

A Joint Strategy for Resources and Waste Management in East London 2027 - 2057

PRELIMINARY DRAFT

A Joint Strategy for Resources and Waste Management in East London 2027 – 2057 – Preliminary Draft

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Executive Summary

It is important that the environment is left in a better condition for the next generation.

This Joint Strategy sets out how the five Partner Authorities, namely the <u>East London Waste Authority</u> (ELWA) and the London Boroughs of <u>Barking and Dagenham</u>, <u>Havering</u>, <u>Newham and Redbridge</u>, will preserve resources by minimising waste, promoting resource efficiency and moving towards a circular economy, all of which will help to protect the natural environment and reduce carbon emissions.

There is a great deal of change coming in the next few years that will affect the management of resources and waste in the Partner Authorities' area. This includes the end of ELWA's long-term 25-year contract for waste treatment services in 2027, potential changes to existing Partner Authority vehicle and service contracts, as well as important national and regional initiatives and targets that will result in new legislation and requirements for local authorities.

This Joint Strategy sets out the strategic aims and aspirations for resources and waste management of the five Partner Authorities, and outlines how the Partner Authorities will work together to manage resources and waste within their boundaries between 2027 and 2057, after the end of the long-term contract for waste treatment services.

Working with residents and businesses, the Partner Authorities want to make it as easy as possible to produce less waste, and to reuse, repair, and recycle more items and materials. Within the Joint Strategy a series of priorities are outlined that will help facilitate this, including how the Partner Authorities will support future improvements with infrastructure. These priorities will form the basis of how the Partner Authorities will manage waste in the future, contribute to London-wide and national targets, and meet the aspirations for future performance. The Partner Authorities will need to work together to achieve these goals.

The Joint Strategy also outlines the journey required to deliver improvement and respond to future changes. The Joint Strategy starts in 2027 once the current long-term contract for waste and recycling treatment comes to an end, but it is recognised that action to deliver improvements needs to start as soon as possible to achieve future performance aspirations. Steps that the Partner Authorities are taking to improve performance in the intervening years, including development of an East London Waste Prevention Programme and Borough Reduction and Recycling Plans (submitted to the Mayor of London), are detailed.

The Joint Strategy itself will need to be reviewed periodically to confirm it remains relevant in light of the rapidly changing policy environment and provides the right framework to drive performance improvements. The first overall review will take place by 2028.

The Partner Authorities also will need to regularly monitor progress against current and proposed performance indicators, which focus on reducing waste, maximising reuse, repair and recycling and limiting any waste sent to landfill.

This Joint Strategy sets the framework to drive environmental improvements that will support the Partner Authorities to help protect the environment for future residents and businesses of East London.

1 Introduction

1.1 Purpose of the Joint Resources and Waste Strategy

This Joint Strategy sets out the strategic aims and aspirations for resources and waste management of the five Partner Authorities, namely the <u>East London Waste Authority</u> (ELWA) and the London Boroughs of <u>Barking and Dagenham</u>, <u>Havering</u>, <u>Newham</u> and <u>Redbridge</u> (the 'Constituent Councils'). The Partner Authorities work together to manage resources and waste within their boundaries. It is a long-term strategy.

It is important that the environment is left in a better condition for the next generation. This Joint Strategy sets out how the Partner Authorities will preserve resources by minimising waste, promoting resource efficiency and moving towards a circular economy, all of which will help to protect the natural environment and reduce carbon emissions.

There is a great deal of change coming in the next few years that will affect the management of resources and waste in the Partner Authorities' area. This includes the end of ELWA's long-term 25-year contract for waste treatment services in 2027, potential changes to existing Partner Authority vehicle and service contracts, as well as important national and regional initiatives and targets that will result in new legislation and requirements for local authorities.

The Joint Strategy period is from 2027 to 2057. It is therefore primarily focused on how resources (the materials we use in our everyday lives) and waste will be managed in the future.

The Partner Authorities will commit to undertake a high-level review of this Joint Strategy by 2028 (see Chapter 5), to ensure the targets, priorities and aspirations are appropriate once future waste and recycling collection and treatment arrangements are better understood. Reviews thereafter will be conducted at intervals of not more than 10 years, to ensure the Joint Strategy continues to drive improvement and enable the Partner Authorities to respond to evolving innovations and policies on resources and waste management.

The previous strategy was originally drafted in 1996 and reviewed in 2006 and set the framework for performance for the 25-year contract period to 2027. The contract operator (Renewi) has developed a number of five-year and annual budget and service delivery plans, which review progress and outline future performance standards¹ and the Partner Authorities have prepared Reduction and Recycling Plans (RRPs) that set out how they will develop their services and local performance to work towards the targets and service standards within the London Environment Strategy². The Partner Authorities Plans will also be updated as proposals for future service and performance improvement on waste reduction, reuse and recycling evolve.

The Joint Strategy does not cover local issues such as the collection of litter, street cleansing and fly-tipping, and also does not set out specific details on how each Borough will develop its household waste and recycling collection services in the future. The Joint Strategy focuses on the longer-term targets and aspirations of the Partner Authorities, and the general principles

¹ Renewi-FYSDP-Report-web-res.pdf (eastlondonwaste.gov.uk)

² London Environment Strategy

by which the Partner Authorities will work together to achieve them. Further details on the responsibilities of the Partner Authorities can be found in section 1.2.

1.1.1 Structure of the Joint Strategy

- Chapter One sets the context for the Joint Strategy;
- Chapter Two describes how resources (the valuable materials that we dispose of every day) and waste are currently managed in the Partner Authorities' area, and provides detail on some of the opportunities, challenges and existing performance levels;
- Chapter Three describes what changes the Partner Authorities expect to see in the
 future, both in terms of how the area will change, what impacts national and regional
 policy may have on the types and quantities of waste being generated, and some of
 the other factors which may also play a role in how consumers buy, use and dispose
 of products that will have an effect on resources and waste management;
- Chapter Four sets out the vision for how the Partner Authorities will work together
 and with the community to help reduce waste and divert more items for repair and
 reuse. It sets out what level of recycling performance is expected to be achieved across
 the area, the aspirations the Partner Authorities have for diverting even more waste
 from disposal, and how future waste treatment capacity will be sourced;
- Chapter Five outlines how the Partner Authorities will work together to achieve the aims and aspirations set out in the Joint Strategy; and
- Chapter Six describes what performance measures will be used to measure success.

1.2 Responsibilities of the Partner Authorities

The four Constituent Councils (as 'waste collection authorities') are responsible for arranging the collection of household waste and recycling, as well as undertaking waste and recycling collections from local businesses that choose to use their commercial waste services.

The Constituent Councils also manage street cleansing, fly-tipping removal, and management of litter from local parks and open spaces, which all generate waste.

ELWA is the 'joint waste disposal authority' for the region, and is responsible for providing treatment and disposal services for the waste and recycling collected by the Constituent Councils. ELWA also operates four Reuse and Recycling Centres (RRCs) where residents can deposit a wide range of materials for reuse, recycling and disposal.

1.3 Why Do We Need a Strategy?

This Joint Strategy is needed to help the Partner Authorities start to plan for the end of the long-term 25-year contract (2002-2027) for waste treatment, while meeting the new requirements that will be arising from national and regional policy changes, and economic, environmental and societal drivers. The Partner Authorities also recognise the imperative to manage resources better in the future, to enhance resource efficiency and minimise greenhouse gas emissions. The main drivers are described in the following sections.

