

Our Waste Strategy

Newcastle upon Tyne 2018

In Autumn 2018 we want to gather the views of residents, businesses and stakeholders as we develop our **Waste Strategy** for how we manage waste in Newcastle.

Why we are doing this?

The world is producing more and more waste. There is also a renewed and widespread passion for environmental issues. Nationally, the government has published its 25-year Plan to Improve the Environment, and a new Resource and Waste Strategy is due to be published this year.



The response to documentaries such as 'Blue Planet' and widespread concern about plastics, particularly in marine environments, has galvanised public opinion and actions. For Newcastle it is too a time of growth and for change. We want to be a city that produces less rubbish. Any waste that is then produced shouldn't be a problem to be got rid of but valued as resource. A resource that can be reused or recycled into something else or utilised in energy recovery or manufacturing.

We want everyone in Newcastle, businesses, major organisations, residents and visitors, to recognise that rubbish is not a council problem but a personal choice. As consumers we have a responsibility to consider carefully what we are buying and think about what will happen to things once we have finished with them. We need to think about our impact on the environment now and for the sake of future generations.

We need to think differently about the things we throw away and make sure that we have given them every chance to become useful again. At the same time, we need to encourage and educate residents and businesses to reduce the amount of rubbish they produce in the first place. This may be through small acts such as careful meal planning and shopping or for businesses something more radical such as new procurement strategies. There are opportunities for small companies to work together, to innovate and create using waste as a resource to grow the local economy.

Following on from the work of the Waste Commission, the time is right to launch our vision for changing hearts and minds. We hope our residents and businesses will embrace the principle of waste as an asset and be part of our vision to think and act differently regarding rubbish from now on. No-one should waste 'waste'. The new Waste Strategy will recognise this and include options to deliver this new vision.

Financial Context

Austerity means our city is on track to have lost £283 million by 2020. The cuts to council funding in Newcastle equal £268 per head of population. The strategy will look to deliver the council's vision for waste up to 2030, with short, medium and long-term actions. Given the impact of austerity and the uncertain future, including the potential challenges of Brexit, all options must be both affordable and sustainable.

What we want your views on?

The Waste Strategy is being developed around themes:

- Behaviour Change and Education
- Waste prevention including reuse
- Food waste
- Recycling and composting
- Operations
- Planning
- Recovering value - Markets and Technology
- Enforcement
- Partnerships, public and private

From the Stage 1 consultation we learned that respondents wanted the benefits from the Waste Strategy to be felt by local people.

People supported the idea of behaviour change and that those who produced waste should be responsible for controlling and disposing of it.

There was strong support for using and reusing stuff for as long as possible, and that waste is always something to be kept to a minimum. While people agreed that an outcome of a stronger, local, circular economy was good there was recognition that this would take time and resources. The language of the 'circular economy' was not

You can **give us your views** about this online at:

<http://letstalknewcastle.org.uk>

Before you do that, please read on to find out:

- How we have responded to the Waste Commission?
- Monitoring, implementing and reviewing the strategy
- What we do now?
- What have we done since the last Waste Strategy in 2005?
- Why do we need a new Waste Strategy now?

widely understood, which needs to be considered when preparing information in the future.

There was agreement that there should be a focus on making less waste and several comments specifically about reducing litter. While agreeing with the ambition of being a cleaner and greener city the wording used in the draft document was confusing and comments were that it could be clearer and that it related to wider environmental issues, including carbon reduction.

There was some confusion over the wording of the outcome of 'zero food waste'. This also attracted most comments; some that zero is not a realistic target, and other on how difficult this would be to measure, but other comments included positive suggestions on encouraging more home composting or looking into collecting.

The feedback and comments have been used to inform the strategy's vision, ambitions and outcomes and this next stage of consultation.

Stage 2 consultation

The next stage is to provide some further information on what is already being done or planned and to consult in more detail so that the Waste Strategy and the supporting Action Plan deliver the outcomes. To do this we are seeking views on some key areas under the different themes. The questions in the questionnaire are included in the box below the information.

Behaviour Change and Education, and Enforcement - Increasing the quality of recycling

High quality recycling is important to make high quality recycled products. So that the council can target its behaviour change, educational and influencing activities effectively, we are seeking views on responsibility for the quality of recycling.

To what extent do you agree or disagree with who is most responsible for ensuring that the right items get recycled?

- Residents, by putting the right things in the right bin
- The council, by making sure people know what items can go in which bins, confirming when people have got it right (for example, by putting a sticker on the bin), and working with households who have put wrong items in their bins to support them to sort their waste and recycling
- The packaging industry and shops, by making sure that more of the packaging we buy can be recycled
- The sorting facility, by making sure they have enough people and / or the right technology to pick the wrong items out of the recycling

- The waste industry, through coming up with ways to use or process hard to recycle materials, such as plastic food trays, so more items can be placed in the recycling bins
- Other - please tell us about this:

Waste Prevention - reducing what is thrown away

Retailers, manufacturers, consumers, local and central government all have a role to play in promoting waste reduction. Consumer behaviour is influenced by complex factors. As a local authority we have limited influence on what, when and where people purchase goods, but we can encourage positive behaviours by residents.

Retailers, including the likes of Tesco, Coca Cola and Marks and Spencer, recognise the value of the resources they use in their products and its packaging and want to encourage reduction, reuse and recycling to reduce overheads. It is likely over the coming decade that supermarkets and other retailers will encourage their customers to reuse and recycle goods at the end of life. These retailers have huge marketing power and the ability to encourage more reduction, reuse and recycling. Newcastle City Council proposes that with the Resource Newcastle Partnership (more information on this is in the Section on responding to the Waste Commission) to work with retailers and others to improve waste reduction and reuse performance.

On average a Newcastle household currently throws away 13kg of waste per week. By 2030, to meet national targets this would need to reduce to around 8kg. Over a year this would mean reducing or diverting from treatment over 35,000 tonnes of waste, not accounting for all the extra waste produced by the expected 21,000 new homes.

To what extent do you agree or disagree that the actions below would make it easier for you to reduce your household waste and costs?

- Avoiding junk mail (for example, by registering with the Mailing Preference Service)
- Buying only what you need
- Composting at home
- Reducing your food waste
- Using reusable nappies (if this applies to you)
- None of these
- Other

What makes it difficult for you to do any of these? Please tell us about this.

Respondents are also being asked what areas of waste reduction they think Newcastle City Council should be involved in.

Food Waste – reducing or valuing waste as a resource

We want to help households and individuals to reduce and manage their waste to seek to ensure zero growth of waste produced per household. What the Waste Commission research showed is that food waste still makes up a significant amount of what is in people's rubbish bins.

How likely or unlikely do you think you and any other members of your household would be to use a separate food waste collection service if one was provided?

Recycling and composting – Increasing recycling

All residents, businesses, organisation and visitors have some responsibility for reducing and recycling the waste they produce. This will require behavioural change and the right set-up to ensure that waste is reduced, and recycling is increased towards the national 65% target.

Currently the council spends over £20 million a year on recycling and waste collection and disposal. Much of the waste in the rubbish bins could have been recycled in the blue or mixed recycling bin. Putting the right waste in the right bin would save money for residents and be more environmentally friendly and sustainable.

To what extent do you agree or disagree that the actions described below would help you to reduce waste and recycle more?

