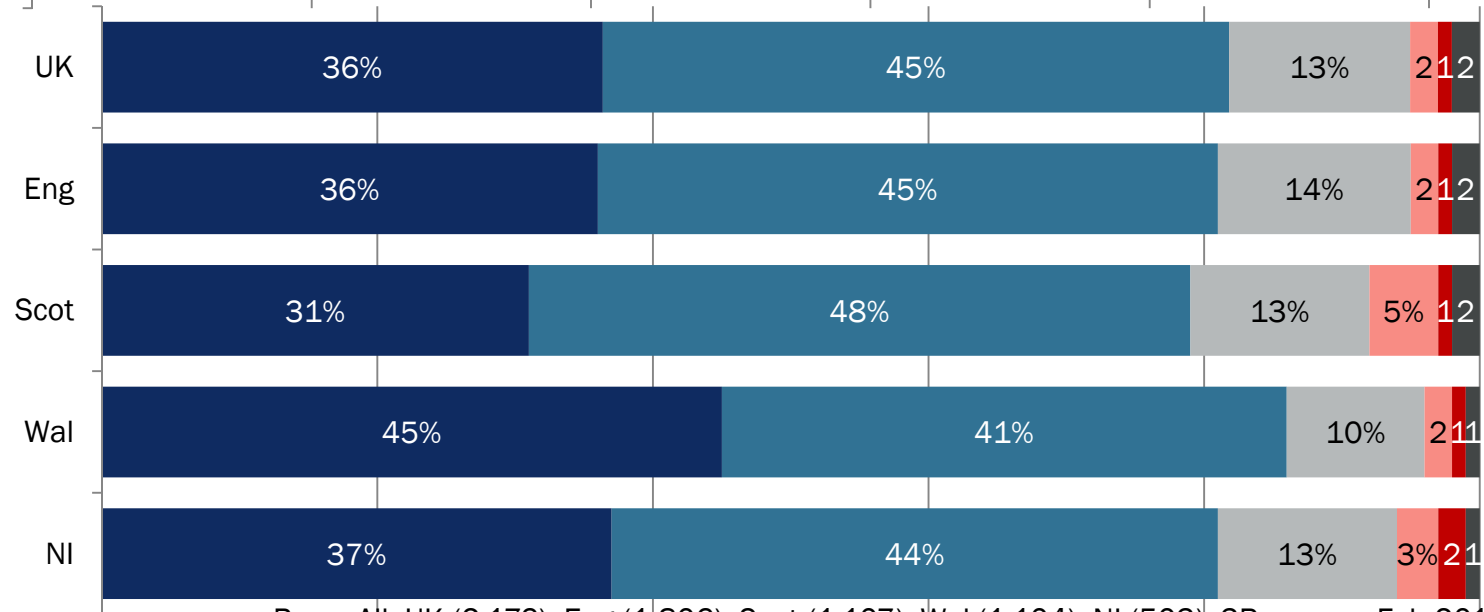
The recycling bins have not got anything like the capacity needed for the amount of people using them. They're full within a couple of days. And they collect everything together – the rubbish and the recycling – and it goes off in the same truck. So I'm not convinced that it is actually recycled

Attitudes to recycling

Q30 – To what extent do you agree or disagree...?



Considering what is collected, I feel I am doing as well as I can with my recycling at the moment



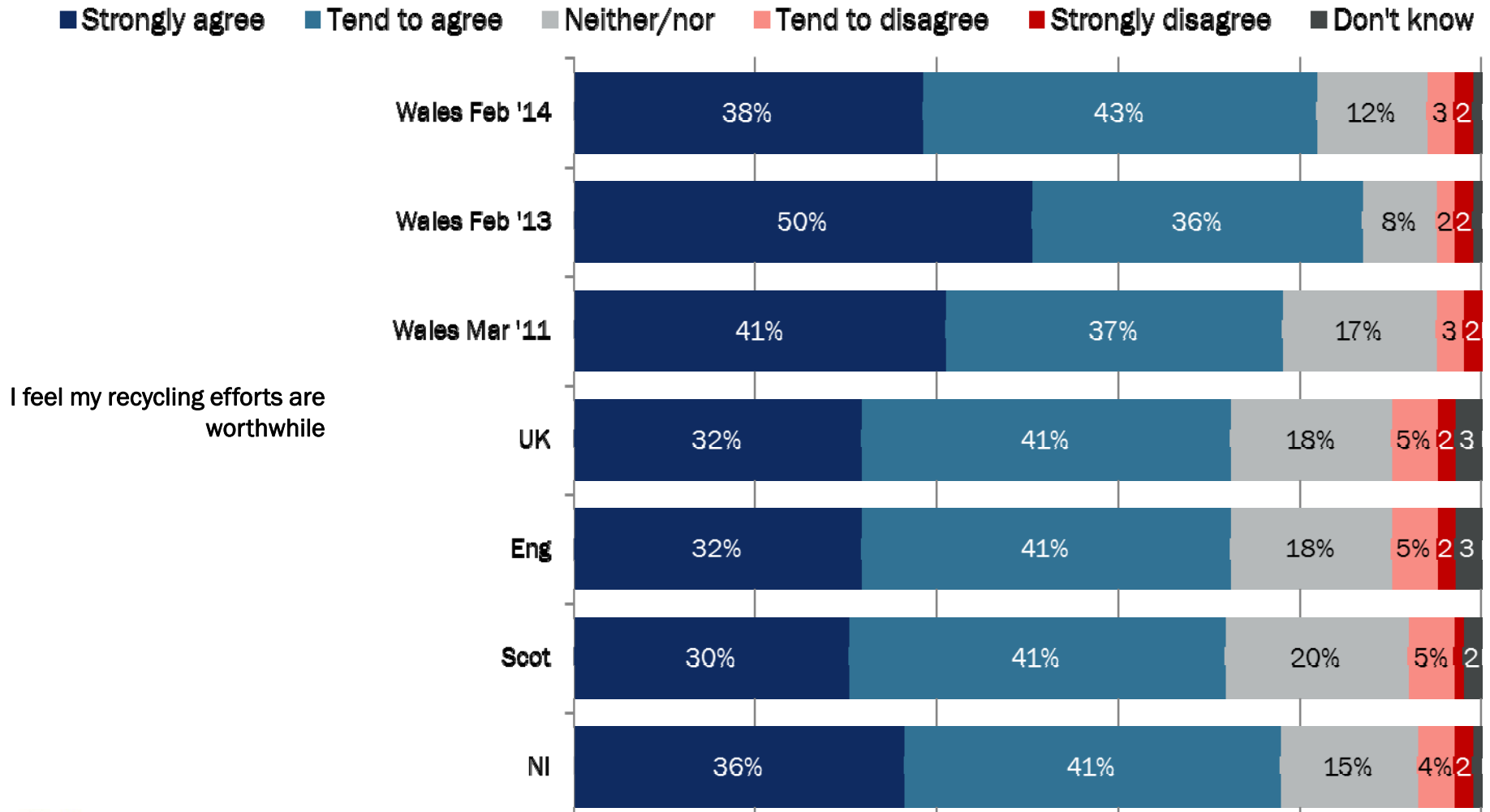
NB – note that all Q30 statements in 2014 are asked of all nations

