

Waste and Recycling Background Information Report

Service provision

Bristol City Council (BCC) through its contractor Bristol Waste Company offers residents the following services:

- Weekly recycling collection – food, plastic (bottles, tubs and trays) cans, aerosols, foil, paper, cardboard, cartons, glass bottles and jars, clothes, shoes and textiles, batteries and small electrical items. Presented and sorted by residents into different containers (see appendix A);
- Fortnightly collection of non-recyclable waste - 180 litre black bin (larger communal bins for flats are provided where needed);
- Communal recycling bins for flats – paper, cardboard, mixed plastic (bottles, tubs, trays), metal cans, glass bottles and jars. Not all flats currently have recycling and a project is underway to provide all flats a recycling service;
- Two Reuse Recycling Centres (RRC) - maximising re-use and recycling. A third centre is opening in Hartcliffe in 2022;
- One reuse shop at the Avonmouth RRC and another two planned for Days Road and Hartcliffe. These three reuse shops will focus on repairing and selling low-cost household products;
- Opt-in fortnightly chargeable garden waste collections; and
- Chargeable Bulky Waste collection of large household items where residents are not able to take the items to the RRCs.

Waste and Recycling Targets

Table 1 below shows the targets from the One City Plan and BCC performance in 2019/20 (pre Covid-19) and 2020/21 (during Covid-19), illustrating the negative impact on BCC's recycling and residual waste performance due to Covid pandemic. BCC and BWC are investigating what caused this reduction in recycling and increase in waste. The following are believed to be contributing factors:

1. Working at home - during the lock downs residents were staying and working at home. This appears to have resulted in more residual waste being collected as more people were at home consuming and generating waste (e.g. eating at home seven days a week/not at work, or filling empty space in wheelie bin with household clear outs or diy). This contributed to increased tonnage waste per person and reduced recycling performance;
2. Closure of Reuse and Recycling Centres – The RRCs were closed for a period during the first lockdown. The RRCs are net contributors to BCCs recycling performance; and
3. Suspension of garden waste collection - During the first lockdown this service was suspended for a period. Although not peak growing season this will have had a negative impact on the recycling rate.

Please note: these are assumptions based on tonnage information and overlaid with events of 2020. BCC and BWC are undertaking greater analysis and research of the tonnage data for 2020/21 and this year to fully understand the causes of these performance changes. This is to enable both organisations to address these impacts.

Defra data for the first months of 2020/21 financial year shows nationally the recycling rate dropped by 3%.

In recent years there have been a number of food waster intervention project undertaken by BWC “slim my waste” and “Bin-digestion” which have helped reduce waste from 40% of the residual in 2015 to 21% in 2021. During the lockdowns the tonnage of food waste increased by 14%.