Development of a Joint Strategy is a statutory requirement for waste authorities in two-tier areas³. Furthermore, development of this document provides an opportunity to ensure that future strategy, procurement proposals and targets align as closely as possible with London's overall strategic ambitions, as set out in the London Environment Strategy.

1.3.1 Summary of the Key Drivers

Figure 1: Summary of the Key Drivers



³ Waste and Emissions Trading Act 2003 (legislation.gov.uk)

1.3.2 Society and the Environment

In recent years there has been growing concern throughout society about our impact on the environment, particularly around climate change, the 'throw-away' society and plastic pollution. An increasing number of people are now aware that producing and consuming goods and services results in greenhouse gas emissions and waste. Members of the public are looking to brands, retailers, governments, and other organisations to help them adopt more sustainable lifestyles.

This growing public interest in how products are made and what happens to the waste people generate has led to a number of policy initiatives at an international, national and regional level. Many of these policies include adherence to the waste hierarchy (Figure 2), which presents the management options for waste and resources in order of preference based on environmental impacts. Policies and programmes are also increasingly focused on delivering what is known as the Circular Economy (Figure 3), which involves designing out waste and pollution, keeping products and materials in use, and regenerating natural systems. Embracing the principles of both the waste hierarchy and the Circular Economy supports society in moving away from unsustainable levels of consumption of natural resources and helps to protect the environment in a number of ways. New policies that focus on these principles, along with pressure from consumers, are driving innovation and change in manufacturing and retailing, leading to new technologies for managing waste products.

At an international level the Sustainable Development Goals⁴ (SDGs), also known as the Global Goals, were adopted by all United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. The goals collectively represent a sort of 'social value charter' for the planet.

The 17 SDGs are integrated, recognising that action in one area will affect outcomes in others, highlighting that development must balance social, economic and environmental sustainability. From the 17 goals and 169 targets there are at least eight indicators which focus on solid waste management, the majority of which sit in Goal 12 – Responsible Consumption and Production. These indicators cover everything from domestic material consumption through to global food loss, but importantly link back to the issue of sustainable management of the resources we have and use.

Developing a Joint Strategy for resources and waste management provides an opportunity for the Partner Authorities to explore the ways they can work together and with the local community (residents, businesses and other organisations) to deliver more sustainable systems for managing resources and waste in accordance with the Circular Economy principles within the national Resources and Waste Strategy and the London Environment Strategy. This includes identifying ways to reduce waste, divert more materials for reuse and recycling, and reduce the greenhouse gas emissions associated with the generation and management of waste and resources. The Partner Authorities will look at how to do this within

⁴ THE 17 GOALS | Sustainable Development (un.org)

their own services and how to influence wider work by a range of organisations involved in the supply of goods and services locally.

Figure 2: The waste hierarchy

The Waste Hierarchy

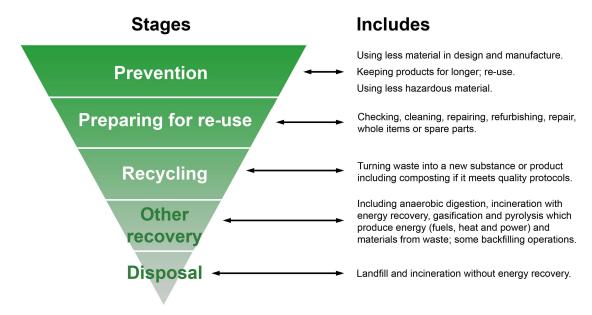
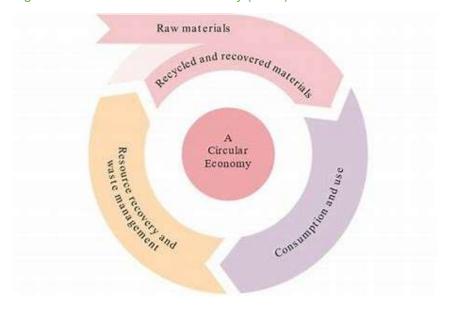


Figure 3: Vision of a circular economy (RWS)



1.3.3 Policy Landscape

National and regional policy on resources and waste is rapidly evolving in order to meet ambitions on preserving materials, reduce environmental impacts, and establish a Circular Economy.

The national Resources and Waste Strategy⁵ (RWS) was published in 2018, and includes many new proposals that will change how local authorities deliver recycling and waste services, and how communities interact with them. These include the setting up of a Deposit Return Scheme (DRS) for drinks containers, extended producer responsibility (EPR) for the costs of managing packaging waste, and establishing more consistent household and business recycling services across the country (Consistency). Further discussion of these issues can be found in Section 3.2.1.

The Government launched a second round of consultations on the DRS, EPR and Consistency proposals in the spring of 2021. This Joint Strategy has included consideration of, and assumptions on, the direction of travel for the development of these proposals, and the actions and priorities set out within the document include further review of the final course of action that the Government decides upon for implementing the RWS.

The Mayor of London also published the London Environment Strategy⁶ (LES) in 2018, which covers a broad range of environmental issues including waste management. The LES includes an aspiration for London to be a 'zero waste city' by 2050. The regional waste policies contained within the LES are similar to the national Consistency proposals, and waste authorities in London must demonstrate 'general conformity' with them.

The national and regional strategies both set ambitious targets for reuse and recycling, which East London will contribute towards. These are explained in Chapter 4 of this Joint Strategy, which also covers local priorities and aspirations, whilst the range of national and regional policies and proposals that have come forward are covered in more detail in Chapter 3.

Local policy issues including commitments to reduce carbon emissions and improve air quality will also need to be taken into consideration and will help to inform the way that we manage waste materials in the future.

1.3.4 Economic

Local authorities have faced a challenging financial situation in recent years, and the Covid-19 pandemic has put extra pressure on budgets locally as demand for some services has increased while income from other activities has dropped. The long-term effects of the pandemic are not yet known, but the disruption to the national economy, along with accelerated changes to how many people live and work, are likely to mean that some adverse effects on local authority finances will continue. The Partner Authorities need to deliver waste collection and treatment services in the most cost-effective way, in order to protect other frontline services that residents value.

The existing long-term waste treatment contract (see below) has prevented the Partner Authorities from gaining the financial savings that other local authorities have been able to through increasing recycling, and the overall costs for treatment of the waste and recycling collected have generally been higher for the Partner Authorities than in many parts of London.

⁵ Resources and waste strategy for England - GOV.UK (www.gov.uk)

⁶ London Environment Strategy - GLA

When this contract ends in late 2027, the Partner Authorities will have the opportunity to start making savings on waste treatment by diverting more material for recycling, and may also be able to access cheaper solutions for managing the residual waste. To make the best of these opportunities, it is important for the Partner Authorities to work together to consider what mix of collection and treatment services will provide the most cost-effective solutions overall, taking into account local priorities and needs. The development of this Joint Strategy is the first stage in that process.

1.3.5 Contract Situation

The current long-term waste treatment contract started in 2002, and was designed to achieve high levels of diversion of waste from landfill. This was consistent with national policy at the time, and the contract was supported by the Government through the implementation of a Private Finance Initiative model. The operator of the contract, Renewi (formerly Shanks Waste Management), has achieved and indeed significantly exceeded the targets set on landfill diversion, and at the time of writing this Joint Strategy less than 1% of the Partner Authorities' waste goes to landfill (a reduction from 3% in 2018/19).

Unfortunately, the structure of the contract has made it more difficult to increase recycling in the Partner Authorities' area, and local recycling performance has fallen behind the rest of the country. The financial savings that other local authorities can achieve by increasing recycling are not available under the structure of the contract, and the range of materials that can be collected for recycling has also been limited by the infrastructure that was built in the mid-2000s to support local waste treatment.

