Bath & North East Somerset Council

Improving People's Lives

Towards Zero Waste 2030

Managing our resources to reduce climate change

Preface

We have great expectations of our teams, of ourselves, and of our residents. We make no apologies for that, as such expectations have allowed us to deliver the improvements achieved in recent years. In order to continue the momentum of the change, we will be open about the great expectations we have. Waste and Recycling Collection and Street Cleaning are important public facing services provided by Bath and North East Somerset Council and affect every household and business we serve. The UK is striving to achieve higher levels of recycling and a more circular economy where more of the products we use can be recovered as raw materials.

As a result, new legislation and changing economics mean that the way we manage resources and waste locally needs to change to keep up. Of particular note in this new strategy, is the escalated priority of the climate and nature emergency. As a council we have announced our own Climate Emergency and have already taken significant steps to plan changes needed. Our original zero waste strategy was adopted in July 2005 and has been revised and updated at intervals since. This strategy reflects the latest information available, covering 2020/21, and provides a review of progress to date. A separate action plan for 2024 to 2030 will ensure that the council offers an efficient, high quality and innovative service that is compliant with the law and meets our residents' needs. Our priority remains to aim for zero waste.

The focus of the Council's updated Towards Zero Waste 2030 strategy is working with residents to achieve the 62% recycling target, making our neighbourhoods cleaner and greener, and delivering objectives of the climate and nature emergency so that we demonstrably move forward in achieving the Council's overarching priority of improving people's lives.

It expands on our previous strategy to provide a more detailed assessment of the key drivers for service change and other actions over the period to 2030, and to offer an expanded set of actions suitable for more in-depth year-by-year planning.

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1. Purpose of the strategy review

The Council, with the help of our residents, has made significant progress on actions laid out in the previous strategy, making changes to how waste is collected and managed, and improving recycling performance. However, over recent years there have been changes in the legislative and policy context in which the Waste Strategy operates. These changes prompt new considerations for the Council as it prepares to assess options for the future of waste in the area. The purpose of this updated strategy document is to set out the progress we have made since our last Waste Strategy and to identify the key goals to be achieved by 2030.

The strategy also provides an overview of the steps we need to take now and over the next few years to ensure that the service we provide continues to keep up with requirements and to contribute to achieving national and local waste management objectives.

Working with residents, our aims are to:

- maintain and improve the service we offer;
- keep the costs of waste and recycling down;
- help our residents to prevent waste, and to reduce the amount of waste that is produced in our area;
- continue the progress we have made on recycling, and increase the proportion of waste that is recycled;
- continue our journey towards zero black bag waste being produced;
- make appropriate use of new ways of treating the remaining waste to maximise its value and divert it from landfill; and
- reduce litter and the cost of litter.

By pursuing these aims we will achieve the best results for our residents while reducing the impact that our waste has on the environment.

Due to the amount of change, we will need to constantly review the strategy and actions as impacts are known. Adaptation and early planning will be necessary to successfully implement the change needed. Since beginning to create this strategy we have also experienced a significant impact, across the world, of the Coronavirus (COVID-19) pandemic. This has also created much uncertainty regarding the change to our future work, businesses and life generally. Despite the impact of COVID-19, the need to change remains. Returning to normal will not be sufficient, and we need to be bold and think holistically about how the changes we make now can help them us prepare for the future.

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2. The cost of managing our waste

In 2020/21 the cost of managing our waste and litter was £190 per household.

The costs of dealing with our residual (black bag) waste are increasing, driven by national policy changes. Since 2013/14 the cost of treating each tonne of our residual waste has increased from £85 to £110 per tonne.

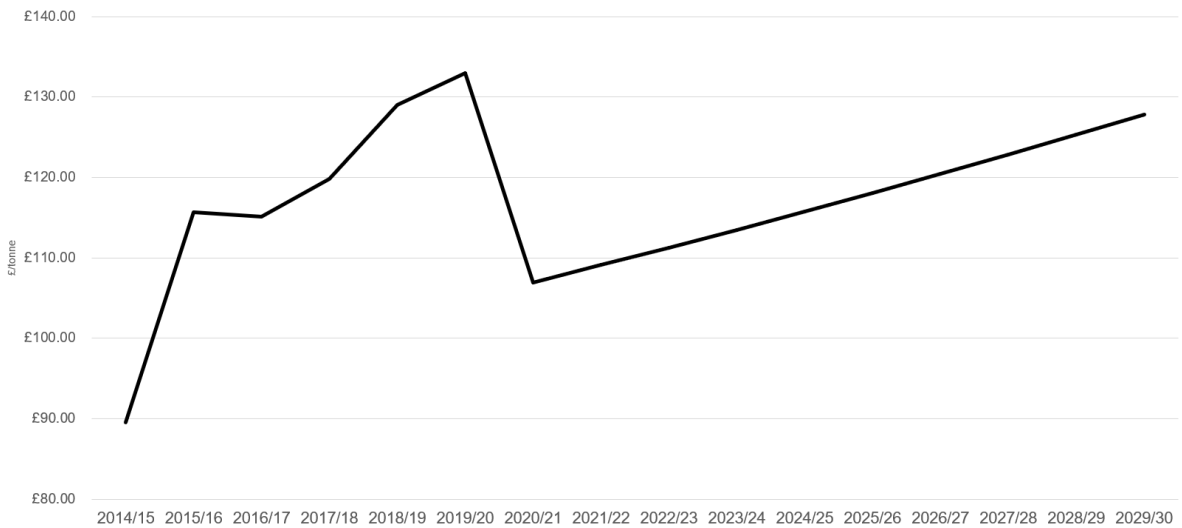
Other financial facts:

- The amount spent on waste and litter in 20/21 was £16m.
- The whole waste and street cleansing service is provided for the equivalent of £1.60 a week per resident if they were to pay the full amount.
- The previous strategy predicted that disposal costs would increase to £11m by 2020. Significant improvements in increasing recycling and reducing waste to landfill, as well as Energy from Waste disposal processing, have meant that our annual disposal costs are now estimated to be ~£3.5m. Figure 2.1 shows the average disposal costs per tonne with a decrease seen in 2019/20, following implementation of the new waste recovery contracts.

We can substantially reduce the overall cost of dealing with waste by following the waste hierarchy (see section 3.1.2). This means finding ways to prevent and then reduce the amount we produce, to reuse things rather than throw them away, and by making full use of the opportunity to recycle waste through the services the Council provides.

The data shown in Figure 2-1 is taken from Bath and North East Somerset (B&NES) own waste statistics, 2021/22 onwards are forecasts and projected with 2% inflation.

Figure 2-1 Average B&NES Disposal Costs including landfill tax



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3. Key drivers

There are many drivers which influence the way we run our services. This section aims to summarise the key ones as they are known in 2022. In addition to providing a cost- effective service that meets local needs, we need to ensure that our waste collections are consistent with our legal obligations and fit with our local plans, partnership arrangements and other strategies. There have been numerous developments in each of these since our last Waste Strategy, and this section explains the changes that have taken place.

In response to all drivers, our challenge will be to keep ahead of potential impacts by remaining proactive and ambitious in our approach.

3.1. Global and UK changes

Recent changes include:

- Over 300 councils in the UK have declared a Climate Emergency, which is likely to increase in future years.
- Leaving the European Union (EU). One of the biggest influences of previous waste strategies has been the EU. The main EU target under the Circular Economy Package is to increase recycling to 65% by 2035. Within England & Wales this target has been adopted in relation to waste management plan requirements.
- The government published the Resource and Waste Strategy for England in 2018 outlining further change (outlined in 3.1.2), but in terms of targets has set out zero avoidable waste by 2050 and plans to double resource productivity.

Figure 3-1 Example of large bales of plastics

- China banned the import of contaminated plastic and paper in 2018. Whilst this has not directly impacted on B&NES as we did not export any there, this has become a strong incentive to improve the quality of materials collected in the UK.