Table 1 – Waste and recycling targets

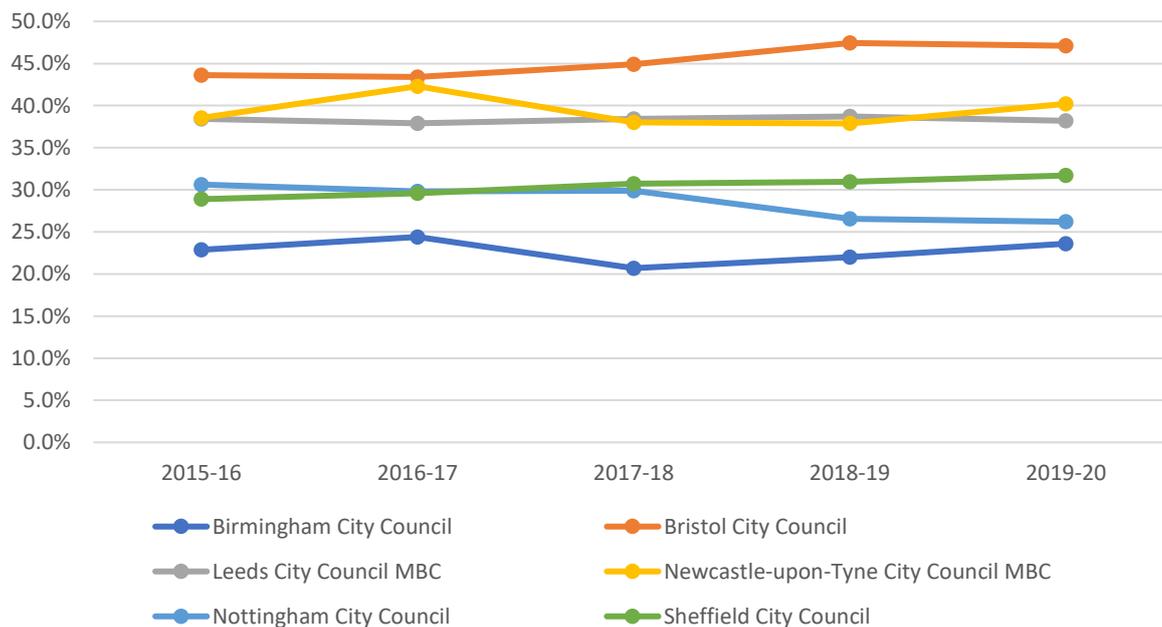
Target	One City Plan 2021	Pre Covid (2019/20)	During Covid (2020/21)
Recycling %	65% by 2025	47%	45%
Residual (black bag) waste (kgs)	150kg/person per year by 2025	182kg	207kg
Food Waste content of residual waste (%)	10% by 2025	35%	21%
Landfill (%)	<5% of residual untreated municipal waste to landfill by 2025	17%	11%

In 2020/21 the two new residual waste treatment contracts started. This means that energy recovery is the primary treatment method for BCC’s residual waste. The two Energy Recovery Centres are both located in Avonmouth and over the next four years should mean that the landfill target of less 5% should be achieved by 2025.

Performance Comparison

In 2019/20 BCC had the highest recycling rate of any UK core city with approx. 47% of household waste being recycled. This was achieved through provision of key services/ changes to services to prioritise increase recycling and reducing waste. Figure 1 below shows how BCC compares to other English core cities up to 19/20.

Figure 1: Percentage household waste sent for reuse, recycling or composting



*An updated graph with Manchester’s full data will be provided later. Manchester’s 2019/20 performance was 40%

Historic Performance trends

Table 2 summarises the main collect service changes that BCC has implemented since 2005 overlaid with the performance improvement.

Year	Service Change/implementation	Recycling Rate in year	Recycling Change	Residual waste per person (kg)	Residual waste Change
2006/07	Introduction of fortnightly waste collection, weekly food collections & chargeable garden waste	31%	14% increase	289	Reduction of 106kgs per person from previous year
2011/12	Reduction in residual waste wheelie bin capacity (reduce from 240litre to 180litre) Addition of 2 nd recycling container	43%	5% increase	203	Reduction of 35kgs per person from previous year
2017/18	Slim My Waste Campaign to increase recycling of food waste.	47%	2% increase	196	Reduction of 10 kgs per person from previous year
2019/20	Cardboard sack roll out	47%	0%	182	Reduction of 2.5kgs per person from previous year