Base: All, UK (2,176); Eng (1,806); Scot (1,107); Wal (1,104); NI (503), 3Rs survey Feb 2014

Attitudes to recycling

Q30 – To what extent do you agree or disagree...? WALES TIME-SERIES DATA

NB The Wales 2011 data did not include a “don’t know” option so use these comparisons with care.



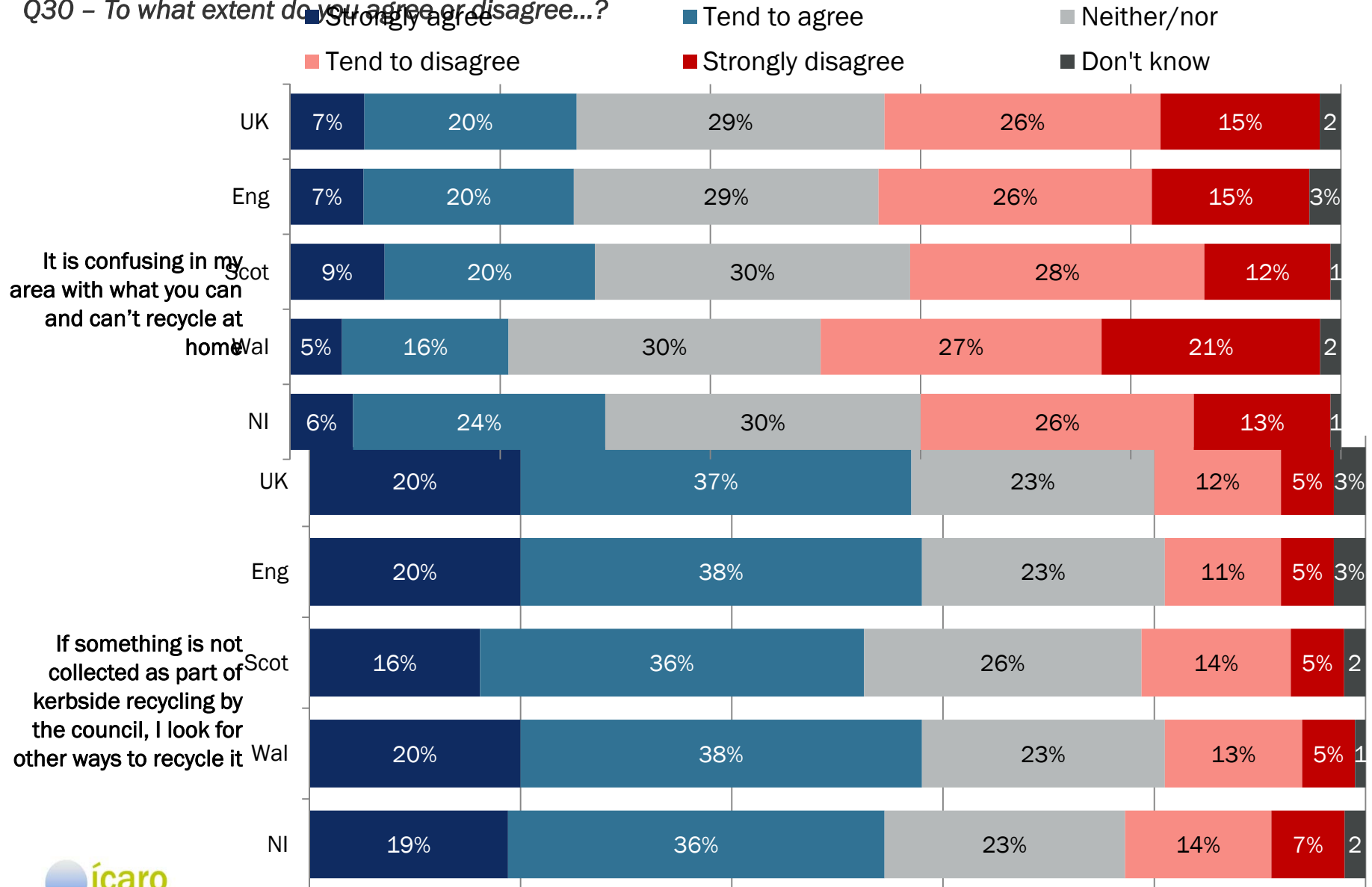
I feel my recycling efforts are worthwhile



Base: All, UK (2,176); Eng (1,806); Scot (1,107); Wal Feb '14 (1,104); Feb '13 (1,069); Mar '11 (1,100); NI (503), 3Rs survey Feb 2014

Attitudes to recycling

Q30 – To what extent do you agree or disagree...?