Renewi is working with the Partner Authorities to try to improve local recycling, including supporting initiatives to introduce a wider range of materials into household recycling collection services. The company's annual budget and service delivery plans⁷ include a number of projects designed to help the Partner Authorities meet and exceed a local 33% recycling target, with partnership working across the region intended to improve household collections, increase the quality of the recycling collected through reduced contamination, recover even more materials from the residual waste, and increase reuse and recycling at the four Reuse and Recycling Centres. The local recycling target was expected to be achieved by 2021, but the impacts of the Covid-19 pandemic unfortunately meant that this was just missed. At the time of writing this draft Joint Strategy, it is anticipated that this target will be met or exceeded in 2022. [Paragraph to be updated for final Joint Strategy]

The Partner Authorities will be working with Renewi to continue to improve local recycling services and performance to the end of the contract in 2027, including identifying opportunities to take full advantage of the changing policy landscape. There will also be work done to mitigate national changes that are expected on how local recycling rates are calculated, which may see a significant portion of the material recovered by Renewi from residual waste no longer being counted towards this performance and reducing local recycling rates by up to 5%.

⁷ ELWA's Strategy « East London Waste Authority

1.4 Producing a Joint Strategy – Aims and Objectives

With the end of the long-term waste treatment contract approaching, and the significant changes coming forward on resources and waste policy, the Partner Authorities agreed that the development of a new Joint Strategy for East London would be an important first stage in planning for the future.

To develop the Joint Strategy, a series of basic questions were posed that would need to be answered for the Partner Authorities:

- What is our current situation?
- How much waste will there be to manage in the future, and what will its composition be?
- How much can we reduce the amount of waste that is generated?
- How much waste can we divert for reuse or repair?
- How much of the waste can we recycle or compost?
- How will we manage the treatment of the waste collected for recycling or composting, as well as the waste that cannot be recycled?

The following aims and objectives (displayed overleaf) were developed by the Partner Authorities for the Joint Strategy to provide a clear outline of what needs to be achieved in the future. The priorities for the future which are detailed in Chapter 4 are based on the aims and objectives.

Joint Strategy Aims

The aims of the Joint Strategy are:

- A1. to promote and implement sustainable municipal resources and wastes management policies in East London as part of our contribution to transitioning to a more Circular Economy;
- A2. to minimise the overall environmental impacts of resources and wastes management;
- A3. to engage residents, community groups, local business and any other interested parties in the development and implementation of the above resources and wastes management policies; and
- A4. to provide customer-focused, cost-effective, best value services.

Joint Strategy Objectives

The objectives of the Joint Strategy are:

- O1. to minimise the amount of municipal wastes arising;
- O2. to maximise reuse, recycling and composting rates;
- O3. to maximise the diversion of resources and wastes from landfill, particularly organic materials that would produce greenhouse gases;
- O4. to co-ordinate and continuously improve municipal wastes minimisation and management policies in East London;
- O5. to manage municipal wastes in the most environmentally benign and economically efficient ways possible, including reducing greenhouse gas emissions, through the provision and co-ordination of appropriate resources and wastes management facilities and services;
- O6. to ensure that services and information are fully accessible to all members of the community;
- O7. to maximise all opportunities for local regeneration and increased social value benefits from waste and resource management, including employment, skills and wellbeing; and
- O8. to ensure an equitable distribution of costs, so that those who produce or manage the waste pay for it.

2 What is our Current Situation?

This chapter provides a snapshot of services delivered and performance at the time of writing the Joint Strategy (spring 2021).

Data and information to support the development of the Joint Strategy was taken from the last full year of service that was available when the development of the document started (namely 2018/2019) and has been used to understand current performance but also provide a baseline for future projections. Any updates to this have been highlighted within this chapter.

Development of the Joint Strategy began in late 2019, and continued during the Covid-19 pandemic. The pandemic has had an effect on the amount (quantities) and type (composition) of waste produced, and the Partner Authorities continue to monitor these changes. However, the Partner Authorities believe it is too soon to forecast with confidence what the longer-term impacts on local waste quantities and composition will be.

2.1 Our Area

The London Boroughs of Barking and Dagenham, Havering, Newham and Redbridge cover an area of 93 square miles, bordering the historic East End, the edges of Epping Forest, rural Essex and the River Thames. The 1.1 million residents live in 425,000 households, spread over a diverse mix of districts that include large housing estates, dense terraces, detached suburban streets, and small villages. There are also significant pockets of commercial land, active farms, and large industrial zones. The area is seeing a great deal of regeneration, spurred on by the 2012 Olympics, the imminent arrival of Crossrail services, and the repurposing of land next to the Thames. Further details on what East London could look like in the future can be found in Chapter 3.

The local community is vibrant, diverse, and ever changing. Residents come from a wide range of cultures and backgrounds, and the development of new housing is attracting many more people to the area. As is commonplace in London, an increasing number of people are renting rather than buying their homes, which contributes to relatively high levels of population transience (meaning people move more regularly). The population density varies significantly from neighbourhood to neighbourhood, but is generally increasing across the area as more new homes are provided in blocks of flats than houses.

2.2 How We Currently Manage Resources and Waste

2.2.1 Collections

2.2.1.1 Regular Household Collections

The four Constituent Councils all provide a weekly residual waste collection for residents, with more frequent services for some blocks of flats where space for bins is limited, and also on high streets where residents need to put their waste out on the street in bags. Commercial waste collections for businesses are currently offered by three of the four Constituent Councils.

Collections of 'dry' recycling, which mainly includes paper, card, plastic bottles, tins and cans, are provided on a weekly or fortnightly basis. Opportunities to improve local recycling services and collect a wider range of materials are being explored, and at the time of writing this Joint

Strategy work is underway to begin allowing a wider range of materials to be accepted in recycling collection services.

Garden waste collections are provided by all four Constituent Councils to meet local needs.

Some of the Partner Authorities also collect additional materials for recycling from households, such as Havering's service for small electronic appliances and batteries. Commercial recycling services are currently offered in two of the four boroughs (as well as by private waste contractors), and there is a network of public recycling banks around the area that residents can use to recycle more materials, including glass.

Residents can book bulky waste collections for larger items like furniture and white goods, with some items being separated so they can be recycled. Some of the Partner Authorities also have additional arrangements in place to allow bulky items to be diverted from disposal, such as Barking & Dagenham' partnership with an online electrical retailer to provide a free collection scheme for specific bulky items that can be reused and repaired.

There are also special collections available for household collections of clinical waste and hazardous waste.

Unlike many other parts of London, the Partner Authorities benefit from some materials being recovered for recycling from the residual waste, such as glass, metals, and the dried residue of food and garden waste. The recovery of these materials currently counts towards local recycling performance, but the Government has indicated that there may be changes to how local recycling rates are calculated in the future that could see the contributions from some of these recovered materials no longer counting. Further information is awaited from the Government on this issue.

2.2.1.2 Street Cleansing and Parks Waste

The four Constituent Councils collect waste from street cleansing operations, including the contents of litter bins, material swept off the street, and larger items that have been cleared from fly-tips.

Similar waste is also collected from the parks managed by the four Constituent Councils, along with material similar to household garden waste (where it is not composted at the parks themselves).