- Having a smaller rubbish bin (green-coloured bin)
- Being able to have two recycling bins
- More information being provided to residents about which types of waste and recycling can go into which bin
- More information being provided to residents about what happens to your recycling
- Incentives or rewards, such as shopping vouchers for individual households to increase their recycling
- Incentives or rewards, such as providing community facilities for neighbourhoods to increase their recycling
- Other - please tell us about this:

Operations - Managing the increasing costs and environmental impact of waste collections

We need to manage the rising costs of waste collection and disposal. One way is by designing appropriate services, potentially for different areas or communities that promote waste minimisation, reuse and recycling

To what extent do you agree or disagree that the actions below would help reduce the cost to the city of waste collection and disposal, and promote waste minimisation and recycling?

- Shared bins for rubbish, where people do not already have these
- Shared bins for recycling, where people do not already have these
- Individual rubbish bins, where people do not already have these (some areas already use shared bins)
- Individual recycling bins, where people do not already have these (some areas already use shared bins)
- More action on “contaminated” recycling bins, for example making people aware of when they have put items in the wrong bin
- Other - please tell us about this:

Planning - Recycling and waste in new developments

We are a growing city, by 2030 planners expect 21,000 new homes, 14,000 new jobs and a population increase of almost 30,000 in Newcastle.¹ With every new home producing almost a tonne of additional waste every year, we need to think about how the waste from these new developments is managed from the start.

To what extent do you agree or disagree that the Planning Authority should work with developers to move towards new developments having a target to enable recycling of 65% of their waste (the EU / national target for recycling of municipal waste), for example by including suitable or innovative storage for recycling and waste inside homes?

If you have any comments about this, please tell us about them:

¹ ‘Planning for the Future: Core Strategy and Urban Core Plan for Gateshead and Newcastle upon Tyne 2010-2030’. Adopted March 2015

Recovering Value: Markets and Technology - Embracing modern technologies to help deliver responsive services and efficiencies

Modern and often innovative technologies and new ways of working can help deliver services and efficiencies while still responding to the needs of our communities.

We want a solution for any waste that is produced that minimises harm to the environment, is affordable, and maximises the benefit for the city and its communities.

When we assess solutions and technologies for treating waste to decide whether to use them there are some standard assessment criteria that are listed below. Which of these do you think are the most and least important ones?

- Does the proposed approach **minimise harm to the environment and maximise benefits** including reduced carbon emissions?
- Is the proposed approach **affordable** and viable in the long-term?
- Does the proposed approach deliver on **council policy** and all statutory requirements?
- Does the proposed approach **support local jobs, investment and the development of the 'circular economy'** (where resources, such as plastic, are kept in use for as long as possible, we extract maximum value from them whilst they are in use, then recover and regenerate products and materials instead of throwing them away)?
- **Does it work**, and is there evidence to demonstrate this?
- **Other** - please tell us about this:

Enforcement - dealing with litter, waste and the criminal offences of fly-tipping and open burning

Newcastle City Council uses the full range of existing tools and powers, and our enforcement figures for waste crime prosecutions are consistently in the top two highest in the country. There is however a need to raise awareness that these are criminal offences; there is an impression amongst some that waste crime is victimless.

Newcastle City Council's enforcement figures for waste crime prosecutions are consistently in the top two highest in the country and we use the full range of existing tools and powers to achieve this. However, the situation is constantly changing, and we need to make sure we have the tools we need to tackle these crimes.

We could work to influence national Government for more, or changed, regulation on all of the areas below - which do you think we should prioritise (or not)?

- **More police assistance** to locate and deal with **fly-tipping** gangs. (This is increasingly being committed by organised crime gangs)
- A **requirement** for anyone who picks up waste, or is a broker or dealer to have a **regulated permit and to use a recognisable brand** (like a kitemark)
- Introduce a requirement for householders and businesses to **store their bins** within their property after collection.
- Have **consistent** and **fair** littering regulation and enforcement by the local authority and police (currently the penalties are different)
- Record offences under the Scrap Metal Dealers Act 2013 as a **crime**, so that they appear on police national computer for all enforcing agencies to see and use.

Partnerships - Increasing recycling by businesses

The council aims to provide reuse, recycling and waste services that help residents, businesses and visitors to manage the environmental impact of waste.

To what extent do you agree or disagree that businesses should have facilities to recycle and be expected to reduce their waste and recycle as much of their waste as possible in the same way as residents are asked to use their blue, green and brown bins? An example would be expecting shops to take back packaging material.

Are there any other comments you would like to make about the issues raised in this survey, or things you would like us to think about when we decide what to do about waste and recycling in Newcastle? Please tell us here.

What did people say in the first stage on consultation and what's changed?

This is a summary of the findings from stage one of our consultation on the Newcastle City Council Waste Strategy. We ran a survey on Let's talk Newcastle Online between 31 May and 28 June and held two drop-in events for people to attend to find out more about the proposals at the Civic Centre on 13 and 26 June 2018.

People could also complete the questionnaire in a paper format and return it to us. We had two responses via paper, one via email and 237 online responses. The questionnaire had six questions about the strategy's proposed vision, ambitions and outcomes, and asked respondents to give us some information about themselves such as age, gender and where they live.

Most respondents to the survey agreed with our **proposed vision**. While those who commented broadly agreed with the proposed vision the aim of becoming a world leader was thought to be challenging.

The highest levels of agreement with our **proposed ambitions** were with the ambitions to **maximise the quality and quantity of reuse and recycling**, and **minimise the use of landfill**, and the lowest with **being recognised as a world leader**. Those who commented were particularly concerned about people needing better education about what can be recycled, and the need to work with external organisations to reduce waste.

The highest levels of agreement with our **proposed outcomes** were with **the benefits of the waste strategy being seen and felt by local people** and **second-hand not being seen as second-best**, and the lowest with **having zero food waste**. There were many comments about compliance and enforcement, particularly around recycling and litter, but also about being realistic.

Following the consultation exercise, the vision wording has been reviewed to reflect the focus to be more on local priorities. The ambitions and outcomes are now shown ranked based on levels of agreement and some of the wording has been clarified.

Our Vision is:

"We want our Newcastle to be a clean, green and sustainable city that wastes less and recycles more."

Our Ambitions are:

1. To maximise the quality and quantity of reuse and recycling.
2. To minimise the use of landfill, which is a poor environmental and economic option.
3. To reduce the production of waste.
4. To explore partnerships.
5. When waste is produced to encourage community and commercial opportunities to use it as a resource.
6. To build communities where excess waste and litter are socially unacceptable.
7. To change the way people, businesses and organisations think about waste.
8. Where prevention, reuse or recycling are not possible, to maximise recovery of our waste through sustainable and affordable collection and disposal channels.
9. To be recognised as a city that learns from world leaders and aspires to lead in resource and waste management.

We are aiming for these Outcomes:

- Benefits should be seen and felt by local people, businesses and the environment.
- Second-hand is no longer seen as 'second best', and repairing is a natural option
- Communities, public and private sectors naturally work together to minimise the impact of and maximise the value of waste.
- Everyone takes personal responsibility for waste.
- In time, a stronger local 'circular economy' bringing hundreds of new jobs and millions of pounds of investment.
- Waste is valued as a resource and managed accordingly.
- Less waste in the bins and on the streets.
- Newcastle is a cleaner, greener and more sustainable city that is an example of best practice nationally and internationally.
- Homes, schools and businesses that throw away less food and save money.