- Circular Economy Action Plan 2020 presented by the European Commission. This covers several actions but the one likely to have an impact on the UK is the Right to Repair. These regulations will apply to a range of everyday items such as mobile phones, textiles, electronics, batteries and packaging. They will ensure products are designed and manufactured so they last - and so that they are repairable if they go wrong. It's likely to create standards for the UK, too - even following our departure from the EU. This is because for most large organisations it would be more cost-effective to make changes which apply to all countries they sell products in.

3.1.1. Climate and nature emergency

Earth's resources are finite. To help preserve them, we need to move away from the 'take, make, use, throw' consumer model and towards an economy where all materials are treated as resources and recirculated.

A circular economy recognises the materials we consider to be 'waste' as a resource. A circular economy would move us towards a society in which we keep resources in use for as long as possible; extracting the maximum value from them. We would then recover materials and regenerate products at the Climate change is closely linked to the number of raw materials we use. Almost two thirds of greenhouse gas emissions are released during the extraction and processing of raw materials and the manufacturing of goods to serve our needs. Although some degree of climate change is inevitable, if we adapt our behaviour, we can help limit the amount of global warming and its resulting impacts on our environment.

A circular economy recognises the materials we consider to be 'waste' as a resource. A circular economy would move us towards a society in which we keep resources in use for as long as possible; extracting the maximum value from them. We would then recover materials and regenerate products at the end of their lifecycle to be used again. At the Paris Agreement of December 2015 a global commitment to reduce carbon emissions was agreed by 195 countries and will be an important driver for change worldwide, and subsequently within the waste industry. Data presented in section 4.3.2 shows the impact recycling has on carbon emissions and climate.

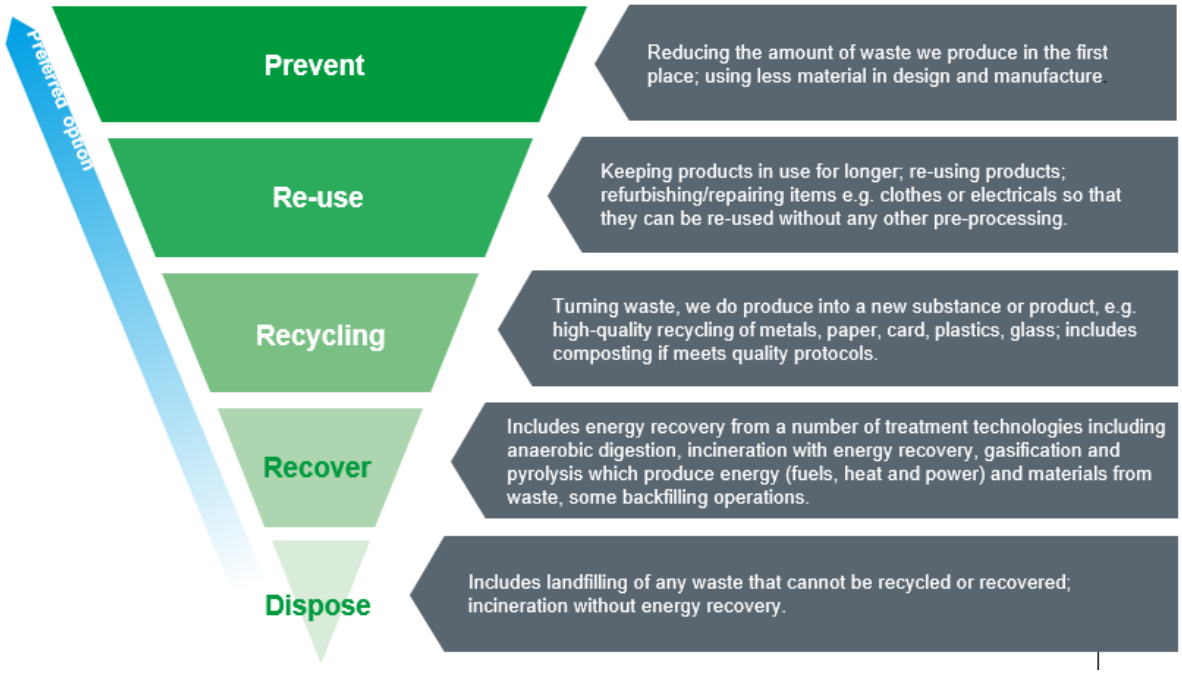
3.1.2. Policy and legislation

Waste hierarchy

The UK-wide policies on waste are built on concept known as the waste hierarchy. The waste hierarchy requires anyone managing waste to consider first prevention, preparing for reuse and recycling followed by other methods of recovery, for example, energy recovery and, lastly, disposal.

Based on the waste hierarchy, a key objective of government policy is to reduce the level of waste going to landfill and to get people to recycle more.

Figure 3-2 The Waste Hierarchy



Resources and waste strategy for England

The Resources and Waste Strategy for England was launched towards the end of 2018 and sets out how the government will preserve material resources by minimising waste, promoting resource efficiency and move towards a circular economy. The Strategy gives a long-term policy direction in line with the 25 Year Environment Plan and it aims to:

- **Reinvent** how we design, produce and sell things
- **Rethink** how we use and consume things
- **Redefine** what's possible about reuse and recycling.

The five strategic ambitions of the Strategy are:

1) To work towards all plastic packaging placed on the market being recyclable, reusable or compostable by 2025;
2) To work towards eliminating food waste to landfill by 2030;
3) To eliminate avoidable plastic waste over the lifetime of the 25 Year Environment Plan;
4) To double resource productivity by 2050; and
5) To eliminate avoidable waste of all kinds by 2050.

Environment Act 2021

The Environment Bill was given Royal Assent in 2021 and is a key piece of legislation for delivering the commitments made in the 25 Year Environment Plan to protect and improve the natural environment in the UK.

It will take forward and legislate the measures and proposals outlined in the Resource and Waste Strategy. The national Strategy and Environment Act aim to make it easier for people to recycle, improve recyclate quality and make way for a more circular economy. The policy changes required to implement the Resource and Waste Strategy will be subject to secondary legislation, the detail of which is not entirely known at this stage. The Act is supported by a series of proposals, with several relevant to waste management including Consistency in collections (now termed Simpler Recycling), Deposit & Refund and Changes to Producer Responsibility.

Consistency in household and business recycling collections in England

To make recycling easier and less confusing for residents, the government wants to standardise recycling and waste collections. They also want to improve recycling information on packaging to help customers make more informed choices when choosing packaged products.

In the consultation documents, the proposed minimum service standards for collections are:

- weekly food waste.
- fortnightly compostable garden waste (in the growing season) provided free.
- fortnightly glass bottles, jars and containers.
- fortnightly paper and card.
- fortnightly plastic bottles.
- fortnightly plastic pots, tub and trays.
- fortnightly steel and aluminium tins and cans.
- fortnightly residual waste.

The government are also considering the collection of foil, foil trays and metal aerosol cans; food and food drink cartons; and plastic film and flexible packaging. Whilst these are still subject to change as the consultation continues, we are in an excellent position. We already have our collections set out in this way, except garden waste collection which we provide as a chargeable subscription service and the collection of plastic film. Initial consultation responses were generally not supportive of free garden waste collections being a statutory requirement of local authorities; the government has acknowledged this and intends to consider the costs and benefits before making a final decision on this matter.

The government expect local authorities to implement the changes at the point of next contract renewal, or by 2024, subject to consultation. The exception is for plastic films to be phased in with a defined end date of the financial year 2026/27.

