

A waste strategy for Birmingham

From waste to resource - rethinking and
renewing Birmingham's approach to waste

CONSULTATION

JUNE 2016



CONTENTS

Introduction	3
Our aims	4
Drivers of change.....	5
The aims of the waste strategy	7
Reduce, reuse and recycle.....	8
What happens next?	12

INTRODUCTION



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Cabinet member for clean streets, recycling and environment
Birmingham City Council

Birmingham is an ever-changing city in which things do not stand still. This is the case for every service delivered by the city council, including waste management and disposal.

But it isn't just about the council. Collectively, citizens, businesses, community organisations also have to change what they do as a result of altering demographics, a shift in make-up of waste that is disposed, the ongoing challenges of local government finance and environmental legislation.

Our aim is to develop a more sustainable Birmingham. The city's population is due to grow significantly, and we can't carry on consuming natural resources at the rate we currently are. It is neither good for us or the planet.

We want to move from the current position where we throw away more rubbish than most other towns and cities. We also want to look at how we can use things again, we want to improve our recycling rate to become the best council nationally and we want to explore how we can best recover energy from any waste that is then still created.

This is because a cleaner, greener and environmentally sustainable Birmingham is in everyone's interests - with not only environmental, but economic and social benefits available to us. Essentially this is about us ensuring that we fully realise the true value of waste.

We must work in genuine partnership because we need a collective change in mindset to reflect the fact waste is a resource that belongs to the people of Birmingham. We need to get a return on that.

Let me be clear. Beyond the absolute statutory and legal duties placed upon us as a council, there are no red lines when it comes to the future. Nothing is ruled in or out.

Innovation and community partnership are key to hitting our future goals and it is clear one size doesn't fit all when it comes to waste management solutions.

Put simply, this is a once in a generation opportunity to achieve positive change for Birmingham.

Lots of conversations have enabled us to reach this point – this consultation focuses on the principles that will underpin a review of the various options we have available to us to achieve our aims and deliver on the intended outcomes.

It's important that we understand whether or not you agree with the principles in this document and you rank their importance to you.

I look forward to receiving feedback on this document so we can shape the way forward in the best way possible.

OUR AIMS

Over the last 18 months Birmingham City Council has worked with citizens and other partners around the city to develop a vision for how Birmingham deals with its waste. In this vision we, the city council, see waste as a valuable resource so we want to find ways of throwing away as little waste as possible.

BY 2035 BIRMINGHAM WILL BE A CITY WHERE:

- *waste is reduced wherever possible,*
- *recycling and re-use is maximised and the value of waste is realised,*
- *where we cannot prevent, reuse or recycle waste we will maximise recovery through generating energy*
- *waste as a resource contributes to health, wellbeing and prosperity.*

We will make this happen by developing plans that meet the needs of the people who live in Birmingham (which could be different dependent on where you live). And everyone will need to play their part if the city is to share the environmental, economic and social benefits of viewing waste as a resource.

Birmingham City Council is now consulting on the aims and ambitions that will be part of a strategy for changing the way in which we view waste – to one where we see it as an asset, something that creates value for Birmingham not just economically, but socially and environmentally too.

The responses to the public consultation being carried out over the four weeks from 29 June 2016 - 31 July 2016 will help shape an options appraisal (based on the feedback we receive to this consultation) that will then allow us to update the city's Waste Strategy in autumn 2016.

It is therefore important that anyone with an interest in the topic has their say. As well as a survey, there will be a range of other ways to have a say including an online webchat and citizens' panel, all of which will be widely publicised during the consultation period.

In the short term these aims and principles will also be used to underpin a review of the council's waste management service due to take place over the next six months.

It is important to understand whether or not you agree with these aims and ambitions and which of these matters most to you. The first part of this document sets out the reasons why we need to change our approach, while the second part outlines the aims and ambitions we want your feedback on.

For those with a technical interest in this topic you can refer to more [detailed papers](#) that have helped shape the work to date.

This consultation represents the first stage of a journey towards a new waste strategy for Birmingham. And over the coming months we will continue to engage with individuals, local communities, businesses and organisations based in Birmingham to ensure that we have the right plans in place and that the key messages from the strategy are heard across the city.

DRIVERS OF CHANGE

We live in a changing world and how we manage our waste into the future needs to change to reflect a wider environmental, social and economic landscape.