2.2.1.3 Reuse and Recycling Centres

ELWA provides four Reuse and Recycling Centres (RRCs), with one in each Borough. These are available for residents to use free of charge to deposit a wide range of materials for reuse, recycling or disposal. Three of the RRCs are also available for businesses to pay to use, through a direct arrangement with the operator of the sites.

2.2.2 Waste Treatment

ELWA is responsible for providing treatment services for the waste the four Constituent Councils have collected from households, businesses, and through street cleansing. These treatment services are provided through a long-term integrated waste services contract with Renewi, which ends in late 2027.

Much of the dry recycling (paper, card, tins, cans, plastic bottles, etc.) is collected in one bin or bag, so has to be sorted before each type of item can be sent off for recycling into new products. This sorting is done at a Materials Recovery Facility (MRF). Separated materials are then sent to reprocessing facilities that can recycle them into new products, and materials that can't be recycled (contamination) are sent for treatment (predominantly to be used as a fuel for electricity generation and district heating elsewhere).

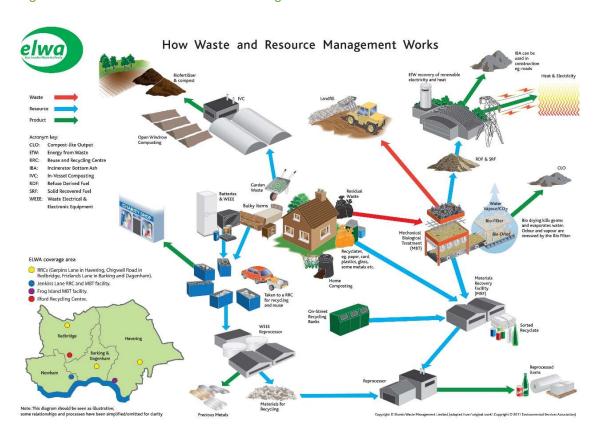


Figure 4: How Waste and Resource Management works within the Partner Authorities' area

Recycling from bring banks and some household collections do not require sorting and are able to be sent directly to reprocessors for recycling.

Garden waste is sent to industrial composting facilities, which produce a high-quality product that can be used to improve soil on agricultural land. This reduces the demand for fertiliser made using fossil fuels, helping to reduce greenhouse gas emissions and other pollution.

Some recyclable materials, such as electrical items, metal and wood, are extracted from the bulky waste that is collected from residents, so that these can be sent away for reprocessing into new products. The remaining bulky waste is shredded to make a fuel to be used for electricity generation and district heating elsewhere.

The residual waste is processed through two Mechanical-Biological Treatment (MBT) facilities, located at Frog Island (Havering) and Jenkins Lane (Newham), which opened in the

mid-2000s and are paid for through the current 25-year contract. The MBT system works by drying out the waste through natural processes similar to composting, where the organic content of the waste (mostly food) decomposes and produces heat. This drives off a lot of the moisture in the waste over the 10 to 14 days it spends in the drying halls at the MBT facilities, reducing the overall weight by about 30% (21% of total waste arisings including recycling). The dried waste is then put through a series of devices to recover some recyclable materials, such as glass, metals, and the solid residue of the food waste. These are sent off for reprocessing, whilst the remaining waste is used as a fuel for electricity generation and district heating elsewhere. A short video of the process was produced by Newham Council, and is available on YouTube⁸.

2.3 How Much Waste Do We Manage?

The Partner Authorities currently manage approximately 450,000 tonnes of waste per year, which comes from a number of sources including households, businesses, Reuse and Recycling Centres (RRCs), on-street bring banks and street cleansing.

Figure 5 displays the percentage proportion of each waste type presented to ELWA for treatment in the 2018/19 financial year.

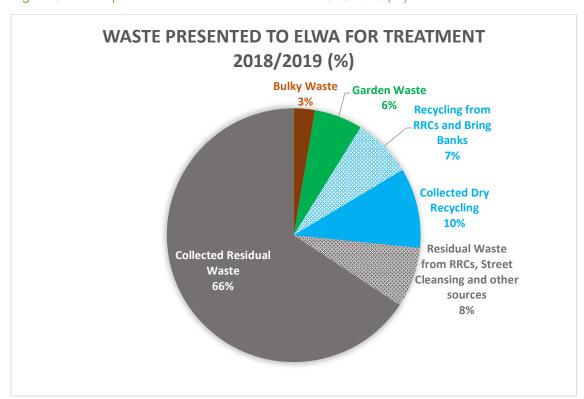


Figure 5: Waste presented to ELWA for treatment 2018/2019 (%)

Once the collected materials are bulked together at a local transfer station or undergo initial treatment, they leave the ELWA facilities for onward treatment and reprocessing.

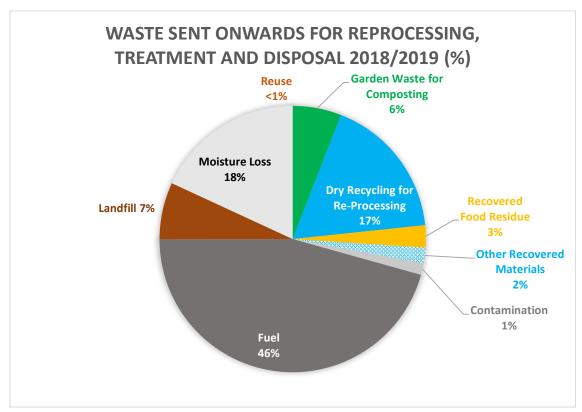
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⁸ What happens to your rubbish in Newham - YouTube

Around 300,000 tonnes of residual waste is processed through the two MBT plants each year, whilst around 43,000 tonnes of mixed dry recycling is sorted at a number of different MRFs. The garden waste is sent to composting facilities, and the materials residents have put into bring banks or taken to the RRCs are sent to other re-processors to be turned into new products.

Figure 6 displays the amount (percentage) of waste and recycling from all ELWA facilities sent onwards from ELWA for reprocessing, treatment and disposal. It includes the moisture loss from the MBT process which results in an overall weight (tonnage) reduction of waste being sent on for further treatment compared to what was collected.

Figure 6: Waste and Recycling sent onward from ELWA for reprocessing, treatment and disposal (%)



2.4 What's In Our Waste

To be able to understand how best to plan future waste collection and treatment services, including how recycling performance could be improved, it is important to understand in more detail what amounts and types of waste residents are currently producing.

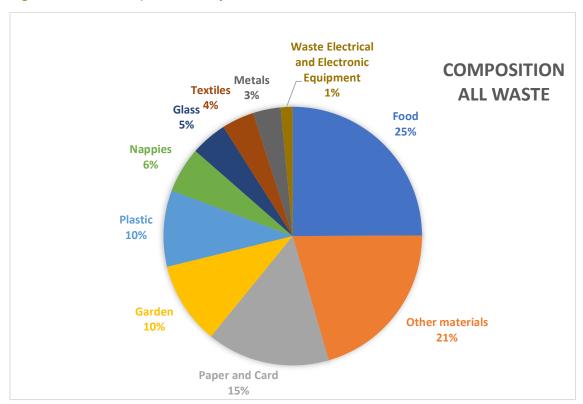
The last time a detailed analysis of the composition of waste managed by the Partner Authorities took place was in 2016, and the charts below show the results from that study. Figure 7 provides the composition of the household waste that was sampled (recycling and residual waste), whilst Figure 7 provides the composition of the residual waste only. This is particularly important as it helps the Partner Authorities to understand how much waste that could have been recycled is still being disposed of in residual waste.