Waste Composition

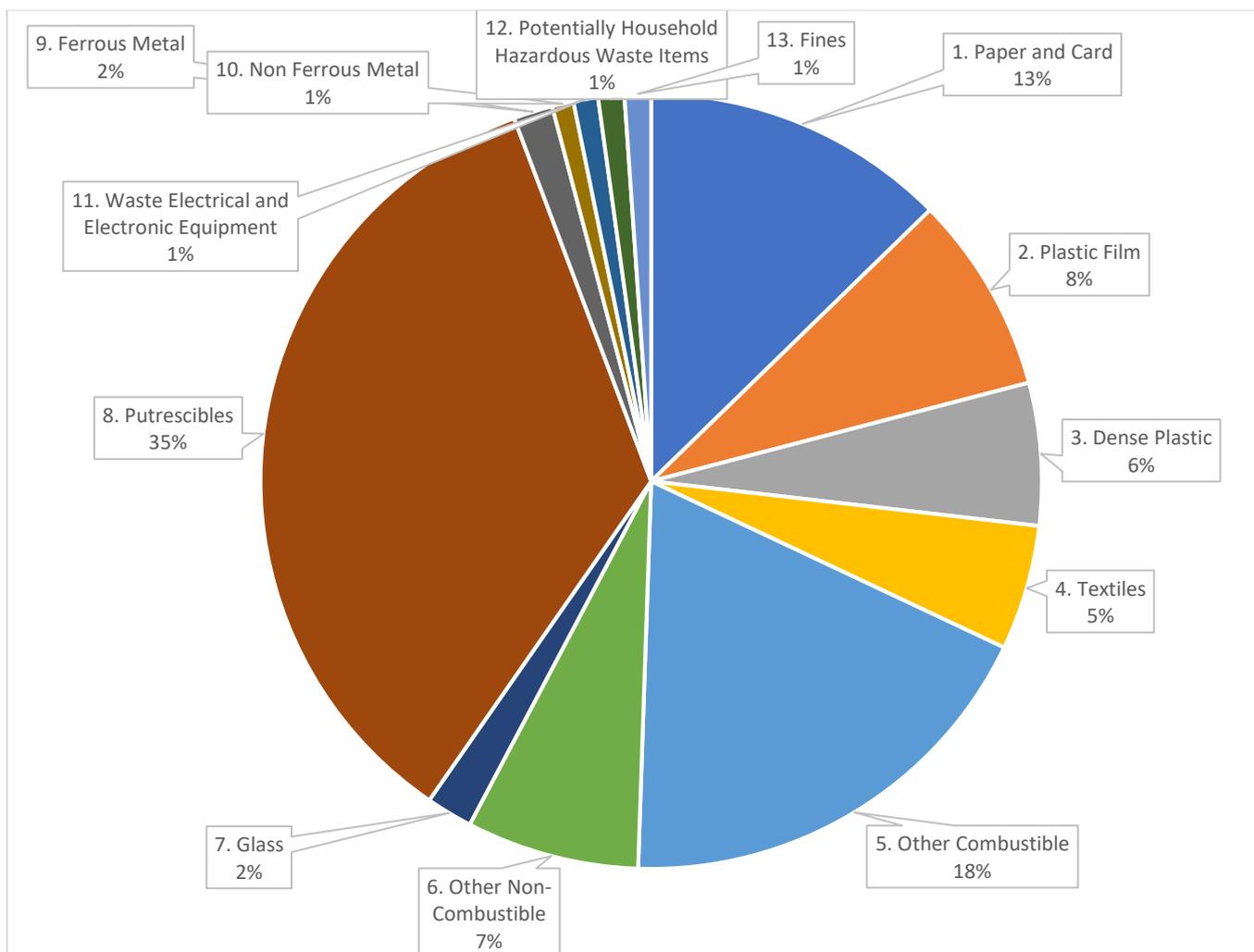
Figure 2 show the result of a waste composition analysis of black bag waste collected from the kerbside. The pie chart show the high-level classification of the types of waste found in the wheeled bins. The following can be recycled:

- Food waste (Putrescibles) 35%
- Paper and card 13%
- Other materials including textiles, glass, dense plastic, waste electronic and electrical equipment, tins and cans 16%

Early indications from a 2021 survey show food waste has reduced to around 21% from 35%. But there remains a significant opportunity to reduce what we're throwing away. At least 50% of what we're currently throwing away in our black sack rubbish could be recycled using our household recycling service. This shows that 35% of the average bin could be recycled on the existing the kerbside recycling services. 10% (other organics) should be deposited at the RRCs and or should be home composted.

Please note: The compositional analysis of black bag rubbished is based on a small sample of properties from different socio economic to be provide an indicative summary. It can vary if dependant on the contents of the bins collected.

Figure 2: Household residual waste composition October / November 2019



Forthcoming Legislation

The Environment Bill last week received royal consent. Table 3 provides a high-level summary of the main themes that will affect waste and recycling up to 2030. Also attached in appendix C is a summary timeline.