Deposit return scheme

To incentivise consumers to reduce litter and increase recycling the government are consulting on introducing a Deposit Return Scheme (DRS) whereby consumers pay a deposit on drinks beverage containers at the point of purchase, which is then redeemed when the container is returned to the retailer for recycling. This encourages the return of the packaging, enabling it to be recycled. If a customer chooses not to return the container, they forego the deposit. The government are currently considering a DRS that includes aluminium and steel cans, PET plastic but excludes glass bottles disposable cups, cartons and pouches/sachets (to be covered under EPR). The introduction of a DRS would be in late 2025, at the earliest.

As well as reducing littering and boosting recycling, the aim is to improve the quality of recycled materials through source separation.

At this stage, full details of the returns process are not known, but as more information becomes clear, we will set out plans regarding the implications and actions required.

Extended producer responsibility

Extended producer responsibility (EPR) is where the manufacturers of products (that end up as waste, such as packaging) pay for the whole net cost of their products including their collection and disposal at end of use, driving sustainable design decisions to be incorporated at the production stage in support of a more circular economy. The government plan to implement an EPR for packaging from 2025.

This change has far-reaching implications and will affect the quantity and composition of the waste, and the likely cost of the service through vehicles and equipment required and material income.

Government has stated at this stage that there will be full net cost recovery (generally this includes contributions to the collection, transport, treatment and campaigning) with payment contributions to local authorities. This is a big incentive for producers to try to avoid packaging or make it recyclable. An example would be pet food sachets which are not currently recyclable.

The payment mechanism and process for distribution of funds to local authorities is still not clear but in the longer term the government intend for this to be based on actual costs incurred.

EPR may apply to a wider range of materials; the government are reviewing and consulting on measures and product standards for five additional materials namely:

textiles, bulky waste including mattresses, certain construction and demolition wastes, vehicle tyres and fishing gear.

Plastics

Plastic is an incredibly useful material due to its versatility and durability and has many benefits and uses. However, if not recycled or disposed of responsibly, plastic can also create land and water pollution, causing long term issues for wildlife and human health. Plastics do not biodegrade; they just break down into microplastics which stay in the environment.

Plastic packaging accounts for 44% of plastic used in the UK and 67% of plastic waste. Most plastic packaging is made from new rather than recycled plastic. To encourage the use of recycled plastic in packaging, the government are introducing a new tax on the production and import of plastic packaging with less than 30% recycled content.

Primary legislation was included in the Finance Bill 2021 and the tax will take effect from April 2022.

The **Plastics Pact** is a national initiative to create a circular economy for plastics. It sets four targets for 2025:

- Eliminate single-use packaging
- Recycle or compost 70% of plastic packaging
- Plastic packaging to be re-useable recyclable or compostable
- Plastic packaging to have a 30% recycled plastic content

Clear plastic bottles can be recycled infinitely. Coloured plastics are far less valuable, and manufacturers are starting to recognise this. For example, Coca Cola changed Sprite bottles from green to clear as a result of their involvement with the plastics pact.

Plastics Pact members are said to have removed PVC and polystyrene from all household / consumer packaging by the end of 2020 as is seen on the website WRAP.

It is also important not to demonise plastics – the focus should be on all single-use items and keeping plastics and other litter out of the environment.

3.2. Corporate priorities

Driving change within the Council is also influenced heavily by our own corporate plan, which was updated in 2020:

- **One**: We have one overriding purpose – to improve people's lives. This might sound simple, but it brings together everything we do, from cleaning the streets to

caring for our older people. It is the foundation for our strategy and we will ensure that it drives our commitments, spending and service delivery.

- **Two:** We have two core policies – tackling the climate and nature emergency and giving people a bigger say. These will shape everything we do.
- **Three**: To translate our purpose into commitments, we have identified three principles. We want to prepare for the future, deliver for local residents and focus on prevention.

The Corporate Strategy is the council's overarching strategic plan. It sets out what we plan to do, how we plan to do it, and how we will measure our performance between 2020 and 2024.

The corporate strategy does not include detail of everything we must do – that will appear in detailed delivery plans which will flow from it. However, the commitments in it will guide the council and they represent the step changes that residents in B&NES will experience from us.

Elements of the Corporate strategy which link directly to Waste include:

• 'Maximise opportunities from new technologies to improve and deliver efficient, modern services'.

• 'Have an effective approach to fly-tipping and litter enforcement as well as to city centre cleansing and trade waste'.

• 'Help our residents to reduce waste, increase recycling and support local litter picking schemes'.

3.2.1. Council climate and nature emergency

In March 2019, Bath & North East Somerset Council resolved to declare a climate emergency and provide the leadership to enable the Bath and North East Somerset district to be carbon neutral by 2030.

For Bath and North East Somerset Council this will give us opportunities to:

- Reduce waste
- Drive greater resource productivity
- Put us in a better position to address resource scarcity now or in the future
- Reduce the environmental impacts of our production and consumption.

The aim is to be carbon neutral by 2030. This is not just for the council but for the whole of B&NES business and residents, with the council acting in a coordination role. This is in its early phases of development. The first progress report went to Council in October 2019 (the emerging actions are from section 3.3 onwards). Councils are at the heart of the community and it is vital we make changes at a local level which are both visible and effective within our local communities.

Fundamentally we need to reduce carbon emissions. We need to cut emissions and be bold. To achieve this, it will need a cultural shift, looking at changing ways of working which are currently engrained. In terms of translating the targets to Waste, the main areas of influence at the corporate level are procurement, buildings and fuel/vehicles.

Procurement

The Councils Procurement and Commissioning strategy has four key objectives which aim to maximise value for money and together with their associated actions, will support positive change across the Council.

They are:

1) Consider the carbon footprint and environmental impact of all products and services bought by the Council over their lifetime.
2) Consider suppliers' capability to address these environmental impacts throughout the supply chain when awarding contracts.
3) Encourage use of local suppliers to further reduce the Council's Carbon Footprint.
4) Encourage innovation by emphasising our needs and desired outcomes to allow suppliers to come up with the most cost effective and sustainable solutions

Buildings

Wherever we have buildings and depots for our Waste services, we need to make them as energy efficient as possible. This will be a significant part of our new depot being built in 2023. Materials used to build the depot will be sustainable as will be long term repairs and maintenance.

Fuel/vehicles

We will commit to:

- Reducing unnecessary miles.
- Making journeys as efficient as possible.
- Consider replacing existing fleet with electric when it is economically & technically possible to do so.

3.3. Local plans, policies and partnerships

The Waste Strategy is just one of the documents that forms the Council's key strategic environmental sustainability direction. These documents provide a framework of policies for developing action plans and budgets to achieve our Zero Waste objective. These plans and strategies have been developed to ensure that

Bath and North East Somerset moves towards an environmentally sustainable, low carbon future that is resilient to climate change, whilst maintaining a high quality of life for those who live and work in the district.

Work is underway on the new Local Plan, being led by Planning Policy. The Council's new Corporate Strategy has climate emergency as an overarching theme, reflecting the upgrading of the issue since the Climate Emergency declaration. This is a significant step-change in prioritisation for the Council.

3.3.1. West of England

Waste partnership

The West of England (WoE) Waste Partnership, consisting of the four Authorities of Bath & North East Somerset Council, Bristol City Council, North Somerset Council, and South Gloucestershire Council was originally formed in 2005. The Partnership was tasked with developing a strategy for managing residual municipal waste for the region.