How have we responded to the Waste Commission now and in the future?

What is Newcastle City Council doing already?

The council cannot deliver the changes needed alone, and we can only achieve our ambition on waste together with residents and partners. The Waste Commission's report contains many actions that the city could take to achieve our ambition for waste and it is for organisations and communities to respond to these ideas individually and collectively. The council has already made progress and acted in response to the recommendations of the Commission to make a difference.

As a priority, we have established the Resource Newcastle Partnership. This is sitting at the heart of everything we will do as a city to change our approach to waste for the future.

Other examples include:

- Stopped the use of **single-use plastic** where practicable, e.g. straws and cutlery
- Switching to **compostable** coffee cups and lids
- Supporting **Refill Newcastle** and refilling of reusable water bottles
- Promoted and improved **recycling** within council buildings and operations
- Provided more and updated **information** on waste and recycling to residents including posters on our bin lorries
- We have challenged our current waste disposal contractor to look for **alternatives** to sending waste to Sweden for energy from waste
- We are challenging **schools** to reduce their use of plastic, such as cutlery and straws
- And we have taken action on **litter** – with messages installed on on-street litter bins to reduce litter, dog mess and dumping of waste.
- Promoting the **garden waste** composted within the city for use in the city.

Steps like these demonstrate the council's commitment and if we are asking residents and businesses to make changes we need to be prepared to step-up ourselves. And this is just the start of thinking about how we reduce waste across the board.

Looking to the future...

The Commission's report contains some more complex and longer-term actions, but we are already looking to make progress on these now. For example:

- Alongside the leading national charity **WRAP** (Waste Resource Action Programme), we are exploring the scope for separate food waste collections and increasing recycling capacity.
- We will be working with the exciting **Future Homes Project** at Newcastle Helix to build waste reduction, reuse and recycling into these new homes of the future, bringing developers, planners and other partners together to look at this.
- Already the **Food Newcastle Partnership** has published its new strategy and action plan which will help to achieve the Commission's proposals on reducing food waste.

Monitoring, Implementing and Reviewing the Strategy

To know how well we are meeting our strategic objectives, it is important to establish and report on appropriate measures.

Key measures which are currently reported include:

- **Residual household waste per household** (formerly a National Indicator, NI 191) - This is important as it reflects how well we are doing in implementing the waste hierarchy, both by recycling and through waste minimisation.
- **Percentage of household waste** sent for reuse, recycling or composting (formerly a National Indicator, NI 192) – This reflects our contribution to the national recycling target.
- **Percentage of municipal waste** sent to landfill (formerly a National Indicator, NI 193) – Minimising landfill is a strategic ambition.
- **Collected household waste per person** (formerly a National Indicator, BVPI84a) – Waste minimisation is the top of the waste hierarchy, and this reflects how well we are all doing.

Because of the new ambitions and outcomes new measures need to be considered to monitor things such as our success in stimulating the circular economy and reducing food poverty.

As part of drafting the Waste Strategy Action Plan a new suite of measures will be needed and targets developed. A key task will be assessing whether the currently published measures, largely weight based former National Indicators, represent the

best way to measure the performance of the council and the city.² Measures of success could still include weight-based metrics but will need different measures for some of the ambitions and outcomes. These could include:

- Recognition as a world leader in waste reduction
- Reduction in food poverty
- Inward investment and jobs
- Waste collected per household
- Waste sent to landfill
- Household recycling rate
- Carbon reduction

Implementing the strategy

Due to council budgets reducing, and the need to adopt more sustainable waste management practices, further pressure will be placed on service budgets. Pragmatically services can only be delivered within available budgets. The council will continue to actively seek any funding opportunities, whether from central government or otherwise, which can help us to afford to undertake work in support of the objectives identified in this strategy.

To ensure the continued drive to improve services and develop efficiencies it is essential to work together in partnership with other organisations and authorities to deliver the strategy. Working together will enable collection and disposal requirements to be coordinated to ensure long-term and sustainable collection, treatment and disposal infrastructure.

Significant changes are required over the next 15 years. To deliver these changes an action plan is being prepared that will break down the actions and tasks required to meet the outcomes as set out in the strategy.

The delivery of tasks within the action plan will need to be monitored and reviewed annually to ensure the council delivers the targets it sets itself through this strategy. Where significant changes occur, the action plan will be updated accordingly.

The action plan will establish how the strategy will be delivered, considering what will be required by the council including

- Action required to deliver waste **minimisation** and further increase reuse, recycling and composting;
- Future changes or improvements to **collection** services (residual waste, dry recycling, garden waste and potentially food waste); and

² Environmental Services Association Report Why Wait Weight isn't working Smarter measures for the circular economy August 2018

- Investments required to deliver future **residual** waste treatment facility and additional recycling infrastructures.

Reviewing the strategy

This strategy will need to be regularly reviewed to ensure that our ambitions and outcomes remain appropriate, and to change them if necessary. This will, in line with government guidance, happen at least every five years, meaning that an initial review will happen by 2023 at the latest. This will be particularly important in the light of any changes to the landscape in which we find ourselves, including:

- The anticipated **publication** of a national Resource and Waste Strategy due to be published by the end of 2018
- The UK's **departure** from the European Union, and any changes in UK waste legislation and policy which arise from that; and
- The level of **funding** provided to each local authority by the UK Government.

What and how do we deliver now?

As a city we are responsible for the collection and disposal of household waste together with a wide range of street-scene related services. A summary of services is attached at Appendix 1.

What have we done since the last Waste Strategy in 2005?

When the last Strategy was prepared in 2005 we collected nearly 182,000 tonnes of Municipal Solid Waste (MSW) each year, and of this only 15% was recycled. The rest, 85%, was landfilled. Last year (2016-2017) we collected a lot less waste. The total was 144,000 tonnes; over 40% of this was recycled and only 20% was sent to landfill. Household waste made up most of this.