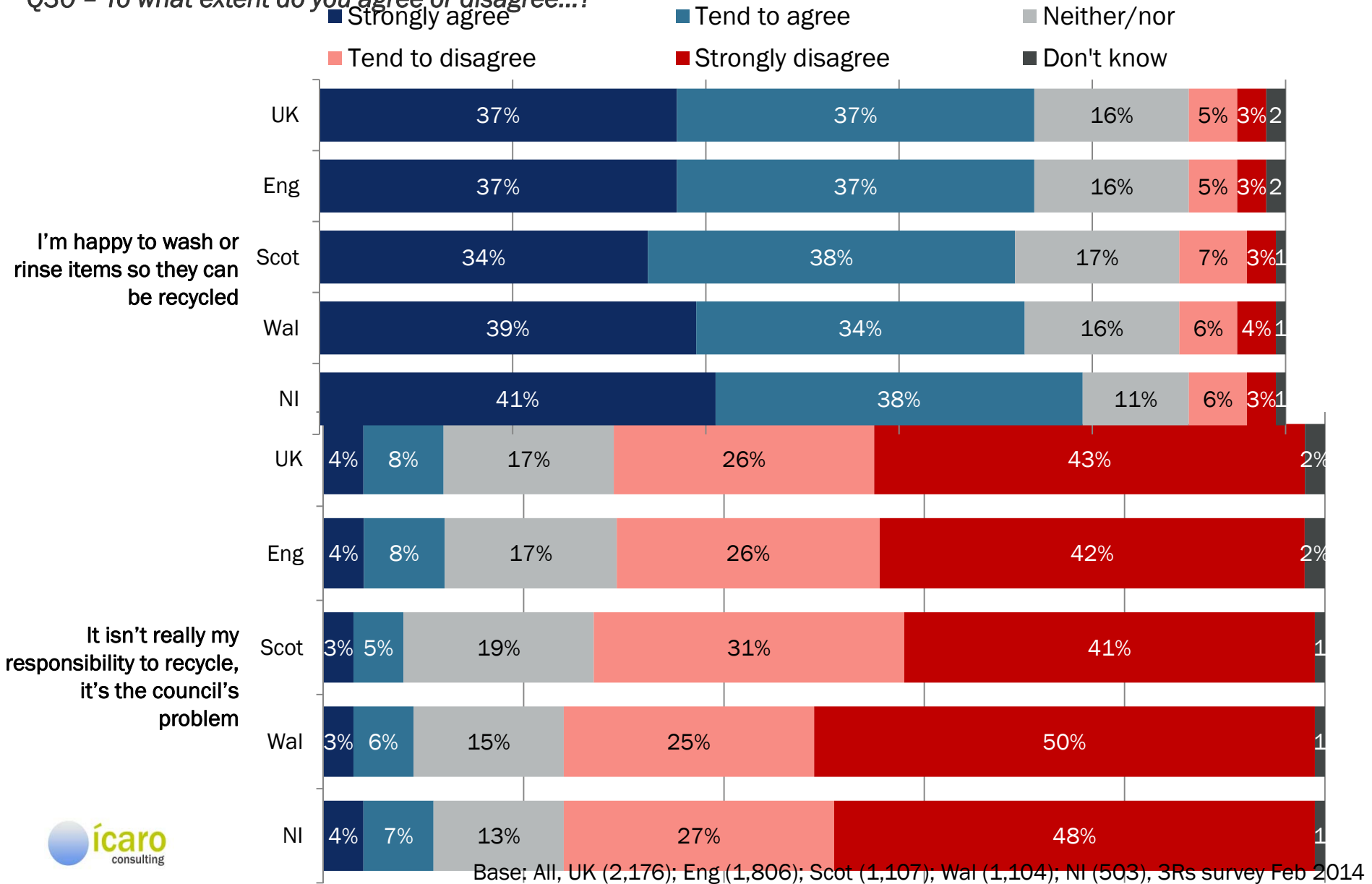


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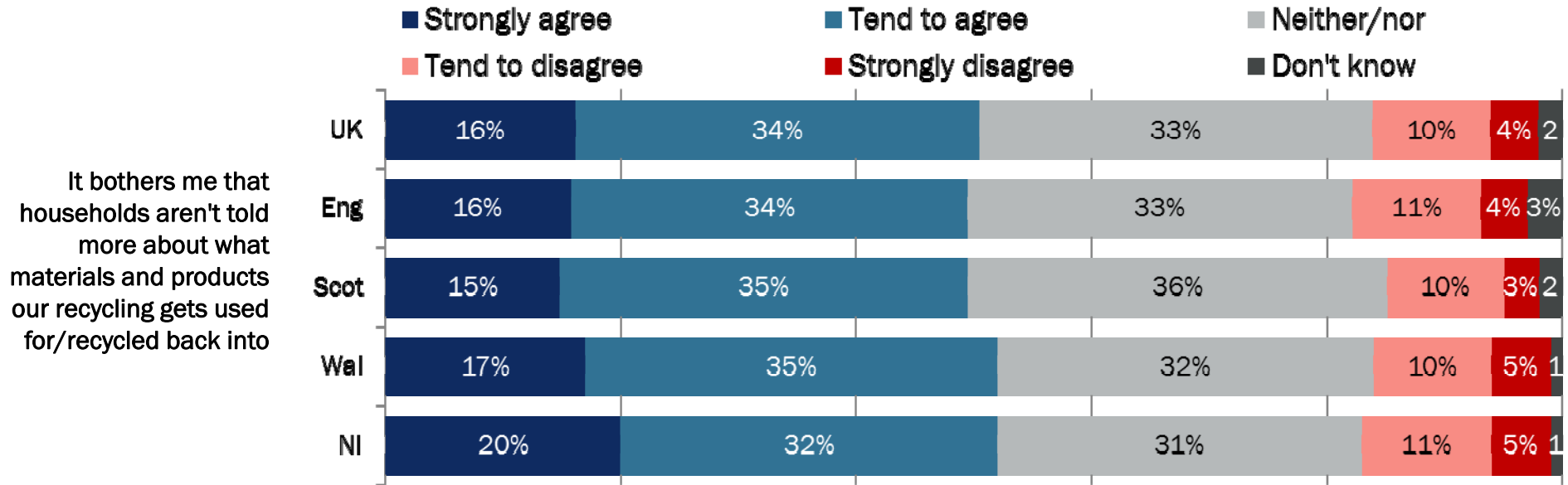
Attitudes to recycling

Q30 – To what extent do you agree or disagree...?



Attitudes to recycling

Q30 – To what extent do you agree or disagree...?





BEHAVIOURAL BARRIERS

Behavioural barriers

- Time / effort / space
- Household management – lack of ‘internal waste transfer stations’
- Habit and rhythm
- Rinsing requirements
- Paid for caddy liners