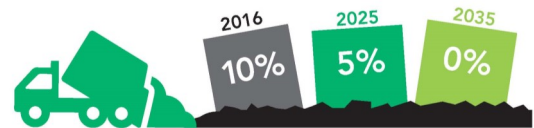
Environmental

- The demands on a city's energy consumption are changing. The demand for electricity is increasing, there is a need to reduce the carbon impact of our energy system. The Carbon Roadmap, a strategic plan to deliver carbon reduction, has set a target to reduce the city's carbon emissions by 60% by 2027 (compared to 1990 baseline levels). Furthermore, around 18% of Birmingham's population suffer from fuel poverty¹. Maximising energy recovery, in the form of heat and electricity, from our waste and then selling it at an affordable rate is one way to meet these challenges.
- There will be changes in waste composition and what we throw away in the future will be different from today – these considerations need to be factored into our future thinking. What and how we collect waste may also need to change, for example, all of our food waste is currently treated at our energy from waste plant but there could be alternatives that deliver better outcomes for the city.

Social

- A number of socio-economic trends will affect us all: a growing and ageing population puts stress on resource use and infrastructure. By 2031 Birmingham's population is predicted to grow by 150,000 requiring 45,000+ additional homes over the same period.
- Citizens are more involved in defining and delivering city services with information technology now playing a pivotal role in how people access information and services, and how they can be active in their local communities. Initiatives such as [Freecycle](#) already show that this approach can support the principles of reduce, re-use and recycle.

We face challenges



Reduce to zero the amount of waste that goes to landfill

Reduce the city's carbon emissions



Reduce the level of fuel poverty amongst Birmingham's population

Population predicted to grow



Waste composition 2016



1. Department for Energy & Climate Change. 2014

Economic/Financial

- By 2020 the council will see a significant reduction in the amount of money it has available to spend on services such as waste collection. We need to work with citizens and partner organisations, including social enterprises, to create a framework that encourages new ways of running important local services so that waste as a resource can help deliver wider outcomes such as cleaner air and a stronger local economy.
- To manage our waste differently now may require investment in new facilities and/or services but we need to find ways to do this in a way that allows us to retain flexibility to address the longer term changes facing us. We cannot predict the future but we do need to do our best to 'future proof' whatever we may put in place now.

Technological

- New and emerging treatment technologies, such as anaerobic digestion (a process that uses chemistry to create a source of renewable biogas energy), provide an opportunity to think differently about how we collect, reuse and dispose of waste.
- The pace of technological change is ever increasing. This means we need to be able to identify and implement solutions that are capable of responding to changing patterns of consumption resulting from technologies, such as home-based 3D printing, becoming more common.

Legal

UK regulations include:

- A requirement to achieve 50% recycling of household waste by 2020 for the UK as a whole;
- Recognition of the duty of local councils in achieving waste prevention;
- Application of a Landfill Tax to encourage diversion of waste away from landfill

THE AIMS OF THE WASTE STRATEGY

To realise these outcomes we have developed eight key objectives that will underpin our future plans.

As part of this consultation we would like to know from you whether or not you agree or disagree with each of the following objectives. And tell us how you would rank each of these objectives. You can give us your views at: www.birminghambeheard.org.uk/place/from-waste-to-resource

Objectives:

1. We want Birmingham to reduce the amount of waste that is created, reusing and recycling what we can and recovering energy from any remaining waste.
2. By 2030 we will recycle 70% of all our household and municipal waste (e.g. from litter bins and street sweepings).
3. We aim to reduce the amount of waste generated per person by 10% (compared to a 2014/15 baseline of 345kg per person) by 2020.
4. Currently, we send about 7.5% of our waste to landfill. Sending waste to landfill is the least desirable option environmentally and the cost of doing so continues to increase because of Landfill Tax. We therefore aim to eliminate waste sent to landfill by 2035.
5. Managing our waste in a more sustainable way can make a positive contribution to climate change and help reduce carbon emissions. We will identify different ways to collect waste that provide better outcomes in respect of carbon reduction.
6. As the composition and type of waste we collect changes over time, we will develop ways of prioritising the collection of recycling.
7. Innovation and efficiency have an important part to play in ensuring that we improve our services, reduce costs and use the most appropriate technologies, now and in the future, to manage our waste.
8. To achieve our recycling target and to eliminate waste sent to landfill we need to increase the range of materials we (and our partner organisations) collect separately from other waste, for example food waste and/or textiles.