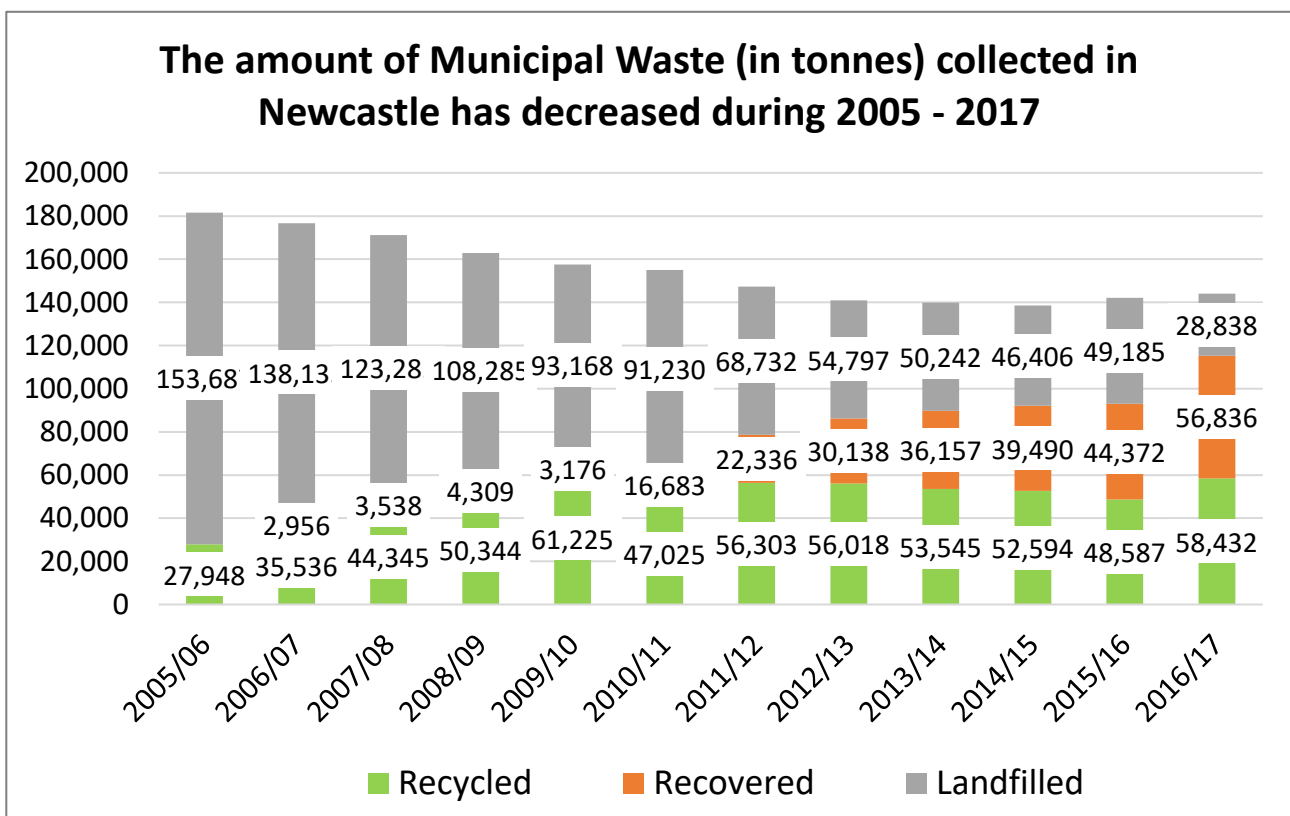
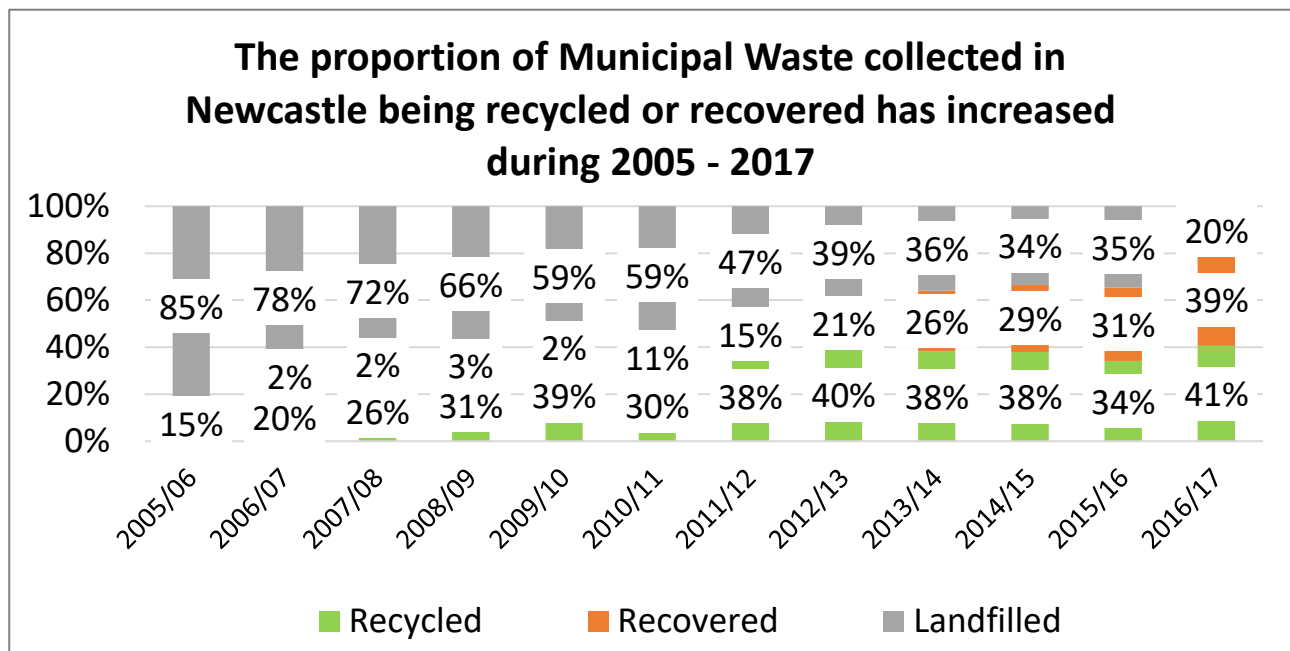
So how have we done this?

- In 2006 we opened the **Byker Resource Recovery Centre** which operates as a Mechanical Biological Treatment (MBT) facility for the black-bag rubbish. This process captures the organic / food content, which is sent to an In-Vessel Composting (IVC) site in Northumberland to produce a compost like output that benefits the environment. Other recyclables, mainly metals, are extracted at the MBT and the final residue is baled and used as a Refuse-Derived Fuel (RDF). This process recycles or recovers 75% of the material that is sent to the facility.

- In 2008 in response to demand from residents for more capacity and more materials to recycle we introduced the **blue wheeled bins**. This has doubled the amount of dry mixed recycling collected at the kerbside; around 18,000 tonnes were collected last year.
- We worked with our contractor to look at how we could divert more waste from **landfill**. Since 2010 thousands of tonnes of residual waste that would otherwise have gone to landfill have been used instead to produce energy and heat, either within the region or in Sweden as a Refuse-Derived Fuel or in an Energy from Waste Facility (EfW) in the UK. Last year over 40,000 tonnes were used in this way.
- In 2013 moving to a **weekly alternating** collection of rubbish and recycling resulted in an increase of around 2,000 tonnes in dry recycling collected.
- Worked with **schools** through the bespoke 'Enviroschools' programme to educate and inform the next generation about waste and their role and responsibility to the wider environment. Thousands of students and the wider school community have benefited from this.
- Delivered many innovative and effective projects with **community groups** to reduce waste, particularly food waste, to reuse material and increase recycling.
- Ran an **Incentives** and Rewards scheme that increased recycling using the old recycling box system.
- We **compost** the collected green and garden waste, such as from the brown bins, within the city. This is the only such facility operated in-house in England and we promote the sale of the high-grade compost to local allotments, community groups, businesses and residents.
- In 2017 we reviewed the use of **on-street litter bins** using remote sensors, so they are placed where they are most needed, and increased the volume of litter collected by nearly 19%.
- We have provided **home composters** at a subsidised rate to minimise the amount of garden waste entering the collection system. Monthly about 40 composters are bought, which over the years means thousands are in use across the city.
- We delivered an **Independent Waste Commission** to make recommendations for developing long-term, ambitious approaches to ensure we reduce waste where possible, maximise recycling and reuse, get as much value as possible from waste, and where prevention, reuse and recycling are not possible, maximise recovery from waste to energy (<https://www.wiseonwaste.co.uk/>).
- Recognised nationally as being a leading local authority for successfully **prosecuting** people who litter and fly-tip. Our successful and tough approach to enforcement has resulted in 2,350 hours of community payback, 50 months' imprisonment and nearly £200,000 in fines and penalties.