Washing vs rinsing

To be honest I throw away butter [tubs] because it's just impossible to wash them clean, even with very hot soapy water they are too greasy and horrible to recycle. Same with some other e.g. cat food / marmite jars – it's just impossible to get them clean enough, so I bin them

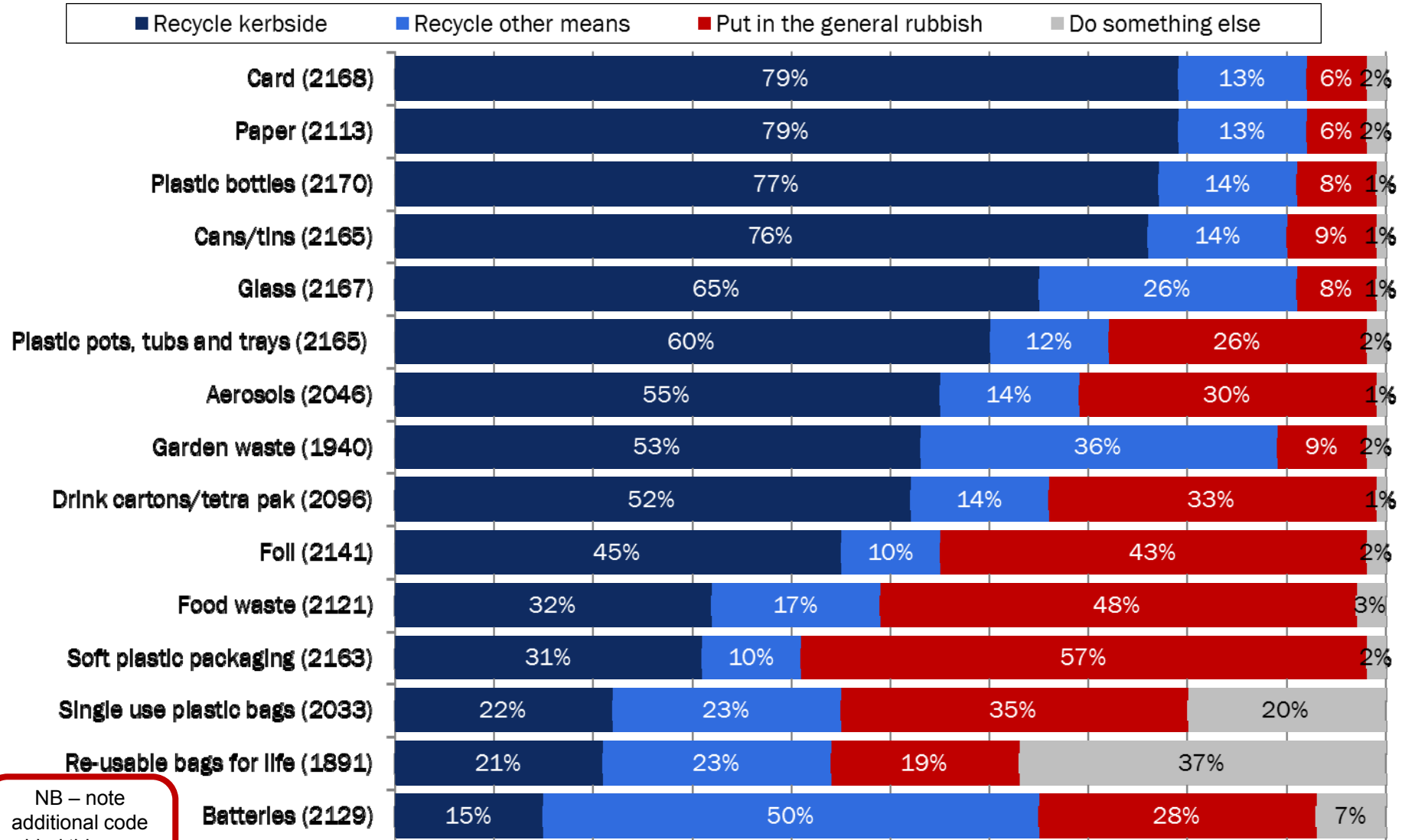
There is cleaning, and then there is rinsing it under the tap quickly. I think people would make more of an effort to just rinse it out.