The analysis carried out in 2016 revealed that there is a large amount of food waste being produced and disposed of as residual waste within the Partner Authorities' area. This is common to many parts of the country, but it shows that a significant difference to the amount of residual waste being produced could be made by helping local residents to reduce food waste. According to the environmental charity WRAP, the average family of four can save just over £60 per month⁹ by reducing their food waste, whilst preventing food waste would have significant environmental and cost benefits.

Data from the residual waste composition analysis also shows that large amounts of paper and card, plastics and metals are being thrown away which could have been recycled.

A further composition analysis will be conducted in 2021.

Figure 7: Waste Composition Analysis Results 2016 – All household waste



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⁹ Why Save Food | Love Food Hate Waste

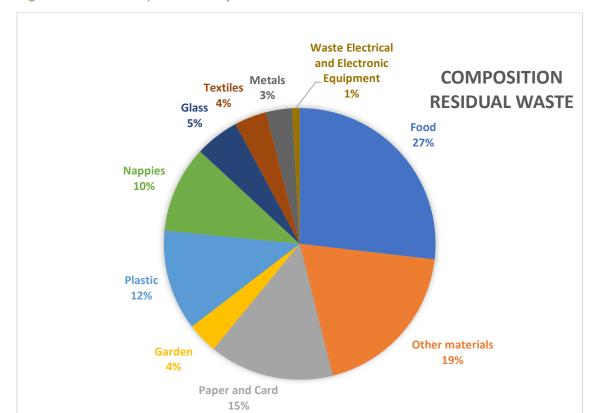


Figure 8: Waste Composition Analysis Results 2016 - Residual Waste

2.5 Our Current Performance

The Partner Authorities' area faces some considerable challenges relative to other parts of England and London in achieving the high recycling rates and reductions in residual waste more widely achieved elsewhere.

One of the main challenges is ELWA's current long-term waste treatment contract. This was innovative when it first began in 2002 and means that very little residual waste is landfilled (which is environmentally beneficial). However, over time it has become restrictive for the Partner Authorities and has meant that it has not been economically viable to achieve the same high levels of performance on recycling as other parts of the country.

2.5.1 Barriers to Recycling

A number of studies have identified common barriers to recycling, many of which are applicable to the Partner Authorities' area. Within the WRAP Barriers to Recycling at Home¹⁰ study the following universal barriers were identified:

¹⁰ WRAP Barriers to Recycling at Home

Situational barriers – including not having adequate containers, a lack of space for storage, unreliable collections, unable to get to bring sites;

 Lack of space for storage within a property is a common challenge for those residents living in flats or in Houses of Multiple Occupancy (HMOs)

Behaviour – for example household disorganisation, being too busy with other preoccupations, difficulties in establishing routines for sorting waste and remembering to put it out on collection day;

 Examples of behavioural barriers include putting things in the recycling even if the unsure if it can be recycled, which can cause contamination of the recycling

Lack of knowledge – such as knowing what materials to put in which container, and understanding the basics of how the scheme works; and

 High levels of transience (residents moving often), combined with a lack of information provided to tenants about services, can limit recycling

Attitudes and perceptions – such as not accepting there is an environmental or other benefit, resistant to householder sorting, and not getting a personal motivational reward from recycling.

 Ease of throwing everything into one bin combined with not having anywhere to store recycling can limit recycling

WRAP's Recycling Tracker¹¹ identifies that age profiles and home ownership affects recycling rates. Residents between 18-35 record lower rates of recycling, and home owners tend to recycle more than people who rent their homes.

ReLondon has produced a report about recycling in flats¹², which noted that people who live in these types of property recycle much less than those who live in houses.

Across the area, the levels of garden waste collected are relatively low because many properties in the region have very small or no gardens, with the lack of a garden becoming even more common due to the increasing number of blocks of flats. Garden waste often makes a large contribution to the recycling rates in higher performing parts of the country.

However, despite the barriers identified, the Partner Authorities aspire to improve recycling rates in the future with the support of the community and businesses. Some of the current initiatives that the Partner Authorities are working on are covered below in section 2.6. The Joint Strategy is looking at how significant improvements in performance can be achieved beyond this once the current waste treatment contract comes to an end in 2027.

2.5.2 Reuse, Recycling and Composting

As a consequence of the factors detailed above, East London has some of the lowest recycling rates in the country.

A particular concern for the Partner Authorities is the amount of contamination in the recycling.

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¹¹ WRAP Recycling Tracker 2020

¹² Report - Making recycling work for people in flats | ReLondon

Contamination is the name given to non-recyclable material that residents incorrectly put out for recycling, or recyclable materials which are placed in the wrong bin (e.g. textiles need to be placed into a recycling bank or donated locally, rather than into household recycling bins and bags). Contamination has to be sorted out from other recyclable items before being sent away for disposal. Some types of contamination are particularly problematic, as they can also damage other materials that would otherwise be able to be recycled. Tissues, nappies and food waste are examples of this type of contamination, and they are especially damaging to paper and card when put into the same recycling bin or bag.

Figure 9: Percentage of household waste sent for reuse, recycling 2018/2019 – NI192 Partner Authorities

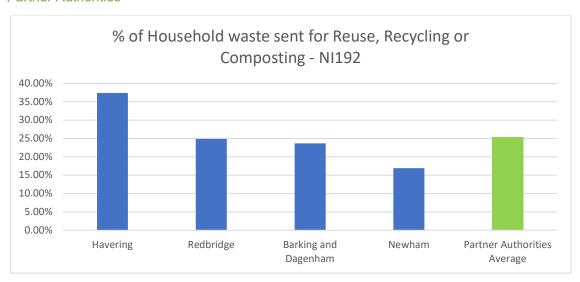


Figure 10: Percentage of household waste sent for reuse, recycling 2018/2019 – NI192 for all London Boroughs and the City of London



2.5.3 Waste Generation

The Partner Authorities' area has some of the highest levels of waste generation in London. The relatively low recycling rates also contribute to the larger amounts of residual waste collected in the area.

Figure 11 displays the total weight of all household waste per head of population, and Figure 12 displays the total weight of residual household waste per household, compared to the other London Boroughs and the City of London.

Figure 11: Total household waste per head (kilograms/head/year) 2018/2019 – for all London Boroughs and the City of London

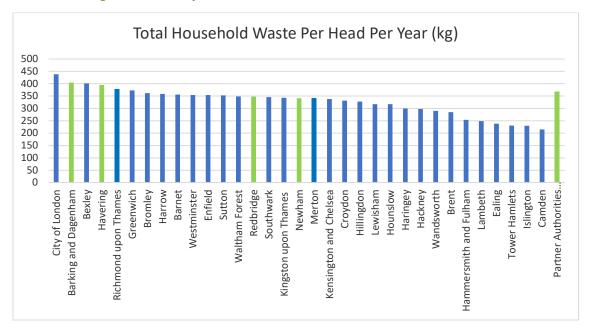
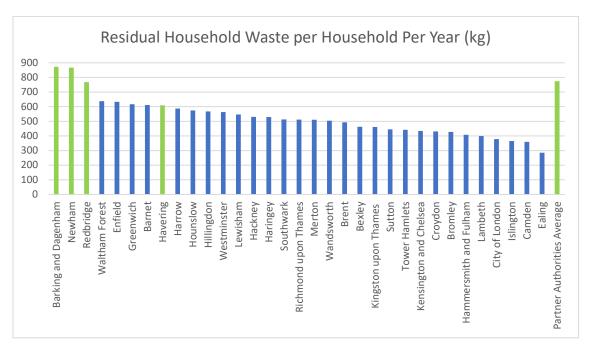


Figure 12: Residual waste per household (kilograms/household/year) 2018/2019 – NI191 for all London Boroughs and the City of London



2.5.4 Landfill Diversion

The Partner Authorities' area achieves a high rate of diversion of waste from landfill due, in large part, to the treatment of residual waste by the MBT facilities described above in section 2.2.2. Other items that may once have been more commonly sent to landfill, such as discarded furniture, are also now treated in a similar way to recover recyclable items and create a fuel from the remaining material. The performance in the baseline year for this Joint Strategy, landfill diversion was 92.4% compared to a London-wide average of 90.5%. However, this has since been increased to more than 99%. In recent years ELWA has been working closely with its contractor Renewi to improve the recovery of recyclable materials from the residual waste at the MBTs. Renewi has also worked hard to establish long-term arrangements for using the fuel it creates from the residual waste, which has resulted in great improvements in landfill diversion. Renewi is continuing to invest in its facilities to improve performance.