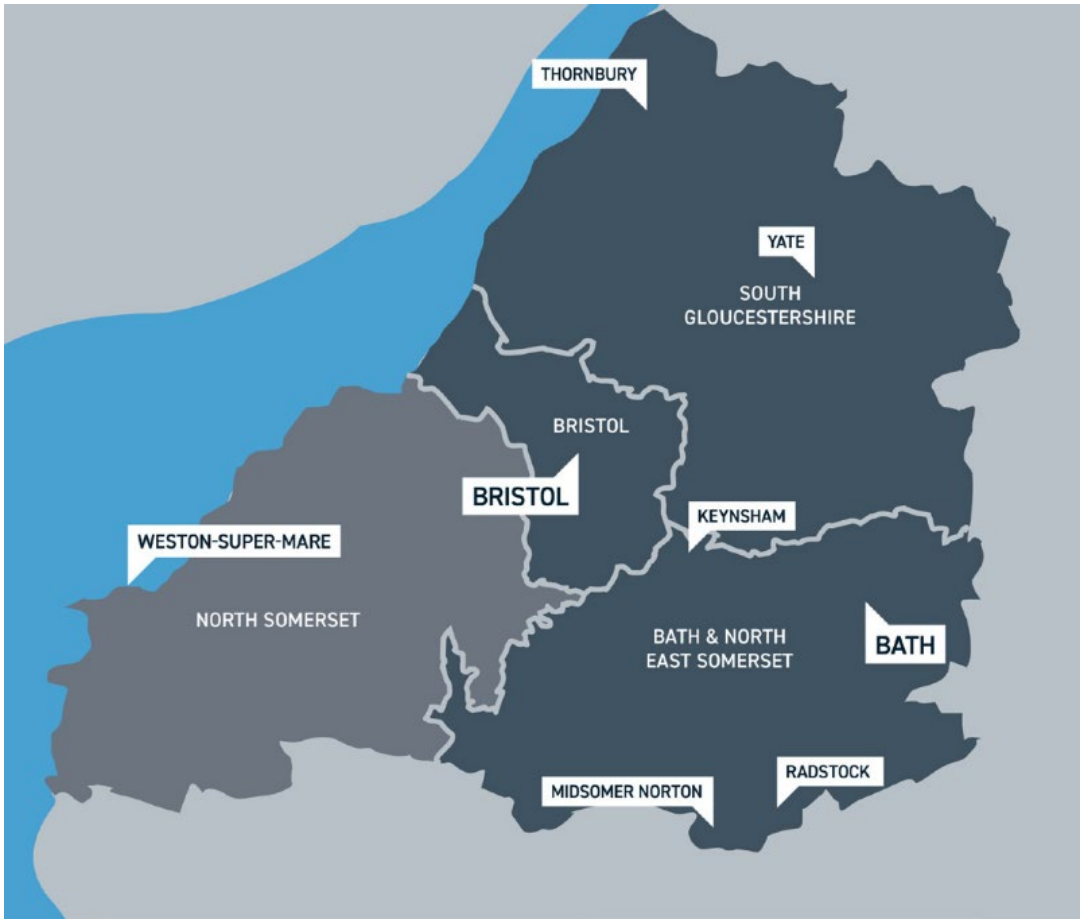
The Authorities believe that working in partnership offers economic, environmental and social advantages, including maximising economies of scale, minimising environmental impacts, minimising transport and providing best value for residents and local businesses. The Partnership has recently awarded new joint waste treatment contracts for 2020- 2030 and continues to work to maximise waste minimisation, reuse, recycling, and composting.

3.3.2. West of England Combined Authorities

The West of England Combined Authority (WECA) is made up of three of the councils in the region – Bath & North East Somerset, Bristol and South Gloucestershire.

WECA also provides support to the Local Enterprise Partnership Board, which is business-led and covers the four West of England councils, including North Somerset Council. Together, they aim to deliver economic growth for the region and address some of our challenges, such as productivity and skills, housing and transport. Although Waste is not currently one of its workstreams, it may have an influence in the future.

Figure 3-3 West of England Waste Partnership (Light Grey), and West of England Combined Authorities and Waste of England Waste Partnership (Dark Grey)



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4. Achievements

4.1. B&NES service

The Council provides householders with a weekly collection of recycling and food waste. It also provides an alternate weekly collection of rubbish as well as offering a fortnightly charged-for collection of garden waste.

We also offer other charged-for services such as bulky waste collections, trade waste and recycling collections (including collections from schools).

Across the district, the Council provides three recycling centres for larger unwanted or broken household items, and extra recycling or rubbish.

Our teams of operations staff, who collect the waste and send it for recycling or disposal, are supported by strategy and contracts officers, all working together to provide a high level of service to our residents.

4.2. B&NES achievements

We continue to look at new recycling or composting services we can introduce to help make it easier for everyone to recycle more:

- in 2009 we introduced a new weekly cardboard collection and made it possible to recycle a wider range of household plastics as part of the kerbside recycling system;
- in 2010 we introduced weekly food waste collections and nearly 60% of our residents are now using that service;
- in 2011 we improved the mini recycling centres for flats in all 130 locations to include cardboard recycling;
- in 2012 we introduced kerbside collection of small WEEE for recycling;
- in 2013 we launched our new trade waste collection and recycling service to provide an improved service for our businesses;
- in 2017 we provided wheeled bins for most residents, and to increase recycling, reduced frequency of collection to fortnightly;
- in 2018 we introduced Fix My Street (FMS) to enable easy reporting of fly tipping and littering incidents;
- in 2019 we started introducing food waste recycling to blocks of flats (90% done) and working with our key housing provider to modernise waste and recycling facilities for residents in these properties;
- streets are cleaner since wheeled bins were introduced.

We've also made our recycling centres easier to use and have been promoting food waste recycling in schools. Many other initiatives over the last five years have continually improved our service, enabling a greater range of materials to be collected for recycling and helping to prevent litter.

We continue to look for ways to maximise reuse and recycling, but our current performance owes a huge thanks to residents and their increased efforts and support to help make this happen. Each week in 2020/21 an average of just over 500 tonnes of recycling was put out for collection.

However, despite the good performance, we are seeing a plateauing in efforts. Momentum is key to improving and making incremental changes to ensure we are heading towards our ambitious targets.

4.2.1. Waste and recycling facts and figures

Table 4-1 outlines progress in our waste services since 2014.

Table 4-1 Progress since 2014

Area of Waste	**2013/2014**	**2020/2021**
Reuse, Recycling & composting	49%, 16728 tonnes	59.2%, 44475 tonnes
Recovery	75%	94.6%
Food	3832 tonnes	7970 tonnes
Residual waste kg per household	494kg	361kg
Black Sack Rubbish collected	27075 tonnes	21990 tonnes
Landfill	23%, 19242 tonnes	3%, 2258 tonnes
HH waste collected	74220 tonnes	75131 tonnes
Number of Households	77950	84930
Cleansing	**2013/2014**	**2020/2021**
Fly-tipping tonnes	152 tonnes	199 tonnes

Area of Waste	2013/2014	2020/2021
Fly-tipping incidents	879	2966 (FMS reporting introduced June 18)
Street cleansing waste	3643 tonnes	2264 tonnes

Whilst after the introduction of Fix my Street (FMS) the number of fly-tipping incidents reported has increased, we view this as a positive outcome as it had enabled us to respond to residents' concerns about the local area.