Recycling behaviour...



Levels of recycling - by individual material

Q1a/b – For each of the items on the list please indicate how your household last disposed of them?

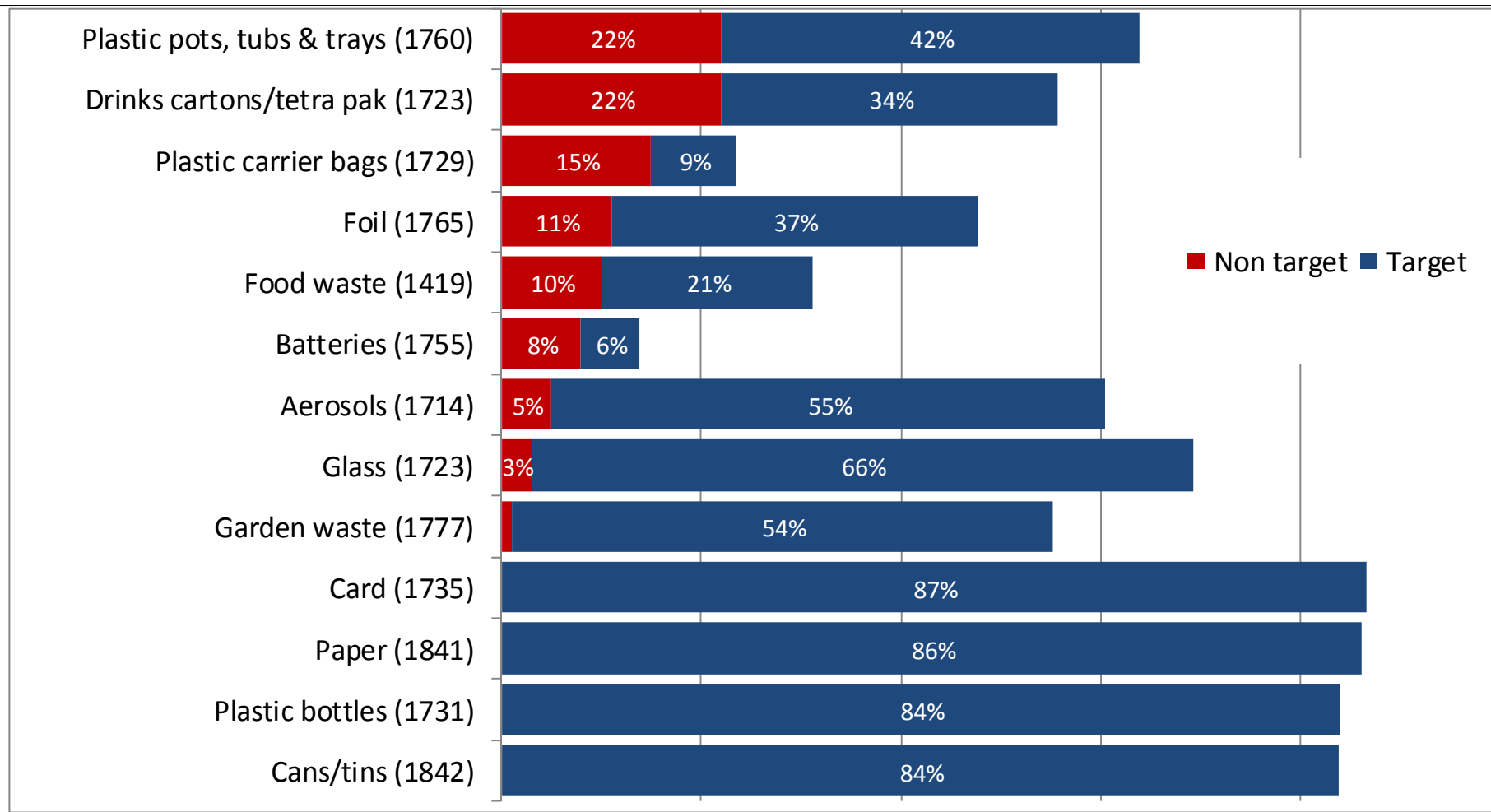


NB – note additional code added this wave that splits plastic bags

Base: Those creating each type of waste (base sizes for each material in brackets above), UK, 3Rs survey Feb 2014