2.6 How We Are Improving

Although there are some considerable challenges to overcome, the Partner Authorities have been working for some time to improve performance on waste reduction, reuse and recycling.

The four Constituent Councils have each produced Reduction and Recycling Plans¹³ (RRPs), which have been submitted to the Mayor of London. These explain how they will reduce waste, increase reuse and improve recycling, working with ELWA and other stakeholders, as part of contributing to the goals and targets in the London Environment Strategy.

In line with their RRPs, Constituent Councils are exploring how to improve local recycling services before the end of the current waste treatment contract, including options for starting to collect a wider range of materials. in order to align more closely with the Mayor of London's

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¹³ Waste Reduction and Recycling Plans – London Datastore

minimum service standards¹⁴¹⁵. There are also projects planned or underway to try to get more residents to start recycling properly, separating more of their recyclable waste and reducing contamination.

2.6.1 Reduction and Reuse

There have been a number of projects and initiatives in East London to reduce waste and increase reuse. These include offers of discounted home composting bins for residents, discounts or promotions on reusable nappies, campaigns and workshops focused on reducing food waste, and 'give and take' days that enable residents to donate items they no longer need while also having the opportunity to find products that they would otherwise have to buy.

The work on waste reduction and reuse has now been developed into the Waste Prevention Programme, which is being delivered collectively by the Partner Authorities. This is focusing on some core materials, such as food waste, furniture, clothing, nappies and electronics, with a number of projects and new services being introduced to help residents reduce waste and save money.

2.6.2 Community Engagement

The Partner Authorities understand the importance of working with communities to reduce waste, increase reuse and improve recycling. There are teams dedicated to community engagement on waste and recycling, visiting residents at their homes, attending community meetings, and running events and roadshows. During the Covid-19 pandemic these teams have made use of online platforms (such as Zoom and Microsoft Teams) to continue this work, providing opportunities for residents to learn how to waste less and recycle more even during the most challenging times.

ELWA and the Constituent Councils also work closely with Renewi and Renewi's communications partner Keep Britain Tidy to deliver a programme of education in schools and community engagement on waste reduction, reuse and recycling.

The Partner Authorities have supported national and regional campaigns on waste reduction, reuse and recycling, including Recycle Week, Compost Awareness Week, Real Nappy Week, Recycle for London/London Recycles, and Love Food Hate Waste.

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3 What Might the Future Look Like?

3.1 The Partner Authorities' Area in the Future

The Partner Authorities' area has been a focus for regeneration for several decades, and major new developments are planned or in progress across the region. The opening of new transport links in the late 1990s and the staging of the London Olympics in 2012 resulted in a rapid pace of new development in the west of the area particularly, whilst the imminent arrival of Crossrail is helping to drive similar changes elsewhere in the region.

The demand for new housing in London has put extra pressure on the land available, so most new housing being developed is in higher-density developments. New areas are being opened up for housing development for the first time, particularly along the River Thames and the region's major transport corridors, whilst new commercial zones are also coming forward. The area is a particular focus for new 'green industries' moving into the capital, spurred on by the excellent air, road, rail and water transport options.

3.2 Resources and Waste Management in the Future

As mentioned in Chapter 2, there are a number of policy drivers that will influence how the Partner Authorities manage resources and waste in the future. These are covered in more detail within this chapter.

3.2.1 Policy Landscape

3.2.1.1 Overview

In its **25 Year Environment Plan**¹⁶ (Jan 2018), the Government set out its ambition to improve the environment within a generation. This included adopting policies within Government Strategies to use resources from nature more sustainably and efficiently, and managing pressures on the environment by minimising waste. Specifically, with relevance to this Strategy, it sets out the following policies:

- Maximising resource efficiency and minimising environmental impacts at end of life
- Achieving zero avoidable plastic waste by the end of 2042
- · Reducing food supply chain emissions and waste
- Reducing litter and littering
- Improving management of residual waste
- Cracking down on fly-tippers and waste criminals

The Plan highlights the importance of taking a natural capital approach when developing and implementing policy.

¹⁶ 25 Year Environment Plan - GOV.UK (www.gov.uk)

The 25 Year Environment Plan is supported by a number of strategies including:

- Clean Growth Strategy¹⁷ which commits to exploring new and innovative ways to manage emissions from landfill
- **Industrial Strategy**¹⁸ which looks at major projects and encouraging consumers to look at the whole life value of a product
- **Litter Strategy**¹⁹ which outlines how the Government will work with groups and businesses to reduce litter
- **Resources and Waste Strategy**²⁰ which demonstrates the Government's ambitions to move to a more circular economy
- Waste Prevention Plan being consulted on in 2021²¹

The **Resources and Waste Strategy** (RWS, 2018) combines the Government's pledges with the commitments it has made through the adoption of the EU Circular Economy Package²². The RWS is guided by two overarching objectives:

- · To maximise the value of resource use; and
- To minimise waste and its impact on the environment.

The RWS will contribute to the delivery of five strategic ambitions:

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

3.2.1.2 What Does This Mean for the Partner Authorities' Area?

The Environment Bill will bring into law a number of key policies set out in the RWS. At the time of writing this Joint Strategy the Environment Bill is still passing through parliament, and new consultations on three key policies from the RWS were launched in the spring of 2021. Although they are not fully defined, several have already been identified as being important for the Partner Authorities to consider:

¹⁷ Clean Growth Strategy - GOV.UK (www.gov.uk)

¹⁸ The UK's Industrial Strategy - GOV.UK (www.gov.uk)

¹⁹ Litter Strategy for England - GOV.UK (www.gov.uk)

²⁰ Our waste, our resources: a strategy for England (publishing.service.gov.uk)

²¹ Note that the London Environment Strategy also contains Waste Prevention objectives (7.1) and a plan for London is expected to follow the national plan.

- The introduction of a Deposit Return Scheme (DRS) for drinks containers, to incentivise recycling. Under the proposals consumers would pay a deposit for items like bottles and cans, which they could reclaim by returning these containers to shops or new 'Reverse Vending Machines' (RVMs) which would be located in supermarkets and other relevant locations.
- DRS systems increase recycling rates and can also reduce litter, but how the proposed system will interact with local authority collections, and whether the additional recycling can be counted towards performance locally, is unclear. There also remains a question about potential future revenue loss from the sale of these materials, if drinks containers are diverted from local authority collection systems.
- Standardising recycling collections from businesses and households. This will
 set requirements for local authorities to provide separate collections of food waste for
 composting and specify the range of materials to be included in recycling collections.
 These mirror the minimum standard requirements for household waste collection
 services set out in the London Mayor's Environment Strategy. Requirements on
 businesses to separate waste for recycling and composting are also proposed.
- Under the Consistency proposals all of the Constituent Councils will need to conduct
 assessments on the delivery of the required services and, notably, the degree to which
 materials should be collected separately from each other for recycling to satisfy tests
 set by Government.
- Extended Producer Responsibility (EPR) for packaging. This will require
 businesses in the packaging production and retail chain to pay for the costs of
 managing their waste packaging and includes a number of initiatives to make
 packaging more recyclable. EPR may provide an opportunity for additional funds for
 local authorities to support collection and recovery of packaging. This is to be consulted
 on by Government.