What do we do with rubbish now?

By introducing more opportunities for recycling, we have increased the rate of recycling, from around 15% when the last Newcastle Waste Strategy was produced in 2005 to over 40% last year (2016/17). We have found valuable uses for more of the remaining material, including using it as a fuel to produce heat and energy. Around 40% of waste collected is now recovered, so last year only 20% was sent to landfill, compared with 85% in 2005. This is shown in the charts below.



So, why do we need a new Waste Strategy now?

The UK is committed to recycling 50% of municipal waste by 2020. The EU's Circular Economy Package (CEP) includes increasing recycling rates for municipal waste up to 65% by 2035. The UK has committed to adopting the CEP targets even after Brexit.

Newcastle is growing. By 2030 planners expect 21,000 new homes and 14,000 new jobs and a population increase of almost 30,000.

Newcastle City Council has a statutory duty to consider the Waste Hierarchy (shown on the right) when thinking about how it manages the waste it is responsible for, starting with the most favoured option and only using the least favoured option (landfill) when we cannot find other alternatives.



1. Options from most to least favoured

Reduce - Waste is going up

We have promoted waste reduction schemes such as promoting the mail preference service to stop junk mail, providing subsidies for home composters and education, and running campaigns to reduce food waste. Since 2005 overall levels of waste have fallen both in total and per household. However, since 2014-2015 we have started to see this picture change, with more waste being collected. This is partly to be expected



because the city is growing, but we are also collecting more rubbish from each household – nearly a tonne per year. The new Waste Strategy will need to challenge the total amount of waste being produced and the amount created per household.

Reuse and Recycling – We’re doing better but could do more

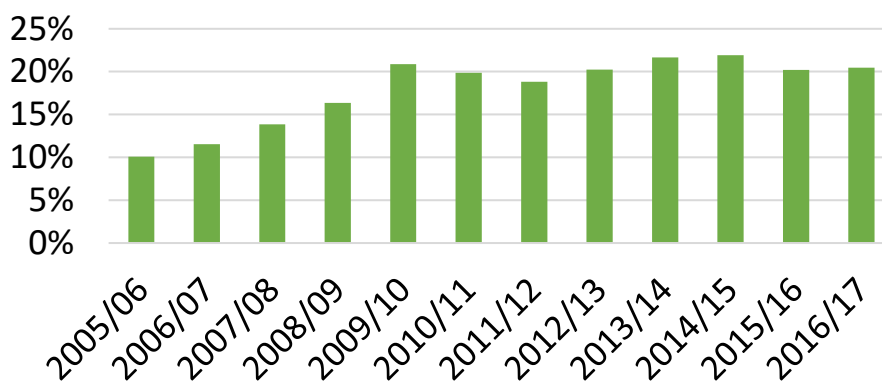
We have promoted reuse through the support of organisations and charities that collect and repair furniture and other household goods, worked with community groups on repurposing a whole range of items and promoted the use of online portals to redistribute items. However, the Waste Commission found

that many of these activities were not joined up and could be more effective if they were better co-ordinated and their scope and scale increased.

We introduced new schemes, such as the blue bins, and improved facilities, such as the MBT process at Byker, for recycling, which has increased the rate of recycling from around 15% when the last Waste Strategy was produced in 2005 to over 40% last year (2016/17).

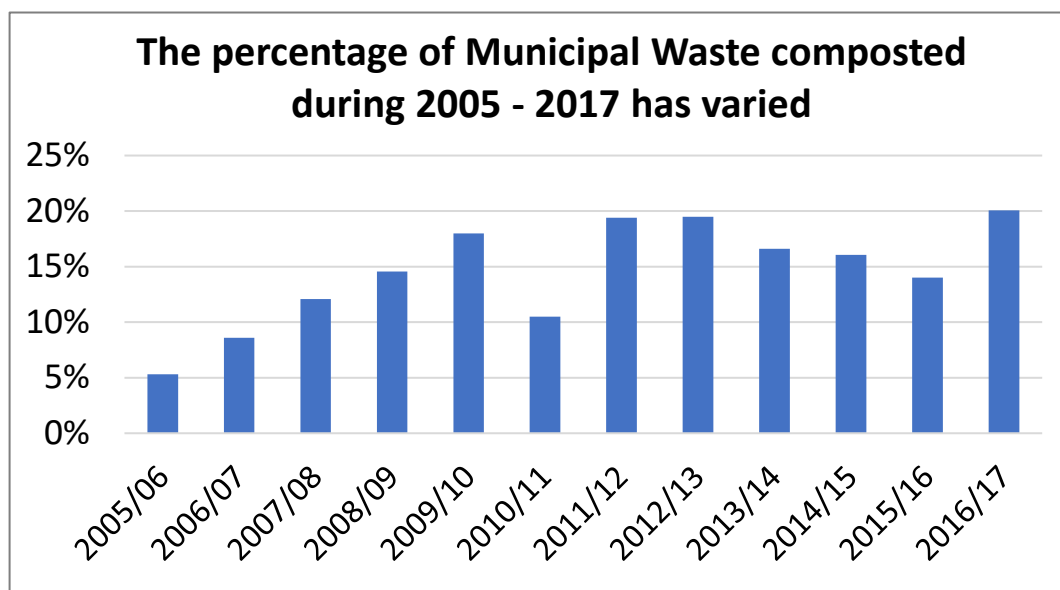
However, as is happening across England, recycling rates are levelling off, particularly for the dry mixed recycling that we collect at the kerbside. We have also seen increasing levels of valuable recycling lost due to contamination. This is not good environmentally and even worse economically, with it costing sometimes four or five times as much to recover or dispose of a tonne of waste rather than reuse or recycle it, which takes away resources from other key council services.

The amount of dry mixed recycling waste in Newcastle increased during 2005 - 2014, but is starting to level off



Composting

We have been very successful in capturing garden waste from brown bins and the HWRCs. We then compost the garden waste within the city, the only such facility operated in-house in



England, and promote the sale of the high-grade compost to local allotments, community groups, businesses and residents.

We have also been very successful in capturing organic material as part of the MBT / IVC (In-Vessel Composting) treatment process, but the evidence from organisations like WRAP is that too much food is being wasted, hitting families who are just about managing and costing the environment.

The recycling of the organic / green element of waste collected is also variable, resulting in the overall recycling rate going up and down over the years. This is due in part to the weather that results in different amounts of green waste being produced, and the dependence on the technology to treat the organic fraction. For example, the lower composting and recycling rate in 2010 / 11 was due to the IVC facility being refurbished and not available for part of the year.

So, while we can capture and treat the organic material, as with all waste, including recyclable material, the ideal is to reduce the amount produced in the first place. We already have processes in place to capture a lot of recycling so achieving higher recycling levels in future will be harder. The new Waste Strategy will need to include options to increase recycling of both dry mixed recycling, and organic and green waste.