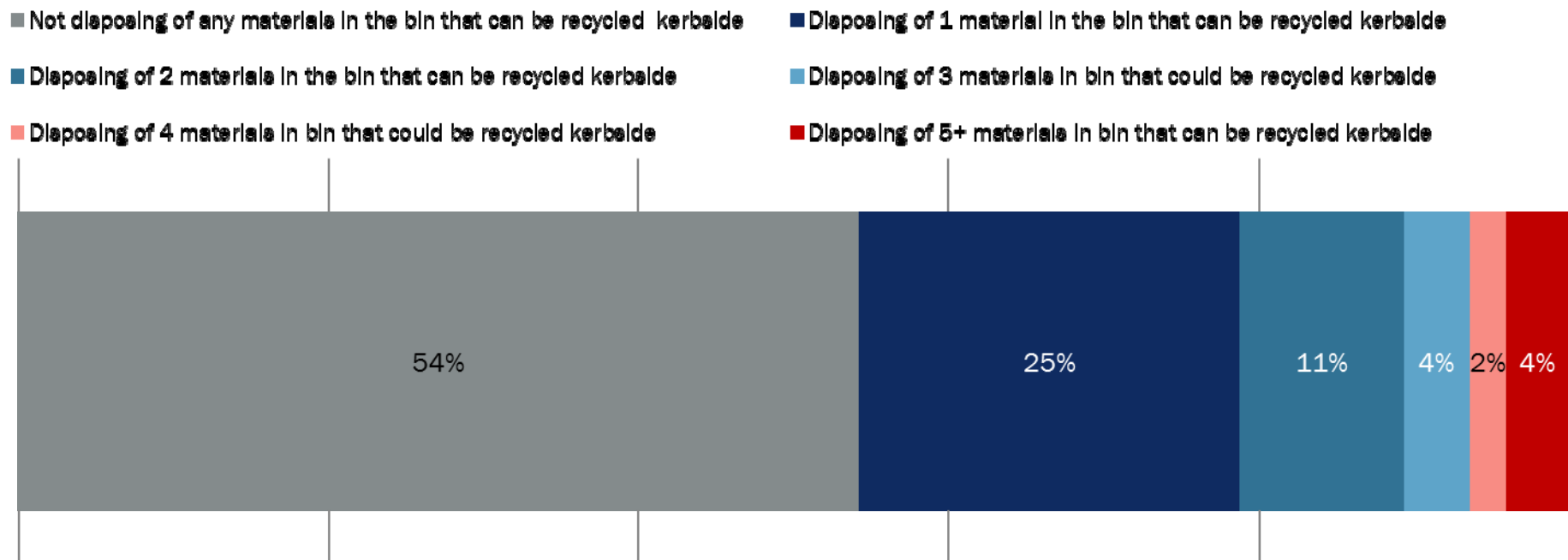
Levels of effective recycling at kerbside – by individual material

This graph shows the % of effective households at kerbside. ‘less effective’ (i.e. non-targeted items) refers to those respondents who say they recycle the material at kerbside when the data from their council suggests it is not collected. NB – the ‘missing’ part of the bar is people disposing of the item away from their kerbside collection e.g. in the bin etc.



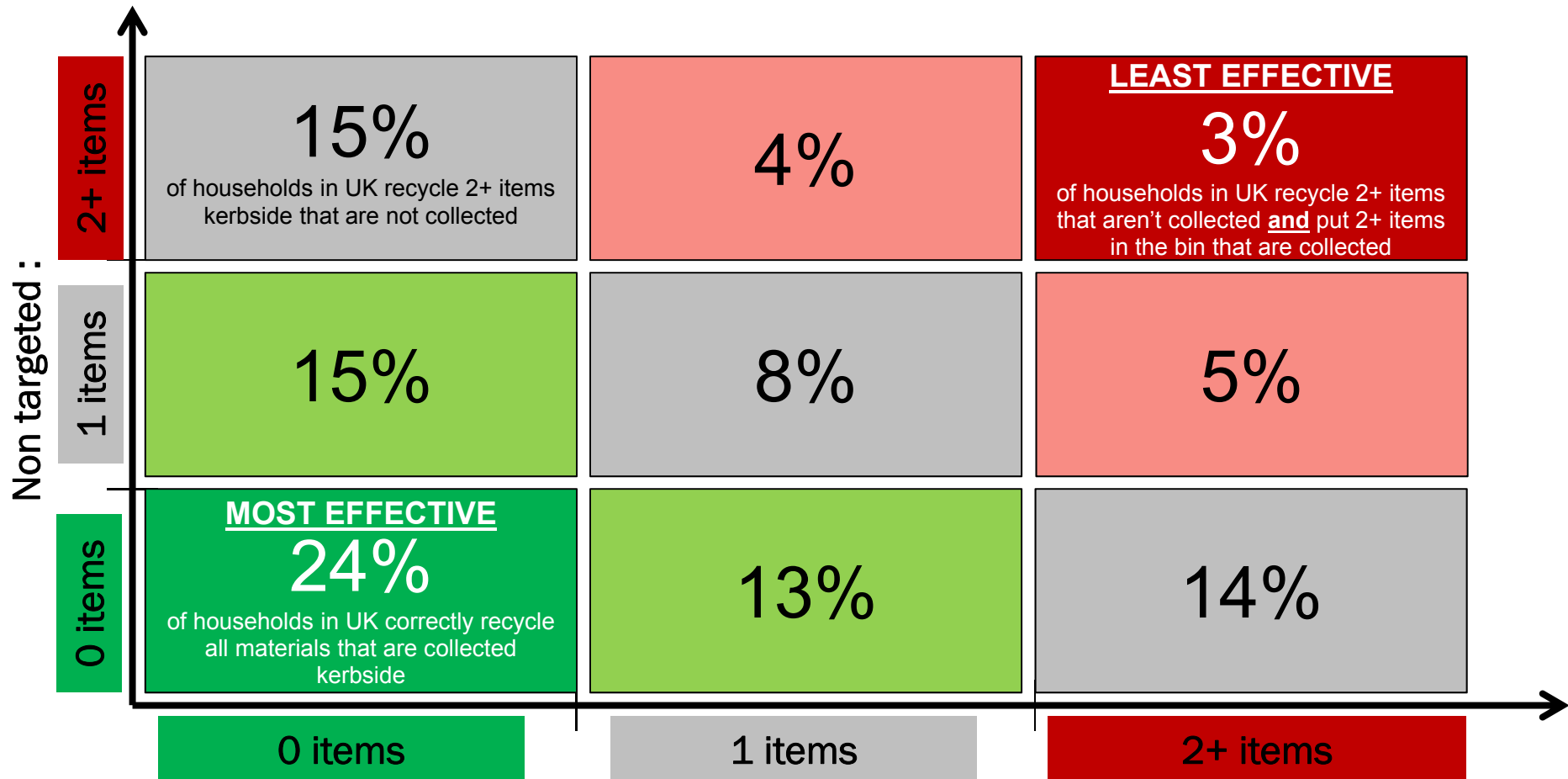
Understanding the potential to increase recycling at kerbside