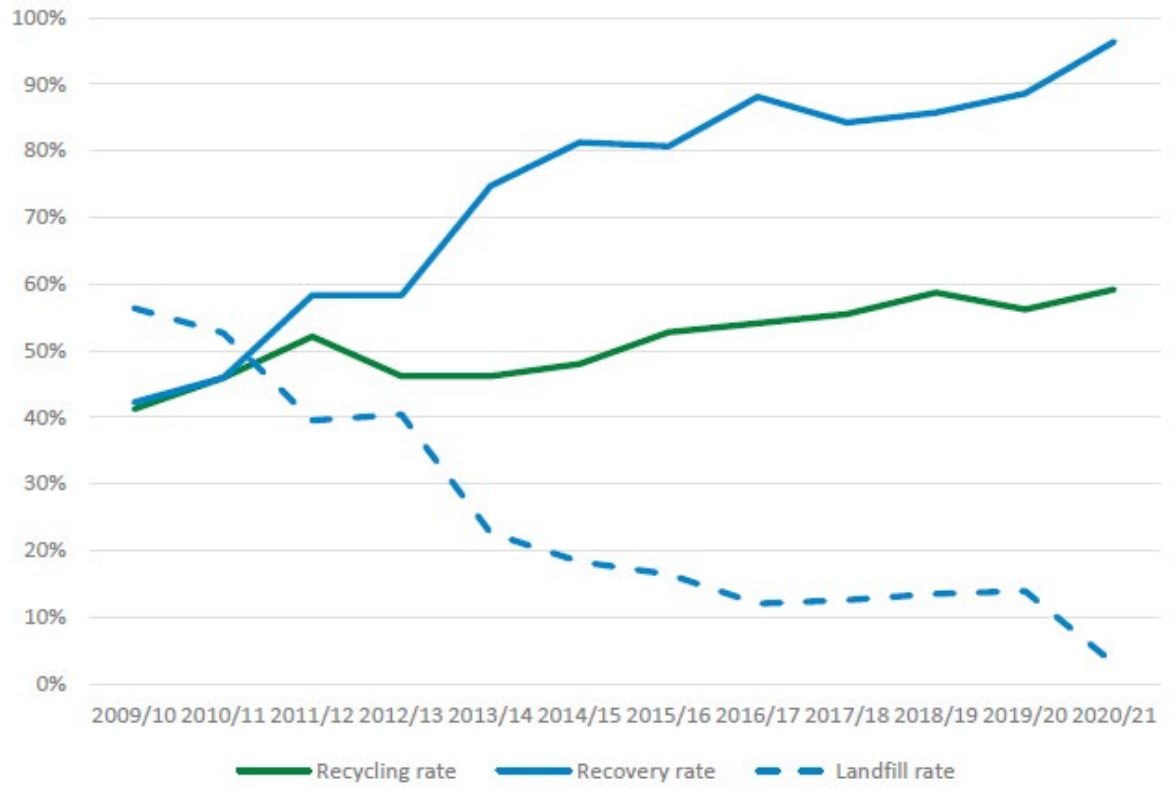
Our residual waste per household, i.e. the amount of waste actually thrown away, has reduced by more than 25%, which is the best measure of progress towards zero waste and circular economy.

We have introduced new schemes and intensified our waste awareness programme to encourage participation in recycling schemes. As shown in Figure 4.1, our recycling rate increased from 41% in 2009/10 to 59.2% in 2020/21, see section 4.3.2 for carbon emissions saved by recycling.

As a result of new treatment contracts, the proportion of waste we send to landfill has reduced from 56% in 2009/10 to 3% in 2020/21, and our combined recycling and recovery rate has increased from 42% in 2009/10 to 94.6% in 2020/21.

Business waste recycling and diversion from landfill across our three recycling centres have both increased compared to five years ago.

Figure 4-1 How the way we manage waste is changing



4.2.2. Infrastructure and contract developments

If the Council is to create sustainable communities, providing housing and employment opportunities alone is insufficient. There is a need to ensure there is access to the necessary supporting 'infrastructure' of utility services, transport, schools, open space, community, health and leisure services and green networks, to support the local population and those who visit or work in the district. Waste infrastructure is an important element of the district's overall requirements.

Our key waste disposal and treatment facilities are located within the South West of England. We send residual waste to either the Suez energy from waste (EfW) plant or the Viridor EfW facility in Avonmouth as part of the West of England Partnership. This enables us to benefit from economies of scale by using facilities that are shared with other authorities and commercial waste collectors, giving us access to competitive prices. We also send food waste to an Anaerobic Digestion (AD) plant in Wiltshire, whereby the digestate is spread on surrounding local farmland and biogas produced in the digestion process is used to produce renewable energy, in the form of electricity and biomethane.

We also have a contract with ETM Recycling to send bulky waste material from our Recycling Centres for second chance recycling within their facility in Bristol. We seek to maintain flexibility in our contracts for these services and monitor existing and developing facilities to ensure we achieve value for money as well as good environmental outcomes.

Case study

ETM have constructed and operate a £4million Materials Recovering Facility in Bristol, providing second chance recycling of the waste that is put in the disposal bins at the Recycling Centre.

ETM's target is to send zero waste to landfill and can process 150,000 tonnes of waste per year. The site using mechanical equipment to shred, sort and screen the waste that is delivered, separating it out into different streams for recycling and recovery including metal, soils, aggregates, wood and PVC window frames.

Figure 4-2 Pile of PVC window frames for recycling and recovery

4.3. How do we compare with other Authorities?

To compare our performance, we have looked at other councils across England as well as our nearest neighbouring local authorities.

4.3.1. Overall service performance

Table 4-2 Neighbour authorities performance (2020-21)

Authority	Residual household waste per household kg	Percentage of household waste sent for reuse, recycling or composting	Percentage of municipal waste sent to landfill	Collected household waste per person kg
Bath and North East Somerset	360.9	59.2%	3.0%	382.5
Bristol City	450.2	46.4%	10.9%	369.4
North Somerset	405.7	60.4%	11.5%	465.5
Somerset Waste Partnership	474.4	52.4%	11.0%	461.1
South Gloucestershire	427.2	58.5%	6.0%	437.1
Wiltshire	553.2	42.3%	14.6%	427.5

We are currently achieving the lowest residual waste per household, as well as the second highest recycling rate. There is still more we can do to improve and learn from each other.

Nationally, in 2020/21 B&NES is the 4th best Unitary authority out of 92, achieving 59.2%. The highest at 60.8% is East Riding of Yorkshire. Out of 348 total councils we rank 15th.

4.3.2. Carbon emissions

Eunomia, an independent consultancy, have produced data to show the amount of carbon dioxide prevented due to recycling by UK councils. This is based on the weight of recycled materials, and the calculation takes into account that recycling avoids landfill or incineration of the items, as well as preventing use of new materials.

Across the UK recycling is saving 4 million tonnes of CO2 emissions, the equivalent of taking three million cars off the road.

In the most recent English recycling carbon index 2018/19, B&NES ranked 9th of all disposal authorities, with a saving of 98kg CO2 per head. Using Carbonfootprint.com, this equates to 18,720 tonnes of CO2 emissions, and is the equivalent of taking nearly 8,000 cars off our roads (based on 10,000 miles in a EU 2020 FORD Focus Model Year Post 2020.25 1.5 EcoBoost M6).

These results reflect the impact residents have had to date, and how this can be raised to another level. It shows the importance that residents are recycling everything they can, to help tackle the climate emergency.

4.3.3. Fly-tipping incidents

B&NES is 99th highest of 314 councils, with 2,966 incidents reported in 2020-21. To see how we are performing compared with other councils we can also look at our 'nearest neighbours' (Table 4-3); the data indicates we have more to do in this area to reduce the number of incidents.

It should be noted that there is some difficulty in comparing data, as there isn't a definitive list of what is and isn't fly-tipping for example we may include black bags left by a rubbish bin as fly-tipping, other authorities might not. We continue to tackle fly-tipping and invested in a number of covert cameras which are deployed in fly-tipping locations.

Our Environmental Enforcement Officers use evidence from these cameras and provided by members of the public, to investigate and prosecute those carrying out environmental crimes.

Table 4-3 Nearest neighbour - Fly-tipping incidents (2020/21) Source: Defra

Council area	Incidents of fly-tipping	Incidents per 1000 people
Bristol	9286	19.9
Bath and North East Somerset	2966	15.1
South Gloucestershire	2481	8.6
North Somerset	1377	6.4

Case study

This fly tip took place over two days on two separate occasions. After an investigation by our Environmental Enforcement Officers and speaking to the two offenders, four fixed penalty notices for fly tipping were issued totalling £1600, all of which have been paid.