The Environment Bill as drafted enables DRS schemes and producer responsibility regimes for other materials to be brought forward by the Government in the future.

Other key provisions of the RWS relevant to this strategy include:

- A tax on plastic packaging containing less than 30% recycled content In addition to the EPR and DRS proposals, which both include some focus on improving the management of plastic waste, the Government has introduced from April 2022, a tax on plastic packaging that contains less than 30% recycled plastic, and will use regulations to phase out single use unrecyclable packaging and place bans on the sale of other items such as drinking straws.
- Ways of measuring performance beyond recycling rates The Government is
 exploring new ways to monitor the performance of resources and waste management
 systems, to try to better capture wider environmental impacts. This could include
 moving away from weight-based targets such as recycling rates, which can incentivise
 the recycling of heavier materials instead of those that offer greater environmental

benefits through recycling.

 The Partner Authorities will continue to measure performance using a range of metrics and will lobby Government to consult on the use of a carbon metric (and other proposed metrics). Further details on performance measurement can be found in Chapter 6.

3.2.2 Resource Efficiency and Scarcity

The natural resources we use are valuable, and as the population of the world increases, the demand for these resources will rise. This will put more pressure on the environment as new sources of these resources are explored, and will also increase the costs for using them.

With the harm we are doing to our environment becoming more severe, and increasing competition around the world for the natural resources we have already extracted, finding ways to use those resources more efficiently will continue to be an urgent priority. Reducing our overall consumption of resources is of the utmost importance, whilst ensuring that materials that are in circulation keep their value and continue to be used again and again will minimise the demand for extracting more from nature. Reducing our waste and reusing or recycling as much as possible are both vital to improving the efficiency of our use of natural resources.

Over time some of the resources we value will start to become scarce, as natural sources get depleted and the costs of finding more become prohibitive. Retaining resources we already have access to by reusing and recycling our waste will help to minimise the pressures that resource scarcity could create.

3.2.3 Greenhouse Gas Emissions

Climate change has become one of the most important concerns for governments and communities around the world, and the role that humans have played in causing it is now well understood. Taking action on climate change is an international priority, and is likely to continue to increase in importance as the effects of the global warming we are already seeing become more apparent. This strategy is being developed in the year that the 26th UN Climate Change Conference of the Parties (COP26) is being hosted in the UK (Glasgow).

The principal focus is on reducing the emissions of a range of 'greenhouse gases', such as carbon dioxide and methane, that are responsible for the rising global temperatures and subsequent disruptive effects on the climate and weather systems. The UK Government has set ambitious targets²³ to cut greenhouse gas emissions by 68% by 2030 (based on 1990 levels). This target is amongst the highest in the world, and commits the UK to cut emissions at the fastest rate of any major economy so far. Everyone has a role to play in achieving this target, and there are implications for all industry sectors. The national resources and waste policy aims to reduce carbon emissions and protect the wider environment by encouraging citizens to reduce consumption and subsequent waste, reuse what we can and recycle materials to retain the value.

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²³ UK sets ambitious new climate target ahead of UN Summit - GOV.UK (www.gov.uk)

Reducing emissions is also a regional and local priority. The London Environment Strategy sets out a number of actions for reducing emissions through changes to our buildings, how we travel, the provision of parks and green spaces that can absorb some greenhouse gases, and how we consume and dispose of products. The Emissions Performance Standard (EPS) measures greenhouse gases released from London's local authority waste management activities and forms a core part of the Mayor's London Environment Strategy. The EPS aims to achieve significant carbon dioxide (CO₂) emission savings from the management of London's local authority waste. The EPS focuses on treatment of waste with an emphasis on recovering materials which deliver greater CO₂ reductions. The EPS sets targets that London Boroughs are expected to contribute to through their RRPs, and defines a Carbon Intensity Floor²⁴ (CIF) that residual waste solutions must meet. The Partner Authorities are all developing plans for cutting emissions arising from their own operations, as well as identifying ways that they can work with local communities to help residents play their part such as encouraging sustainable consumption.

In urban areas in particular, including East London, air quality is another important issue that is being tackled as the effects on human health of certain pollutants become clearer. Many of the activities that emit greenhouse gases are also the cause of local air pollution, so actions to adopt more sustainable lifestyles will help in tackling both problems. Some of the Partner Authorities have implemented air quality management areas, and all Partner Authorities are observing the London Environment Strategy requirements on emissions when planning for future vehicle fleets.

3.3 Preparing for the Future

The Partner Authorities have an aspiration to manage resources and waste more sustainably in the future, through a focus on reducing waste, increasing reuse and repair, and improving recycling.

Huge changes have happened to the types of waste that we have produced over previous decades, and this type of change is expected to continue. The Partner Authorities need to understand what the waste they collect and manage might look like in the future, covering a period that would match the lifespan of most kinds of large-scale waste treatment infrastructure. A period of 30 years from the end of the current long-term contract in 2027 has therefore been looked at, meaning predictions have been made to 2057. However, the Partner Authorities recognise that the accuracy of forecasts will reduce the further into the future they look, and as such will review the predictions every few years to determine whether anticipated growth, material changes and other factors have developed as expected.

Land use in the Partner Authorities' area will also change in the future, as new housing is built, transport links are improved, industries move in and out of the area, and major regeneration plans are developed and delivered. A changing local area will inevitably mean the amount and type of waste being generated also changes, and the Partner Authorities will need to be able to respond to this.

²⁴ Policy 5.17 Waste capacity | London City Hall

3.3.1 How Did We Forecast?

A range of forecasting or 'horizon scanning' techniques were used to look at the factors which could influence the amount and type of waste that will be generated in the future.²⁵

The first stage was to identify how much the amount and type of housing in the Partner Authorities' area might change, as this is likely to be the single biggest influence on the future generation of waste, and the interface between residents and their local waste and recycling collection services. The second stage was to predict how some of the proposals in the Resources and Waste Strategy might impact on future waste. Finally, an analysis was done of other political, economic, social, technological, legal and environmental (PESTLE) factors that might lead to changes to the types and quantities of products that are consumed and disposed of in the future (Figure 13). All of this analysis was based on research from around the world, as well as forecasting that other organisations or industries have done.

Examples of the types of forces considered include:

- Climate change making the UK warmer and wetter increasing garden growth rates;
- Growth of online shopping and deliveries cardboard;
- Smart Technology including smart home items (lights, speakers etc.) and wearable devices (glasses, wristbands, shoes etc.).