Recovery

Following the waste hierarchy, this is all about getting value from waste that can't be reused or recycled. This includes anaerobic digestion, incineration with energy recovery, gasification and pyrolysis which produce energy (fuels, heat and power) and other materials from waste.

The Byker Resource Recovery Centre operates as a Mechanical Biological Treatment (MBT) facility. As detailed above the organic / food content is used to produce a compost, other recyclables, mainly metals, are extracted and the final residue is baled and used as a Refuse-Derived Fuel (RDF) to generate electricity and heat. This process recovers around 70% of the rubbish processed through it.

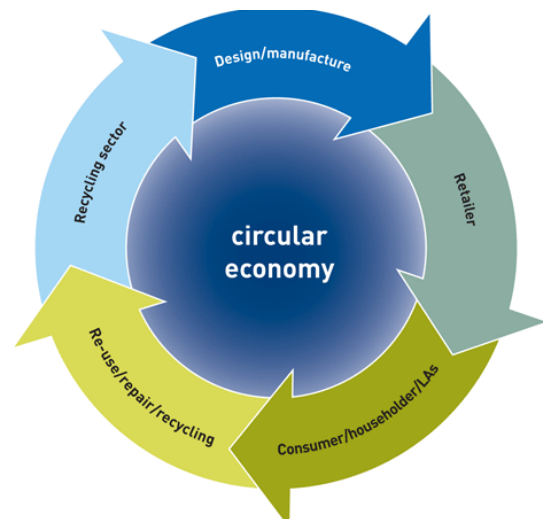
Landfilling rubbish is a poor economic and environmental option

Landfilling rubbish is poor economically and environmentally, and the last option in the waste hierarchy. Landfill Tax is payable on every tonne of waste sent to landfill. The tax originated as a driver for change, as making landfill more expensive makes alternatives such as recycling more financially attractive. In 2018/19 the rate is £88.95 for every tonne landfilled. At this time there is no set of solutions that can remove the need for some landfill of municipal waste. What we can aspire to is minimising this to the lowest level practicable.

What is a circular economy?

A 'circular economy' is where resources, such as plastic, are kept in use for as long as possible, we extract maximum value from them whilst they are in use, then recover and regenerate products and materials instead of throwing them away

This is an alternative to a traditional 'linear economy'. In a linear economy, resources are used to make things, which are then used, and disposed of at the end of their life (the 'make, use, dispose' model). Single-use plastic bottles are a good example of this.



2. Circular economy model

As well as creating new opportunities for growth, a more circular economy will:

- reduce waste
- drive greater resource productivity
- deliver a more a competitive economy.
- better address emerging resource security / scarcity issues in the future.
- help reduce the environmental impacts of production and consumption both here and abroad.

You can find out more about this online here:

Making Things Last - A Circular Economy Strategy for Scotland

<https://www.gov.scot/Publications/2016/02/1761>

Examples highlighted by the waste industry:

Case studies: <https://www.veolia.co.uk/media/media/circular-economy-case-studies>

And examples from **Denmark** can be found here:

<https://stateofgreen.com/en/profiles/state-of-green/news/10-examples-of-circular-economy-solutions>

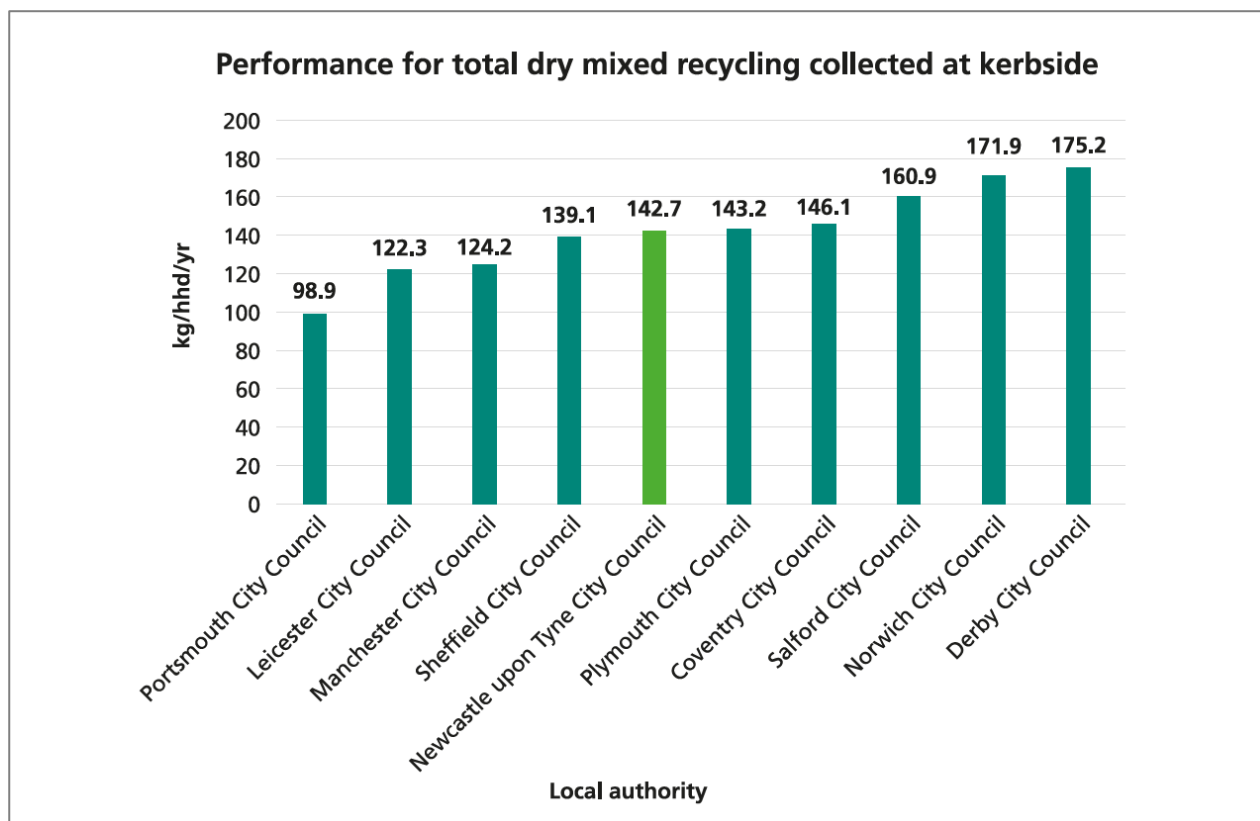
What goes in the average bin? Waste composition analysis

Our analysis of waste going into the Byker Resource Recovery Centre shows that there is a lot more recyclable material in rubbish bins that we could be capturing in separate recycling collections. Estimates, using data from the MBT process, indicate that there is as much recyclable material in the city's green rubbish bins as is collected in the blue recycling bins. This would mean the city is collecting no more than 50% of all possible recycling from households. As part of the delivery of the Waste Strategy we will commission work to look at what's in the rubbish bins in more detail.

How do we compare with other areas?

As shown in the chart, the proportion of waste within Newcastle that is sent for reuse, recycling or composting is heading in the right direction, but it is still below that of other cities, and well below the best-performing authorities.

3. Dry mixed recycling collected at kerbside: comparing local authorities



Context – what’s happening now and in the future?