Figure 4-3 Fly tipping

5. Ongoing and future actions

Our approach is structured around the waste hierarchy, which informs our thinking about how to prioritise our efforts when tackling waste. We need to capitalise on the increased global interest in waste and resource issues and to harness that to deliver significant change and reduce our climate impact. The link between climate impacts and waste is often forgotten. We should value the material we have to prevent raw material use and ensure any waste that is generated is reused, recycled or treated appropriately to extract maximum value.

Councils, households, businesses and the waste industry will need to adapt in the coming years, particularly with the changes outlined in the Resources & Waste Strategy for England, the key proposals of which are outlined in section 3.1.2.

We continually monitor the quantities of waste we manage and research best practice throughout the country. We will develop an annual service plan in accordance with local needs and financial pressures. We will continue to look towards external funding to support our reduction, reuse and recycling activities.

5.1. Communications and the community

- Communications are central to getting our messages on the service across to residents. Our key campaigns will include the following:
- WoE partnership – more joint efficiencies for the region
- Maximising of opportunities e.g. Twitter social media, marketing campaigns
- Focus on local partnerships with those keen to support waste prevention repair and reuse
- Litter prevention

To streamline communications, some of our customer care processes will be moving to selfserve. For many of our services, we will increasingly be using new technology, including online tools so that residents can access services at a time convenient to them. We will continue to provide telephone and face to face help to those who need it.

5.1.1. Community initiatives

We recognise the great work our community does for the environment and we will continue to support our community through:

- Maximising the value of volunteers, for example actively working with #NoPlaceforLitter
- Helping people to do more in their community through the provision of low-cost equipment such as litter pickers

- Working with a range of community and volunteer groups to provide either direct support or promote their activities and initiatives. For example, Wombles litter picking groups, Bath Cloth Nappy Library, Repair Cafes
- Supporting Parish councils and those wanting to develop their own initiatives
- Student liaison partnership – joint initiatives including, door knocking, fresher fairs, and tackling problem properties

Case study

Reusable nappies:

Since 2017 B&NES have been running a scheme that enables residents to buy a Bambino Mio real nappy starter pack at a discounted price. Bambino Mio produce cloth nappies, which are also known as 'Real Nappies', 'Washable Nappies' or 'Terry Nappies', each pack includes the items listed below and are worth £250 but residents are able to currently purchase them for £167.

- 15 all-in-one reusable nappies
- 50 nappy liners
- 300g nappy/laundry cleanser
- 1 reusable wet nappy bag
- 1 nappy bucket
- 2 laundry bags

Whilst it feels like a big outlay at the start it is estimated that the cost of using disposable nappies is over £900 per child, and nearly 3 billion disposable nappies are thrown away in the UK each year.

If residents are not sure about the concept, then they can still give them a try by borrowing nappy kits from the Bath Cloth Nappy Library, run by volunteers with an interest in promoting real nappies.

Figure 5-1 Reusable nappy schemes

Annual communications, education & engagement strategy

We will continue to develop our community engagement and communication activities to maximise awareness, participation and understanding, to ensure our services are used to maximum effect by residents. Priority areas will be tackling confusion, maximising the use of existing provision, and making our collection systems easy to understand. This will include a focus on flats and other hard to reach areas and groups. Campaigns will have a strong focus on those materials with the greatest carbon impact such as food waste and textiles.

As part of our strategy we will explore ways of working with schools to educate children to take messages home and help to change behaviours.

We will continue to listen to what people are saying they want to do to reduce the waste they produce, to reuse more of it and to increase recycling so that we can take account of their views in future service changes.

Support implementation of climate and nature emergency action plan

One of our key actions is related to the climate and nature emergency action plan, and our efforts to reduce the climate change impact and improve the environment. This links well to our communications and community engagement. We will continue to:

- Roll out our communications campaign to tackle litter and promote litter picking and increase volunteer engagement, along with supporting community litter picking groups, such as Wombles Groups and the No Place for Litter equipment hubs.
- Work with the Student Community Partnership on the Pack for Good, Moving Out campaigns to generate increases in reuse and recycling through encouraging students to recycle more.
- Promote the Plastic Free Bath and North East Somerset campaign and Refill scheme and support community and businesses across B&NES to act on single use plastics.
- Stop using the chemical glyphosate for street weed removal; instead council staff will use manual methods. We will establish equipment loan hubs for residents to remove weeds in their local area.

We will explore other opportunities as part of our overall approach to managing our service area to reduce our carbon impacts.

Develop a range of carbon reduction activities

We will assess the carbon impacts of our waste transport activities to ensure we are making informed choices. Initially, this will focus on key areas such as training drivers to drive more efficiently, operating more fuel-efficient vehicles and reducing energy consumption in our office and depot accommodation.

Priorities will also be to:

- Review UK trials of electric collection vehicles with the intention to replace large goods vehicles (LGV) fleet with electric or hydrogen alternatives in the long term when technology develops sufficiently for this to be viable. The capital cost is currently expected to be around three times that of a conventional refuse collection vehicle (RCV), so further work is needed on the savings from fuel and

other costs. We already have 7 electric vans but as they reach the end of their life small vehicles will be replaced with electric alternatives, where these are viable.

- Provide electric bikes for staff to travel between depots and to carry out inspections.
- Review driving abilities and give feedback where greater fuel use is occurring.
- Implement waste collection rounds which result in less fuel use, as long as they are consistent with standards of service.
- Reduce the number of unnecessary journeys.

Table 5-1 What can residents do to reduce carbon and reduce climate impact?

Impact area	**What can be done**
Streets	Litter picking in your local area or join a Wombles litter picking group.
Recycling	Make sure that you are recycling everything you can. Check out our Recycling A-Z on the council website: https://beta.bathnes.gov.uk/recycling-z
Recycling	Take back flexible plastic packaging to supermarket collection points.
Recycling	Utilise local collection points for certain materials e.g. charity textile banks or battery collections in shops.
Recycling	Get a subsided home composter from the Council.
HWRC	Sort all items being taken to recycling centres so that any recyclable materials can be put in the right place.
HWRC	Let staff know if you have any items that are suitable for reuse that can be set aside.
Black bin waste	Reduce the amount of waste you are producing by only buying what you need and will use – especially food items.
Black bin waste	Wherever possible buy items without packaging – look out for refill shops offering a range of cooking, food, kitchen, body and cleaning products for refillable containers.
Black bin waste	Reuse wherever possible.
Black bin waste	Use washable nappies (e.g. Bath Cloth Nappy Library).
Re-use	Buy second hand wherever possible.

Impact area	What can be done
Re-use	Swap out single-use plastics to reusable alternatives.
Re-use	Use the Refill Bath Scheme and water fountains rather than buying bottled water.
Re-use	See if items can be repaired before throwing out (for example using a repair café).
Re-use	Donate unwanted items like clothes, books and furniture to charity.

5.2. Prevent/reduce

Reducing the amount of rubbish produced at home remains our number one priority. Since 2013/14 we have made great progress with a 28% reduction down to 361kg per household in 2020/21, but there is still more to do.

The amount of waste produced per household has fluctuated over the last five years. As the number of households in the district increases, we need to continue our efforts to help householders reduce the amount of waste they produce if we are to ensure that continuous improvement is achieved. Our priorities are to:

Continue to promote initiatives aimed at reducing waste at source, such as home composting, reusable nappies and the Love Food Hate Waste campaign.

- Campaign to reduce the number of single use items, particularly plastics, including the promotion of our 'Bath Refill' scheme.
- Target food waste and encourage residents to reduce the amount they need to throw away, as well as recycling it separately if it cannot be avoided. This is a big priority area over the coming years.
- Reducing the amount of residual waste at HWRCs e.g. ensuring any black bags of waste do not contain recycling by engaging with users and operating an inspection area.
- Continue to work with volunteers who are carrying out activities that help reduce waste.

As well as continuing our campaign strategy, we will work with our WoE partners to share ideas to prevent waste and maximise the impact that these initiatives have throughout the sub-region.