REDUCE, REUSE AND RECYCLE

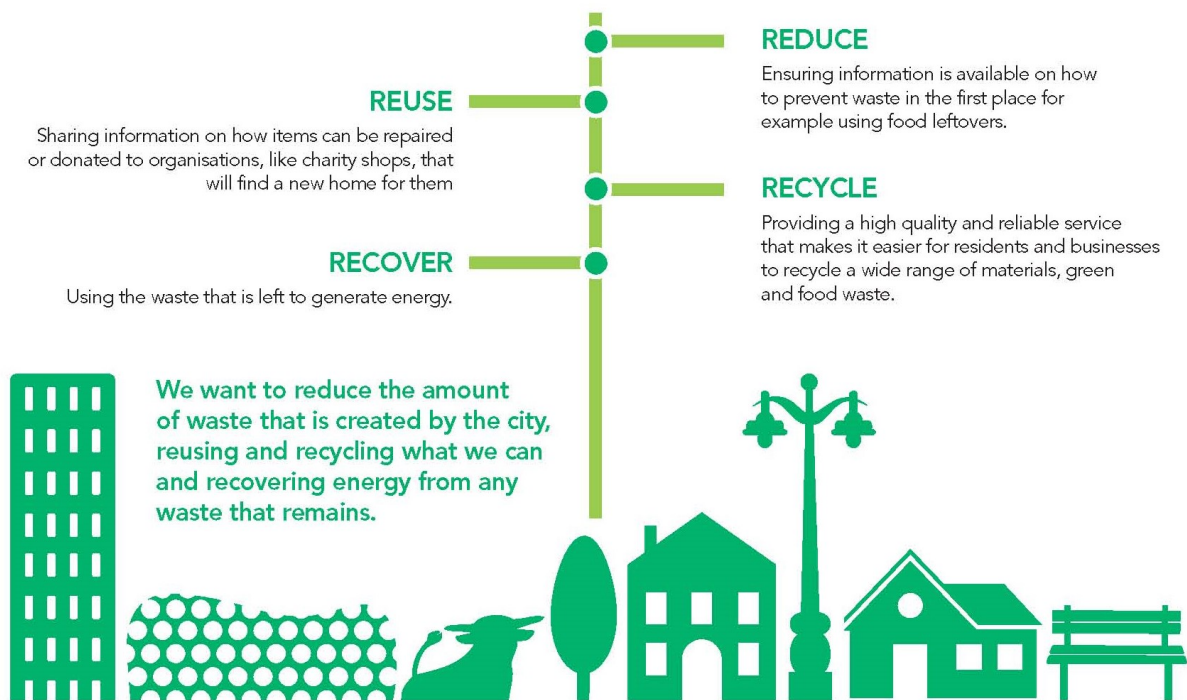
The underpinning principles of our waste strategy

1. Focus on preventing waste

The 'waste hierarchy' is a method for ranking waste management options based on what is best for the environment. It gives top priority to preventing waste in the first place. When waste is created, it then gives priority to preparing it for re-use, then recycling, then recovery, and last of all disposal.

Birmingham already generates 'value' from waste because the waste collected by the council that cannot be recycled or composted is sent to the Tyseley Energy Recovery Facility (ERF) where it is used as a fuel to generate energy to power around 40,000 homes. However, within the waste hierarchy reducing, reusing or recycling waste is considered to be more beneficial than just recovering value from waste in the form of energy. We know that under current arrangements, the value from waste is not all kept within the Birmingham economy. But it would be far more beneficial if it were shared with everybody to promote health, wellbeing and prosperity.

A simple definition for each element of the hierarchy is included in **Figure 1** below.



2. Create a 'circular economy'

The history of Birmingham as a major manufacturing region reflects the traditional 'take, make, dispose' model of resource management. As a city we need to be more sustainable. We can achieve this by working with citizens, across communities, industry and business to promote the principles of a 'circular economy' based on waste.

In a 'circular economy' the value of products and materials is maintained for as long as possible; waste and resource use are minimised, and resources are kept within the economy when a product has reached the end of its life, to be used again and again to create further value.

A good example of this already exists with Birmingham currently generating enough electricity from the waste that is sent to its Energy Recovery Facility at Tyseley. We are also developing opportunities to create new district heating networks and future waste treatment facilities need to be seen as a potential heat supply source.

As we have already highlighted, how we treat or dispose of our food waste must be explored in more detail because food constitutes the single largest waste stream that remains in our residual waste bins at around 30% of all waste currently. Anaerobic digestion is the process by which food waste can be treated and the by-product – biogas – used as a vehicle fuel or as gas to the grid.