Strategic Drivers

The **proposed vision, ambition and outcomes** are based on the intention that the new Waste Strategy will recognise the diverse external and internal forces that impact on waste management, from public demand for more recycling, to the impact of the global market on waste as a commodity. It will respond to significant drivers for change, including:

- **Demographics** – a growing population and number of businesses
- **Environmental**, sustainability, and carbon reduction ambitions
- Renewed and widespread **passion** for environmental issues
- **Public demand** for change

- **Legislation**, targets, national strategies and policies
- Council Plan, Local Plan, **local strategies and policies**
- Increasing **cost pressures** / affordability
- Waste **Markets**
- Future impact of **Brexit**

What will success look like?

The Waste Commission saw success as follows:

- Newcastle upon Tyne recognised as a **world leader** in waste reduction.
- Overall waste per household and businesses **down** by 10% by 2025.
- Waste sent to **landfill** reduced to less than 10% by 2025.
- **Recycling** rate increased to 65% by 2030.
- By 2030, **millions of pounds** and hundreds of new jobs added to the local economy.
- Helping to reduce **food poverty** in Newcastle.

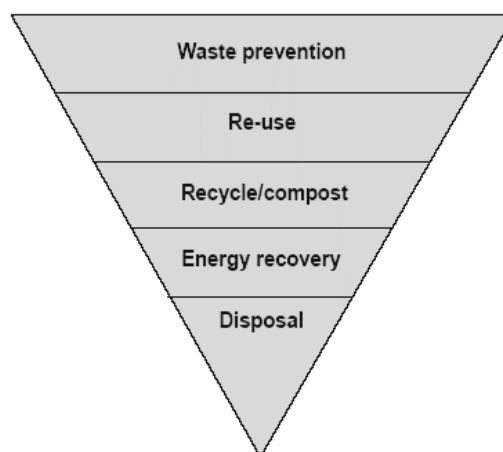
Newcastle is a modern city, with exciting plans for growth

- By **2030** planners expect 21,000 new homes, 14,000 new jobs and a population increase of almost 30,000 in Newcastle.³
- The city's **economy** is growing, with the fastest growing digital sector in the UK outside London. Newcastle has become a leader in Life Sciences, with significant growth in sub-sea engineering and financial services.
- We aim for an approach to waste in keeping with our **ambition** for a modern, vibrant, fair and sustainable city.

³ 'Planning for the Future: Core Strategy and Urban Core Plan for Gateshead and Newcastle upon Tyne 2010-2030'. Adopted March 2015

The European and UK legislative context

- The '**Waste Hierarchy**' (on the right) shows the priorities for current waste policy in the EU and UK. First, prevent waste from arising; then reuse products and materials; recycle into new materials; recovery (energy); and finally, disposal.
- Through the EU's **Waste Framework Directive**, the UK is committed to recycling 50% of municipal waste by 2020⁴.
- The EU **Circular Economy Package** has even more ambitious plans to reduce the waste we produce, reuse and re-cycle more. Headline targets include increasing recycling rates to 65% by 2035.
- Currently, the UK is committed to adopting the **Circular Economy Package** as part of the proposed arrangements for leaving the EU.



4. The Waste Hierarchy

Resources are getting scarcer

- As we leave the EU, the UK needs to become ever more **productive**. Using resources more wisely is sensible, and Newcastle can be a big part of this.
- Using **measures** based on how efficiently we use resources, rather than the current weight-based targets, may become necessary once the UK leaves the EU.

Newcastle has high levels of social deprivation

- In Newcastle, there are significant **inequalities** between the most and least affluent parts of the city⁵.
- The 'lowest ten' **recycling routes** in the city tend to be clustered around some of our most deprived areas in the West and East⁶. We need to think more about why people in more deprived parts of the city either do not want to or are for some reason unable to recycle as much as they could⁷. Equally, we could highlight the need to address the link between greater affluence and higher levels of waste generated.
- Encouraging more people in our most **disadvantaged communities** to reduce, reuse and recycle more could have practical benefits for people in those

⁴ 'Waste Framework Directive (2008/98/EC)', which is translated into the national framework through the Waste (England and Wales) Regulations 2011.

⁵ 'Know Newcastle' (Newcastle Future Needs Assessment).

⁶ 'Waste Commission Tour of City and Presentation of Baseline Data', March 2017

⁷ 'Too Good To Waste – Final Report', BAN Waste Select Committee, 2003

communities; for example, reducing household food waste as a way of reducing pressure on family budgets⁸ and a way into healthier eating.

People are living their lives differently

- Traditional consumer and shopping patterns are changing, and this will have big impacts on future waste generation and management.
- The move to online shopping has significantly changed the volume and types of packing waste but has also delivered an innovative approach to grocery shopping.
- The opportunity in the long-term is for less consumption in terms of food and packaging. However, there is the risk in the short-term of more packaging and wastage⁹.

We want to reduce, reuse and recycle

- The UK is committed to **recycling** 50% of municipal waste by the 2020. The EU's Circular Economy Package proposes increasing recycling rates to 65% by 2035.
- Since 2005, Newcastle, like most places in the UK, experienced **improvement** in household recycling rates. However, the rate of improvement has levelled off in the past three years¹⁰.

We want Newcastle to be amongst the best

- On measures of recycling and waste arisings, Newcastle sits roughly **mid-lower table** when compared with all authorities in England. Newcastle is not the worst performer on these measures either in comparison with authorities across England or with the Core Cities (the group of 10 large regional cities in the UK) ¹¹.
- There is much more we can do to **improve**. There is evidence to show that up to 50% of waste put into residual bins¹² (not into recycling bins) could be recycled.

⁸ 'Household Food Waste in the UK', 2015, WRAP

⁹ 'Digital Technology and Consumer Trends: Future Scenarios for Waste and Resource Management', CIWM 2017

¹⁰ 'NCC Policy Cabinet: Waste', January 2017

¹¹ 'Waste and Recycling Statistics (various)', DEFRA, 2017

¹² Based on ongoing operational estimates and observation.

Further Work

As the consultation and development of the Waste Strategy and subsequent action plan progresses, we will need more evidence. For example, to help answer the question of how to choose the best rubbish disposal method, we could have a Compositional Analysis of the city's waste done, and, before procuring any long-term solution, do a detailed Technology Appraisal of potential solutions.

Timeline

Milestones

Vision agreed

Further consultation on options

Draft final Waste Strategy

Approval of Waste Strategy and publication

Timing

September

**September /
October**

December 2018

Early 2019



Local Services and Waste Services in the City

Refuse Collection – Rubbish and Recycling

As the Waste Collection Authority, the council has a duty to collect refuse from all 130,000 households in the city. 90% of homes have a weekly collection from the edge of their property using wheeled bins. About 10% of households, mostly flats, are served by shared containers where individual bins are not practicable.

The standard size of the wheeled bin, green and blue, is 240 litres. For recycling there is also a 40 litre in-bin caddy for glass and small batteries. Those with shared bins have a separate wheeled bin for their glass.

Refuse collections are mainly done using 26-tonne refuse collection vehicles (RCV). For recycling these vehicles have split bodies; the glass is collected in the smaller side, and the Dry Mixed Recycling (DMR) goes into the larger compartment. There are two smaller RCVs that collect from areas with restricted access. The hours of operation for domestic and recycling collections are from 6.30 am until 4.15 pm Tuesday to Friday.