6.6 million tonnes of food waste comes from our homes each year in the UK! Almost three quarters is food we could have eaten. (Source: WRAP website.)

5.3. Reuse/repair

Re-using items preserves resources, reduces waste and supports a circular economy. Reuse also creates social value and brings communities together. We need to consider reuse before items are recycled or thrown away, e.g. can you repair an item of clothing, get your electrical appliance repaired, can an item be donated or sold on, etc. We are committed to achieving significant improvement in the levels of reuse within the district.

Our priorities will be to:

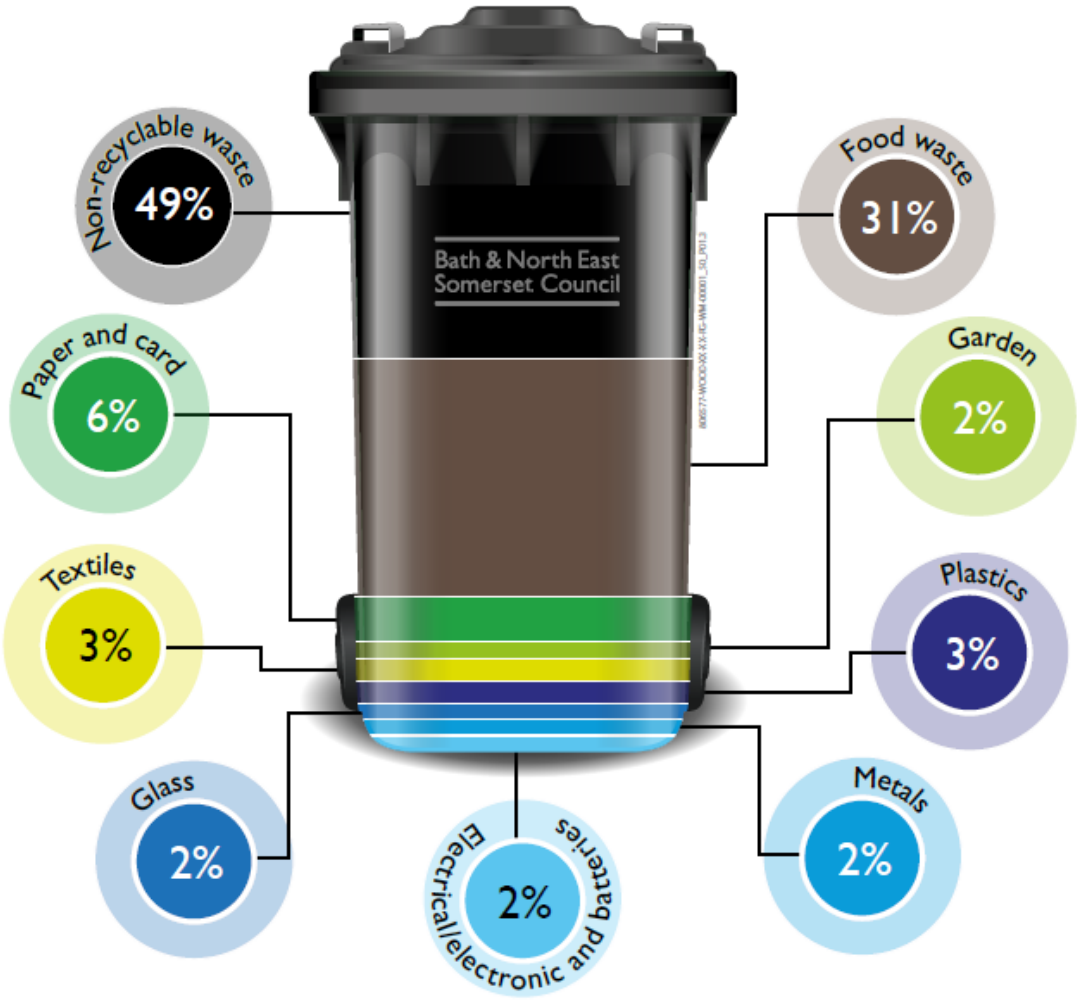
- Increase reuse of the items left at our HWRCs by setting up a reuse shop at the Keynsham Recycling Centre.
- Work with and promote third parties, and in particular charities, to further develop reuse and repair networks throughout the area and the Internet.
- Help enable community groups to hold reuse and repair events locally, such as clothes swaps, repair cafes, share / loan networks.
- Promote reusable alternatives, such as reusable bottles, coffee cups.

5.4. Recycle

The waste composition analysis in 2022 showed us that we have more to do to divert waste from the black bin (rubbish) into recycling. As can be seen in figure 5.2, 51% of the material found in the black bin is recyclable; approx. 31% is food waste and 18% is recyclables that could go in the green box or blue bag.

We know from our last customer survey (December 2019) that over half of our respondents said they had space in their black bin when they put it out. This is very encouraging especially as residents are saying this whilst using one of the smallest bins used for fortnightly collections across the UK.

Figure 5-2 Current contents of the black bin



The following statistics from the 2022 analysis also show where efforts need to be focussed.

- 36% of residents do not put out food waste separately, so we will be encouraging these people to do so.
- 10% of residents do not put out any recycling, education will support residents to do so.

B&NES will set high expectations of residents. We wish to educate and encourage, every household in the district so that residents become regular recyclers of the following materials:

Figure 5-3 Current dry recyclable materials collected at the kerbside

In recent years we have achieved great success in increasing the amount of waste we recycle, with 59.2% recycled in 2020/21. Our ambitions are to further increase the amount we recycle to **62% by 2025** and **65% by 2030**. This would give us an estimated financial saving of £400,000 on waste disposal costs, and ways we will accomplish this are:

- Continue to provide a comprehensive range of recycling and composting services to households across the district and aim to increase the range of materials we recycle at the kerbside and/ or via our recycling centres for recycling, as and when sustainable and cost-effective new markets develop e.g. plastic film, black plastic, disposable nappies, carpet, tyres, hard plastic etc.
- Introduce sorting stations at the recycling centres, so black sacks can be opened to ensure residents are recycling everything they can.
- Use in-cab technology within our collection fleet to increase participation monitoring and tailor specific education to increase recycling.
- Continue to review our garden waste services and promote home composting in a drive to keep this biodegradable material out of the black bins.
- Make recycling the norm and for those who do not take part, we will review the potential of making recycling compulsory.

- Review our waste collection policies to ensure that we are maximising the amount of waste we recycle and are using the most appropriate systems, e.g. review recycling container provision to increase participation.
- Use data to drive performance improvements as we get more tailored information. This will allow comparisons across areas and create opportunities for more focussed education.
- Consider our role in helping business to understand what their responsibility is to effectively manage their waste.

We set **high expectations for residents recycling** and where households are not participating in recycling or presenting waste inappropriately these will be identified by our crews when they are collecting. The methods of identification will include:

- checking recyclable materials in the bin as it empties into the truck
- noting unusually high or low weights of the bin
- observing no or little recycling being presented in the recycling collection
- other non-invasive methods.

The education team will communicate with the resident and offer support and guidance.

As a last resort, we reserve the right to encourage participation with formal enforcement, as set out in Section 46 of the Environmental Protection Act 1990 EPA. This prohibits certain recyclable materials within the black wheelie bin for which alternative collections are supplied. We will work with residents to assist them and give them every opportunity to participate in recycling, however, we are not obliged to collect waste that is not presented in the correct way. Placing business waste in your household bins is also illegal and you could receive a fine if you are caught doing this. For more information on how to dispose of your business waste correctly visit the managing your waste page of the Government website.

5.5. Recover

Where waste cannot economically be prevented, reused, repaired or recycled, we will continue to reduce reliance on landfill for black bag and other residual waste.

We will explore new treatment technologies to ensure the most advantageous outcomes, taking account of carbon emissions, wider environmental considerations and the cost to residents.