Looking at the materials that households say that they currently put in the bin and comparing this to what their council recycles at kerbside, this graph shows the % of households who are putting items in the bin when they could be recycling them at kerbside. For example, 4% of households are putting 5 or more material in the bin that are collected kerbside.



Segmenting the population: mapping levels of recycling effectiveness (i.e. non-targeted items) against the potential to recycle at kerbside

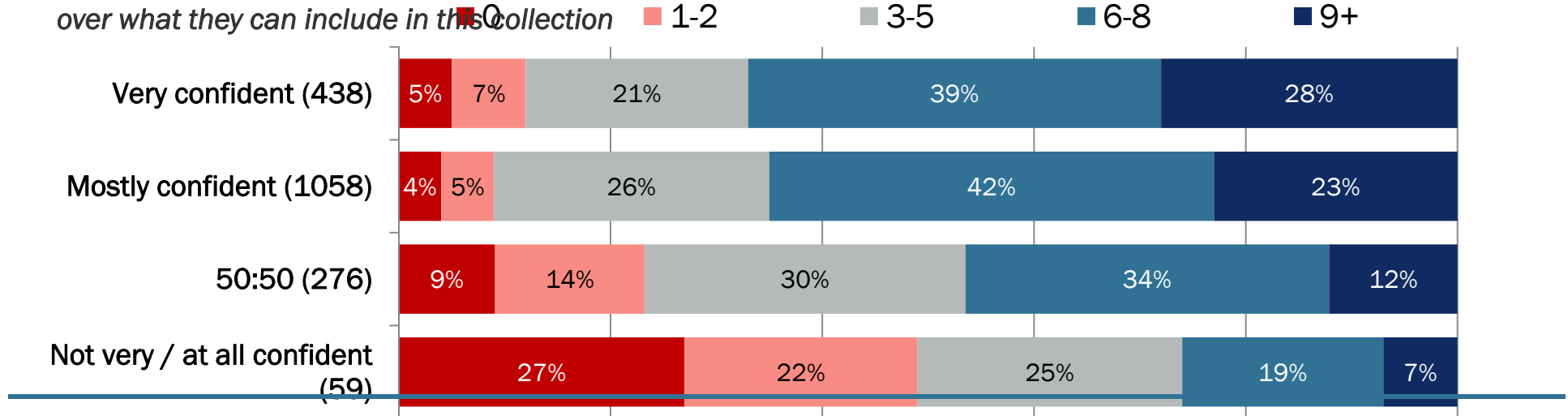
This table allocates households in UK into one of nine segments. The x axis represents the % of households that are currently putting one or more items in the bin when they could be recycling them kerbside. The Y axis represents the % of households who are incorrectly recycling items at kerbside that are not collected.



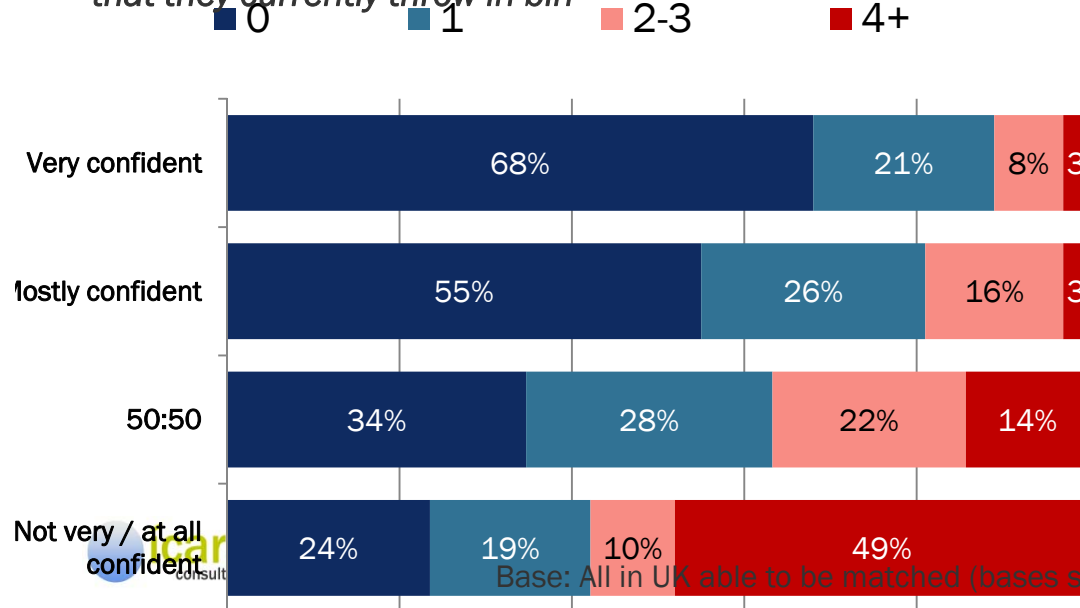
Number of items put in the bin that they could recycle kerbside:

Confidence vs. matched behaviour

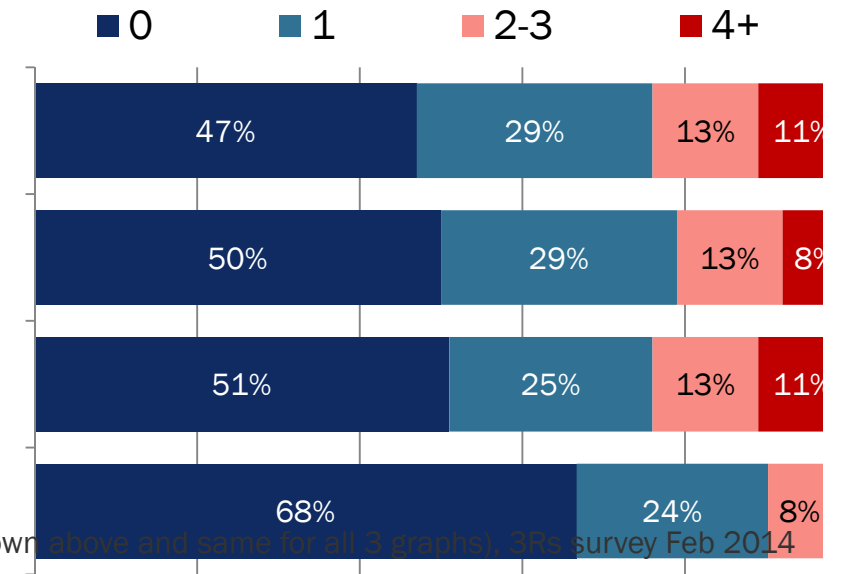
Matched data vs. Q31 – How many materials do they effectively recycle kerbside split by their level of confidence over what they can include in this collection



How many items could they recycle kerbside that they currently throw in bin



How many non targeted items



Base: All in UK able to be matched (bases shown above and same for all 3 graphs). 3Rs survey Feb 2014

Barriers are interdependent

Situational: Poor service – Attitudinal: why should I do my bit – Behavioural: in turn influences how much effort they make or how much time they are prepared to dedicate

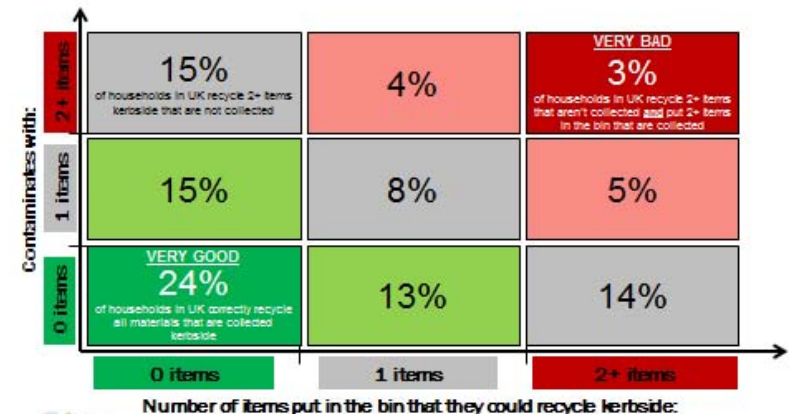
Personal: going through a divorce – Behavioural: other priorities – Situational: temporary private accommodation (knowledge; bins) – Attitudinal: lesser feelings of community

Further segmentation

- Focus on dry materials
- Combine with other scheme data
 - Av week containment capacity
 - Scheme type
 - Rurality
 - Average kg per hh per week
 - Frequency vs capacity
- Indicative groupings initially
- Secondary to actual recycling rates

Segmenting the population: mapping levels of incorrect recycling (i.e. contamination) against the potential to recycle more at kerbside 41

This table allocates households in UK into one of nine segments. The x axis represents the % of households that are currently putting one or more items in the bin when they could be recycling them kerbside. The Y axis represents the % of households who are incorrectly recycling items at kerbside that are not collected.



Summary 1

- Barriers are broadly the same as they were in 2008
- Behavioural and attitudinal barriers are often related to the property, household type and the collection system, so behaviour change interventions need to be custom-designed around specific circumstances

Summary 2

- There are new situational barriers such as those relating to specific types of tenure e.g. private renting, and for properties like flats.
- New barriers of knowledge and understanding arising that are highly specific to certain materials, in particular plastics and food.

Summary 3

- Evidence shows there is a need to accommodate change as a major variable – both *people* and *service*
- The household, not the individual, is the basic behavioural unit, but more needs to be known about recycling behaviour within the home if we are to get better at helping households make changes
- We need to find ways to communicate to the whole household

Summary 4

- A quarter of current recyclers are recycling all they can
- A quarter capture well, but add non-targeted items
- A little more than a quarter add non-targeted items but don't recycle all the materials they could
- A little under a quarter are the least effective both in not recycling what they could and adding non-targeted items

What's next

Evidence

- Barriers trials

Technical support for partners

- Publishing work around improving performance of weekly food collections
- Getting new videos and content onto WRAP web to help develop social norms for storage of food in home
- Probably focusing on improving performance in urban collections (e.g. flats). Will be preliminary research and then call for partner Authorities later in year.

Communications support for partners

- Refresh of Recycle Now and new 2 year strategy
- Recycling Locator
- Workshops for partners