A comprehensive guide to best practice and our associated research can be found at:

www.birminghambeheard.org.uk/place/from-waste-to-resource

Our waste strategy will be based on these principles because there are strong economic, social and environmental reasons for changing the way we view and therefore use increasingly scarce raw materials.

3. Working in partnership to reduce and reuse waste

We need to identify a range of measures that can help reduce the amount of waste generated. Through the waste strategy we will promote and support those organisations that work with us to divert waste from landfill, for example furniture reuse shops.

Examples of this include:

- Awareness-raising campaigns aimed at affecting purchasing habits, for example the nationwide Love Food Hate Waste campaign theme developed by the Waste Resource Action Programme (WRAP), the UK's leading recycling advisory body.
- Implementation of systems to facilitate the sharing of resources, often referred to as the 'sharing economy', for example [Borroclub](#) is an online platform, developed as part of Innovation Birmingham, that enables people to borrow household items from those living nearby, and
- Using procurement as a proactive means to embed waste prevention as set out in the [Birmingham Business Charter for Social Responsibility](#).

A WASTE STRATEGY FOR BIRMINGHAM

Reuse must feature prominently in our future plans because it can help achieve a wider range of positive outcomes for the city including carbon reduction, job creation, tackling poverty and resource management. Our research highlights the important role played by the third sector in developing reuse programmes and initiatives. They include:

- Development of 'reuse centres' at Household Recycling Centres – one already exists at our Norris Way facility and is run by a local community organisation – [The ReUsers](#).
- Reuse of surplus construction products and materials by charities, social enterprises and other community groups.

A comprehensive guide to best practice and our associated research can be found at:

www.birminghambeheard.org.uk/place/from-waste-to-resource

4. Recycling and reuse is maximised

The ambition of Birmingham City Council is for Birmingham to be the best performing city for recycling, increasing the rate to 70% by:

- Making better use of new technologies to enable a greater mix of materials to be recycled (for example, utilising Materials Recycling Facilities – MRFs to increase the recovery of recyclable materials from household waste prior to treatment).
- Developing alternative collection arrangements for flats and other properties that are difficult to access.
- Ensuring collection arrangements for recycling are targeted and encourage increased participation.
- Working with property developers to specify collection infrastructure for new build properties.

In all instances the cost of introducing new technologies needs to be quantified and a cost-benefit assessment made on the wider benefits they may generate such as new employment opportunities, local markets for materials, and scope for inward investment, built into any decision-making process.

A comprehensive guide to best practice and our associated research can be found at:

www.birminghambeheard.org.uk/place/from-waste-to-resource

5. Move away from a ‘one size fits all’ approach

Birmingham is the largest city outside of London, servicing around 1.1m residents and collecting around 500,000 tonnes of municipal waste (including 50,000 tonnes of garden waste) from residents and businesses each year. Currently, the council collects residual household waste weekly and recycling fortnightly.

The majority of the waste collected but not recycled or composted is sent to the council’s Energy Recovery Facility (ERF) at Tyseley. Although this plant can handle around 350,000 tonnes per year the council still needs to send over 30,000 tonnes of residual waste to landfill each year.

To achieve the proposed targets for waste reduction and recycling we may need more flexible and localised arrangements for the collection, treatment and onward processing of the different types of waste. This is because the ‘one size fits all’ approach adopted up until now will not allow the council to respond to expected demographic, socio-economic and legislative changes over the lifetime of the waste strategy.

WHAT HAPPENS NEXT?

We have already stated that this consultation represents the first step towards us achieving our bold ambitions for waste. Based on the outcomes of this consultation the council will be setting out its plans for how it proposes to manage waste over the next 20 years.

However, it cannot just be about what we have done and plan to do in the future. It also needs to be about what we can do as a city to deliver the positive outcomes required.

There is a role for stronger partnership working going forward and examples include:

- Working with large retail and manufacturing companies to address the issue of over-packaging,
- Building stronger relationships with the Greater Birmingham and Solihull Local Enterprise Partnership (GBSLEP) to ensure that local companies and organisations can play a greater, more direct role in how we manage our waste.

Talking to local community groups to help share the messages about how to make the small changes that will help us reduce, reuse and recycle more of our waste.

You can take part in the consultation by going to:

www.birminghambeheard.org.uk/place/from-waste-to-resource

If you are interested in finding out more about the work
Birmingham City Council is doing to develop its waste strategy
please contact:

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