Table 3: Future Government Policy which may influence recycling and residual waste performance

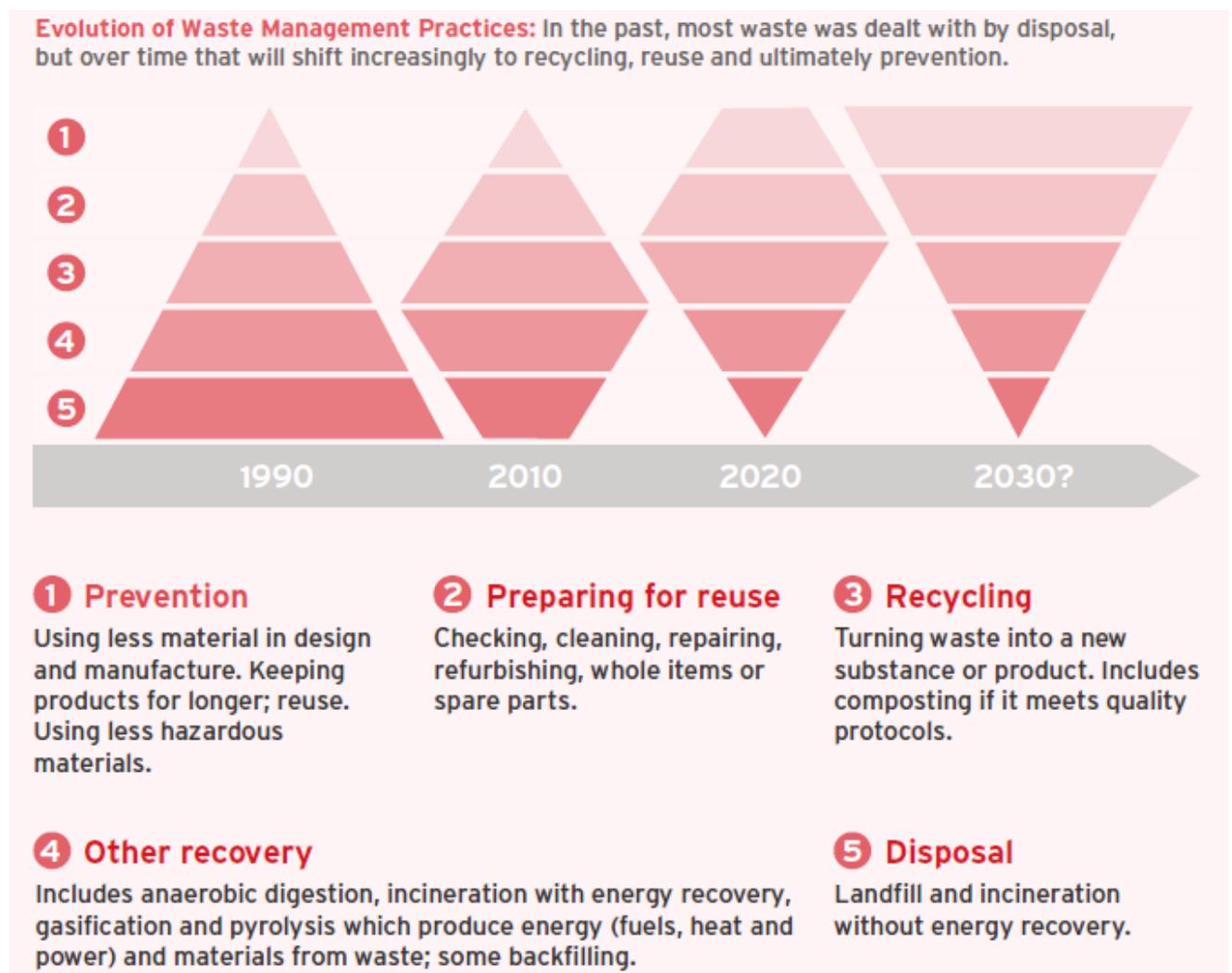
Policy	How could this effect the recycling rate?
<p>Environment Act Achieved Royal consent and due for release by April 2022</p>	<p>The provisions within the bill could facilitate changes to make recycling easier for residents and businesses and make packaging more recyclable.</p>
<p>Deposit Return System (DRS) The introduction of a deposit return scheme to incentivise recycling</p>	<p>If the scheme is 'all in' then it may draw materials away from household collections, reducing the recycling rate. If the scheme is 'on the go (normally littered materials)' it may increase the recycling rate and reduce litter.</p>
<p>Consistency in Household and Business Recycling in England Standardising recycling collections from businesses</p>	<p>Rolling out food waste collections to properties which don't currently have them would increase the recycling rate.</p> <p>The consultation also included a proposed change on how performance is measured, possibly moving away from weight based (looking at carbon improvement) targets that incentivise collection of heavier materials.</p> <p>In the short term using additional metrics won't have any impact on recycling rate. It will allow BCC to understand the carbon benefits of reducing, reusing and recycling those materials which could provide the greatest carbon benefits, including food waste and textiles.</p>
<p>EPR – Extended Producer Responsibility Requires manufacturers and producers to consider what will happen to their product/packaging at the end of its life at design stage and provide funding or facilitate full cost recovery.</p>	<p>Through a fee system producers will be encouraged to make their packaging reusable / more recyclable. This decrease the amount of difficult to recycle material that there is currently no recycling solution for.</p>
<p>Waste Prevention Programme</p>	<p>A successful waste prevention intervention may reduce the recycling rate as easy to prevent (and recycle) items such as food waste and plastic bottles are reduced. The best environmental option will always be waste prevention.</p>
<p>Action on plastics Renewed action on plastics including ensuring that producers pay the full costs of disposal for packaging (EPR) that they place on the market, a tax on plastic packaging that contains less than 30% recycled plastic</p>	<p>A combination of initiatives should drive greater recyclability of plastics and raise awareness of the imperative to reduce single use plastics and recycle those that can't be reduced.</p>