Residents can pay for the collection of garden waste containers from residential properties across the city; over 25,5000 households subscribed to this service last year. Commercial customers can pay for trade waste collections.

That is over 7,000,000 collections from 130,000 households and 2,500 businesses each year.

Bulky Collection

There is an appointment-based collection service for bulky household waste and construction type material from households for set fees.

Grounds Maintenance

This involves grass cutting, grounds maintenance, arboriculture work to trees. The hours of operation for this service are 7.30 am until 3.30 pm Monday to Friday across the city.

Street Cleansing

This involves litter picking, litter bin emptying, graffiti removal, mechanised sweeping, back lane clearance, dog fouling removal, fly tipping removal. The hours of operation for this service are 7.30 am until 3.30 pm Monday to Friday across the

city. Within the city centre, the service operates from 6.00 am until 10.00 pm, seven days per week, all year around except for Christmas Day and New Year's Day.

Pest Control

This is an appointment-based treatment services for pests and vermin to residential and commercial premises for a set fee.

Waste Management

As the Waste Disposal Authority, a key duty is the management of our Waste Disposal and Recycling Contracts. We manage the processing of the following waste:

Type of Waste	2016-17 Tonnages
Household Waste	119,016
Non-Household Waste, such as rubble, fly-tipped tyres, cleansing and street sweeping	10,573
Trade Waste	12,863
Industrial Waste	1,654
Total Municipal Waste for 2016/17	144,106

We manage this through the following external contract relationships:

- **Waste disposal contract**, with Suez, for the processing of waste which is done at Byker and Benwell. This includes treatment of waste through Mechanical Biological Treatment (MBT) which converts the organic (food) waste to a compost like output (at an In Vessel Composting facility at Ellington), captures metals for recycling and produces a refuse derived fuel for Energy from Waste (EfW).
- **Landfill contract**, with Suez, for waste that is not suitable for recycling or processing through the MBT or EfW.
- **Materials Recycling Facility (MRF) contract**, with O'Brien Waste Recycling Solutions (since July 2017 owned by Biffa), for the sorting and separation of kerbside recycling.
- **Miscellaneous** contracts for the processing of waste collected at Household Waste Recycling Centres and for the operation of Brunswick Household Waste Recycling Centre.

We report quarterly data and statistics to ensure compliance with government agencies such as the Environment Agency and the Department for the Environment Food and Rural Affairs (Defra).

Household Waste Recycling Centres (HWRCs)

These are places where residents of Newcastle may deposit their household waste for recycling, composting or disposal. We provide three HWRCs at Byker, Walbottle and Brunswick. The HWRCs do not accept commercial waste. We manage the HWRC sites located at Byker and Walbottle. We manage the HWRC contract for the Brunswick site.

Deposit of waste at a HWRC from a van or trailer requires a waste permit in advance of visiting. Currently each household can apply for six permits. HWRCs are open every day of the year except Christmas and New Year's Day. Summer opening hours (1 April to 30 September) are 8am to 8pm; winter opening hours (1 October to 31 March) are 8am to 6pm. The HWRCs are permitted to operate under licence from the Environment Agency.

Last year 62% of the material brought to these sites was reused or recycled.

Sandhills Composting Facility

Sandhills Depot includes a PAS100 and CQP (Compost Quality Protocol) accredited composting facility, permitted to operate under licence from the Environment Agency. At Sandhills we compost garden waste from the brown bin service, HWRCs, our grounds maintenance operations and from our landscape trade customers. The garden waste is composted to produce a PAS100 & CQP compliant product, which is sold as a soil conditioner. The soil conditioner compost produced at Sandhills can be purchased by both trade and public customers. Residents can purchase their own home composting bins from 'GetComposting' at the following prices, which we subsidise:

Bin Type	Price per unit	Buy one, get one half price
220 litres plastic compost bin	£10	£15
330 litres plastic compost bin	£12	£18
Two tier plastic 'wormery'	£35	N/A
480 litres modular wooden compost bin	£50	N/A

Partnership Working

Relationships exist with a range of key internal stakeholders and external partners including Regulatory Services (Enforcement); Communities Team; Your Homes Newcastle; Byker Community Trust, other neighbouring local authorities, waste disposal contractors including Suez and Biffa (formerly O'Brien Waste Recycling Solutions).

Other work includes supporting communities and partnership organisations to improve local neighbourhoods for residents, businesses and visitors to the city; and to enable communities to do more for themselves.

Legislation

For **Refuse Collection** – Section 45 of the Environmental Protection Act 1990. The council has a duty under its status as a waste collection authority to arrange for the collection of household waste.

Section 46 of the Environmental Protection Act 1990. The council can require occupiers to:

- Place the waste for collection in receptacles of a kind and number specified.
- Place the receptacles in a way that helps the emptying of them.
- Put into the receptacles or compartments only the substances or articles specified.

For **Waste Management** the following legislation affects these services:

- Environmental Protection Act (EPA) 1990
- Controlled Waste Regulations 2012 (as amended by the Controlled Waste Regulations (Amendment) Regulations 2012)
- From 1 January 2015, the Waste Regulations (England and Wales) 2012 applied a requirement for any 'establishment or undertaking' that collects waste to separately collect paper/card, plastic, glass and metals where separate collection is necessary to ensure that the waste undergoes treatment for recovery or recycling and where 'Technically, Environmentally and Economically Practicable' (TEEP). An 'establishment or undertaking' includes waste management companies, Local Authorities and brokers and applies to collectors of both household and business waste.
- Hazardous Waste Regulations 2005 (as amended by the Hazardous Waste Regulations (Amendment) Regulations 2010)
- Waste Electrical and Electronic Equipment Regulations 2006 (as amended by the Waste Electrical and Electronic Equipment (Amendment) Regulations 2010)
- Health and Safety Executive (HSE) Operating Civic Amenity Sites Safely (Version Waste 01. 09/11)

- Publicly Available Specification 100 (BSI PAS 100) for composted materials
- The UK is committed to recycling 50% of municipal waste by 2020.
- The EPA 1990 Section 51A imposes an obligation on us to provide places (HWRCs) for residents in the Authority area to deposit their household waste. As part of providing these facilities we have a duty to manage and audit the Environmental Permits of these premises, which consists of:
 - Technical competency
 - Site licence conditions.
 - Government agencies require us to provide quarterly statistics on all waste collected and treated by Newcastle City Council.

For **Street Cleansing** – Section 89 of the Environmental Protection Act 1990 places a statutory duty to keep land and highways clear of litter. The Act specifies that it shall also be the duty of each local authority, in respect to any relevant highway or relevant road for which it is responsible, to ensure that the highway or road is, **so far as is practicable**, kept clean.

Funding

Over the last four years the service has undertaken significant transformational changes and nearly £5 million reduction in budgets available to deliver the service.

Gross expenditure	Gross income	Net budget	Capital projects
£20,320,550	(£1,695,740)	£18,624,810	£2,709,025

Workforce

The activities last year were delivered by 186 full time equivalent posts (FTEs), including domestic waste collection, blue bin recycling, bulky collections, garden waste collection, street cleansing, Sandhills, waste management and Household Waste Recycling Centre staff.