Section 4.2.2 details our current treatment and recovery arrangements for treating our non-recyclable waste. Our waste management contracts have been designed to ensure that we can continue to maximise recycling.

5.6. Dispose

All approaches are aimed at reducing the amount of waste which arises, and therefore needs to be disposed of. Waste going to landfill continues to reduce and we will be focussing on ensuring that progression continues, although there will always be some items only suitable for disposal in landfill.

5.7. Improving place

5.7.1. Litter

Dropping litter is a widespread negative behaviour. Keep Britain Tidy estimate that the total cost of litter to the taxpayer is £1bn a year.

An estimated 62% of the population drop litter although only 28% admit to it. From the 2019 resident survey, residents felt that greater awareness of the impact of litter would be helpful in reducing it.

To reduce litter and improve place we will:

- Continue to take enforcement action against those who litter; a recent resident survey showed that 86% supported fining people for littering.
- Raise awareness and educate to show the impact of litter on the environment (e.g. cigarette butts).
- Provide media coverage on main A-road litter picking to get a clear message out about the cost of clearing litter and its impact.
- Continue to review practices of waste collection services to reduce any litter caused from collections.
- Continue to review the type, quantity and placement of litter bins to ensure they are in those areas where they are needed the most.
- Work to maximise volunteer and community engagement in litter picking, for example, making litter pickers available in parks.
- Work specifically with students to support their understanding as they become new residents, and what the council is asking them to do. Seeking out opportunities where students can assist the council to deliver real change.
- Increase support for businesses to enable them to manage waste effectively and to ensure it doesn't impact on place. This could include advice and support to encourage them to recycle more.

5.7.2. Tackling environmental crime

Environmental crime has a negative impact on our local communities and costs the Council and its tax-payers tens of thousands of pounds each year in clear up costs.

Environmental Crimes include:

- Dropping litter on the street or from a vehicle, this includes chewing gum and cigarette butts.
- Graffiti.
- Fly-tipping.
- Not putting domestic or commercial waste out properly.
- Not clearing up after a dog.
- Breach of a Community Protection Notice.

As well as the actions listed regarding litter, we will implement a range of actions to help reduce or prevent environmental crimes:

- Engaging the community to assist in preventing such crimes from occurring, and obtaining evidence where it does.
- Zero tolerance approach to those who fly-tip – escalated action and enforcement enhanced and increased to reduce incidents.
- Name and shame – develop easy ways for residents to report and provide evidence from dash-cam footage and CCTV.
- Provide more education to residents in communal or shared properties to encourage correct use of bin stores.
- Identify and remove incidents of domestic and commercial waste being placed in street litter bins.

5.8. Infrastructure

5.8.1. New depot - Keynsham recycling hub

An important area is developing a new purpose-built modernised Waste and Recycling Hub. The development will consolidate current operational facilities within state-of-the-art facilities at Pixash Lane, as well as house a sorting and baling facility for the recyclable materials we collect from residents and businesses. This will mean we can maximise the quality and income from those, which is a valuable part of the recycling budgets.

The depot will be linked to a modern public reuse and recycling centre, with a permanent Reuse Shop. This will help residents of B&NES to reuse and recycle more and in doing so will help tackle the Climate Emergency.

In line with the Council's climate and ecological emergency declarations, the scheme will integrate carefully considered sustainability measures with flexibility and

adaptability to meet future demands, including new recycling developments (arising from the Environment Bill), on-site renewable energy generation, building fabric efficiency and enhancement of ecological systems with planting and wildlife corridors. Capacity for the electric vehicle fleet has also been incorporated.

The Keynsham Recycling Hub is on the strategic road network for access to the ring road and motorway for the bulk haulage of waste and recycling to treatment and reprocessing sites within the region and across the UK; this will help maximise transport efficiencies.

Construction of the new depot has started with completion and relocation due in 2023. Phasing of the build will be considered to keep sufficient reuse, recycling and bulky disposal facilities available to residents.

Figure 5-4 Design of the new depot

Figure 5-5 Depot redesign

5.8.2. Bath recycling centre

A public Recycling Centre will be retained at the current Midland Road site until a new permanent Household Waste Recycling Centre is developed and built in Bath.

5.8.3. Vehicles

Currently the waste service uses around 800,000 litres of fuel every year, drives over 670,000 miles and current spend is around £900k pa on fuel, with every mile costing us £1.30 per vehicle. We need to reduce this by making routes and journeys more efficient and only carry them out where necessary. Large scale system change is needed in order to achieve our 2030 carbon neutral target. We need to cut emissions and be bold. In order to reduce our carbon impact as well as our fuel usage, we will be taking specific actions to achieve the best vehicle support possible.

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6. Financial implications

6.1. Proposals and Council's financial plans

The national and local financial situation will require tough decisions, and we anticipate that efficiencies or cuts may be required to meet financial objectives. Proposals will be assessed in line with the Council's core vision and waste strategy objectives.

We will assess the estimated financial impact of the changes resulting from the government's national Resources & Waste Strategy. We will need to factor in the anticipated financial impacts of increased recycling rates, and other investments in this period.

Work will be done to analyse all of our current costs. This will allow us to respond to any questions arising from the private sector about the introduction of EPR (see section 3.1.2). We can then progress any agreements regarding the cost of the service we provide.

The financial impact of introducing actions to support this strategy will be considered as each annual plan is detailed and presented for agreement. Any financial implications of proposals (or outcomes of reviews) will be presented in detail with any recommendations. In that way, no financial commitment will be made without sight of the financial data.

6.2. Estimated costs

Any business-as-usual costs, such as replacement of fleet, are not considered here as they form part of the services normal business planning outside of the strategy. However, there are a small number of commitments within this strategy which will have some direct financial implications, shown in Table 6-1.

Table 6-1 Estimated commitment costs

Category	Commitment	Estimated Cost/income	Date of known cost
Recycling rate	Increase to 62%	£200,000	2025
Recycling rate	Increase to 65%	£400,000	2030

Category	Commitment	Estimated Cost/income	Date of known cost
New recycling streams	To add new items to recycle at kerbside, such as film.	Unknown but will be proposed if financially viable.	As identified.
Impact of new government waste strategy changes. (These items are not as a direct result of the strategy as they are government led and will be compulsory for us to deliver.)	Extended producer responsibility - resulting in 'full net cost recovery'. However there is no clarity regarding how the calculations will be done.	Income will be estimated when 'full net cost recovery' is explained.	Anticipated 2024
Impact of new government waste strategy changes. (These items are not as a direct result of the strategy as they are government led and will be compulsory for us to deliver.)	Deposit return scheme – estimates show this could reduce kerbside collections by 23%.	Reduction in income and reduction in resource requirements. Unclear until actual impact is known.	Anticipated 2024

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Category	Commitment	Estimated Cost/income	Date of known cost
Impact of new government waste strategy changes. (These items are not as a direct result of the strategy as they are government led and will be compulsory for us to deliver.)	Consistency in collections – we already provide all collections required, except for free garden waste and collection of plastic film.	If free garden waste is collected there will be the loss of current income as well as increased operational costs as more residents may use the service.	Anticipated 2024

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7. Monitoring our progress

This strategy provides the overarching direction for managing our waste, outlining the steps we need to take now and over the next eight years to reduce the amount of waste we produce, to recycle as much as possible and to minimise the amount of waste sent to landfill.

We will manage the delivery of the strategy through:

- development of our annual service plan;
- annual target setting;
- reviewing progress against annual targets;
- development of specific project plans; and
- development of annual communication plans.

Waste management performance information can be found in the B&NES Policy and Documents.

To know more about our current recycling please visit the B&NES recycling page.

Finally thank you to all of the residents and businesses in Bath & North East Somerset for playing your part in helping to achieve what we have set out in this strategy.