Refocus

BCC is developing a revised waste strategy/action plan and an important part of the strategy will focus on changing the headline performance target. Since the introduction of recycling the services in the 1990s local authorities across the UK have been chasing ever increasing recycling targets. Moving forwards BCC should consider making residual waste reduction or total household waste reduction the primary target as reducing waste has the greatest environmental and associated carbon benefits. As well as inclusion of monitoring carbon performance of services and waste/recycling treatment to enable informed decision making to reduce carbon and contribute towards Bristol to meeting its carbon target of net zero by 2030.

Figure 3 show how a revised waste hierarchy could work. Prioritising prevention, reduction and reuse before recycling.

Figure 3: Revised waste hierarchy from 2018 National Strategy for England.



From Our waste, our resources: A strategy for England 2018.

Appendix A – How recycling should be sorted and presented by residents on the kerbside scheme

LET'S GET IT SORTED!

BLACK BOX



Paper
White & coloured
not brown



Magazines
& directories



Glass
Rinsed, no lids

! Place items below in separate, untied bags



Textiles
Usable, wearable
& dry



Batteries



WEEE
Small electric
items such
as toasters,
mobiles
& remotes



Shoes
Tie in pairs



Spectacles
Any type

! Place items below next to box



Engine oil
In sealed
container



Car batteries
Place next to box

GREEN BOX



Cans
Rinsed & squashed



Plastic bottles
Rinsed & squashed



Lids & caps
Jar lids, shampoo tops, etc.



Plastic packaging
Rinse food trays.
No black plastic



Aerosols
Empty. Lids off



Foil
Rinsed & squashed

BROWN FOOD BIN

(All cooked & uncooked food)



Fruit & veg
(peelings etc.)



**Cheese
& dairy**



**Plate
scrapings**



**Meat, fish,
bones &
egg shells**



**Bread,
pasta, rice
& cereal**



**Coffee
grounds &
tea bags**

You can use newspaper, a compostable liner, or reuse an old carrier or bread/veg bag, to line your caddy. Don't include any packaging, including compostable.

BLUE CARDBOARD BAG



Boxes
Remove tape,
flatten & fold



Cartons
Rinsed &
squashed



**Greetings
cards**
No glitter



Brown paper



Cardboard tubes

Remove tape, flatten & fold to fit in the bag. No card that has food on it, like dirty pizza boxes. No drinks cups.

Make sure your bins and boxes are sorted correctly and out for collection by 6am.