Figure 13: Overview of PESTLE Forces

Political	 Political forces shaping our world, the future of work and the adoption of policies that will drive changes to consumption, behaviour change and the way that waste is collected
Economic	•Economic forces that will drive the global and UK economy including future funding for climate change mitigation and adaptation and funding for local government
Social	Social forces that influence the behaviour of residents and businesess including consumption and ethical drivers
Technological	•Technological forces that will influence the use of technology in our everyday lives including how we use it to manufacture goods and reprocess materials
Legal	Legal forces including future policy and targets
Environmental	Environmental forces including climate change and pro-environmental behaviours

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²⁵ https://eastlondonwaste.gov.uk/jointstrategy

Three examples of future 'worlds' were created by grouping together different impacts:

Green World – this is a 'best case' scenario, where governments, communities and businesses all embrace the most environmentally conscious behaviours and lifestyles, leading to reductions in waste and the adoption of truly sustainable lifestyles.

Current Trends – in this scenario there continues to be improvements in legislation, product design and the adoption of sustainable lifestyles, but not to the extent as in the Green World scenario.

Degraded World – this is a very unlikely scenario, where even current environmental protections come to an end, and waste generation significantly increases.

In addition, to help provide some comparison with the current situation, current levels of waste generation per household were projected into the future using the forecasts for the amount of new housing that is expected to be built in the Partner Authorities' area to understand how much waste there would be to manage with no other changes considered. This created a fourth 'world' known as Household Growth Only.

Figure 14: Example forces mapped against the three 'worlds'

Forces	Potential outcomes 1	Potential outcomes 2	Potential outcomes 3
	Green World	Current Trends	Degraded Word
Climate change making the UK warmer and wetter - increasing garden growth rates	Increased rates of garden vegetation growth and further land dedicated to allotments. Increased levels of growing food at home. Increased consumption of salad and vegetables. Increased garden waste arisings and higher levels of participation in food waste collections.	Increased rates of garden vegetation growth. No new allotments. Slow take up of growing food at home. Some increase in consumption of salad and vegetables. No change in garden waste arisings. Food waste recycling collections are introduced.	Increased rates of garden vegetation growth. Reduced number of allotments due to housing developments. Slow take up of growing food at home. Some increase in consumption of salad and vegetables. No change in garden waste arisings. Food waste recycling collections are rejected by government.
Growth of online shopping and deliveries - cardboard	Increased switch to online shopping and deliveries (currently 15 - 20% of all consumer goods are sold online). Proenvironmental behaviours encourage reduced levels of consumption and high levels of recycling. Take back schemes embraced. Use of crates increases. New schemes enter the market in the medium term and refills increase.	Online consumption increases. Increased arisings of cardboard in the short term which is recycled (change in composition). Take back schemes in the longer term - embraced where compulsory (reduction in cardboard produced and recycled).	Online consumption increases. Increased arisings of cardboard in the short term which are not recycled. Take back schemes in the longer term - only used where compulsory.

Forces	Potential outcomes 1	Potential outcomes 2	Potential outcomes 3
	Green World	Current Trends	Degraded Word
Smart Technology including smart home items (lights, shower, speakers etc.) and wearable devices (glasses, wristbands, shoes etc.)	Increased levels of Waste Electrical and Electronic Equipment (WEEE) due to an increase of Internet of Things (IoT) and required sensors. Items that aren't considered WEEE currently will need to be re-categorised in the future. E.g. textiles. Comprehensive take back for WEEE items Extended Producer Responsibility (EPR) and widespread recycling options that are used.	Increased WEEE arisings due to an increase of IoT and required sensors. Items that aren't considered WEEE currently will need to be re-categorised in the future. E.g. textiles. Comprehensive take back for WEEE items (EPR) recycling increases in line with increased arisings.	Increased WEEE arisings due to an increase of IoT and required sensors. Items that aren't considered WEEE currently will need to be re-categorised in the future. E.g. textiles. Comprehensive take back for WEEE items (EPR) used when financially viable.

It was decided to base this Joint Strategy on the Current Trends world, which anticipates reductions in waste per household compared to the current situation but recognises that the transition to a comprehensively more sustainable economic model will take a considerable amount of time to achieve. However, if everyone makes a strong commitment to living more sustainably, the outcomes projected in the Green World scenario could be achieved. The Partner Authorities will ensure that future services are able to respond to the world changing in a different way than has been projected, and will support efforts across society to move towards a future that is as close as possible to the Green World.

3.3.2 Our Predictions for the Future

The Current Trends world considered a wide range of possibilities, and anticipated gradual increases in policy, legislation and social trends that will help to protect the environment. Many of the current barriers to more sustainable ways of life are expected to continue, but growing concern about the environment will lead to greater awareness and consideration of waste generation by individuals, organisations and governments.

The impacts of these predictions on materials vary, but notably the following types of waste are anticipated to increase:

- Waste electrical and electronic equipment
- Nappies and other absorbent hygiene products
- Plastic film

Recycling opportunities for plastic film and electronic equipment are expected to increase, as is the use of food waste for generating energy and making soil improvers. The use of paper is expected to continue to decrease, but this will be offset to some degree by the increasing use of cardboard for packaging and home deliveries.

3.3.3 Preparing for the Unforeseen

The process to forecast what the world may look like in the future was completed before the emergence of the Covid-19 pandemic in March 2020. Although local authorities plan for a number of events as part of managing risks, the size, severity and length of the Covid-19 outbreak was not foreseen.

At the time of writing this Joint Strategy, the pandemic is still ongoing and organisations across the resources and waste industry are continuing to manage its impacts. These have included more household waste being generated as many people started working from home, fluctuations in global material markets as international trade was disrupted, and large amounts of healthcare waste starting to be generated as testing and vaccination regimes got underway.

There are also a number of possible long-term impacts from the pandemic that are starting to be discussed at a local, regional, national and even international level. These range from relatively short-term economic downturns to fundamental shifts in how and where people live and work.

The Covid-19 pandemic has highlighted the need for greater resilience in how services are planned and delivered, but has also demonstrated how sudden events could set the world on a different path than had been predicted. The Partner Authorities will take the learning from this pandemic on board in the planning of future services, and will monitor the long-term changes that could come about to ensure that the forecasts of future waste types and quantities explained in this chapter remain relevant.

4 Where Do We Want To Be?

The Partner Authorities have high aspirations for increasing the sustainability of local resources and waste management in the future, as outlined in the aims and objectives for the Joint Strategy (see boxes below). This chapter sets out the Partner Authorities' priorities and aspirations for resources and waste management for the Joint Strategy period.

Joint Strategy Aims

The aims of the Joint Strategy are:

- A1. to promote and implement sustainable municipal resources and wastes management policies in East London as part of transitioning to a Circular Economy:
- A2. to minimise the overall environmental impacts of resources and wastes management;
- A3. to engage residents, community groups, local business and any other interested parties in the development and implementation of the above resources and wastes management policies; and
- A4. to provide customer-focused, cost-effective, best value services.

Joint Strategy Objectives

The objectives of the Joint Strategy are:

- O1. to minimise the amount of municipal wastes arising;
- O2. to maximise reuse, recycling and composting rates;
- O3. to maximise the diversion of resources and wastes from landfill, particularly organic materials that would produce greenhouse gases;
- O4. to co-ordinate and continuously improve municipal wastes minimisation and management policies in East London;
- O5. to manage municipal wastes in the most environmentally benign and economically efficient ways possible, including reducing greenhouse gas emissions, through the provision and co-ordination of appropriate resources and wastes management facilities and services;
- O6. to ensure that services and information are fully accessible to all members of the community;
- O7. to maximise all opportunities for local regeneration and increased social value benefits from waste and resource management, including employment, skills and wellbeing; and
- O8. to ensure an equitable distribution of costs, so that those who produce or manage the waste pay for it.

Priorities outlined in this chapter are based on extensive modelling, and provide realistic and appropriate steps that align to, and will contribute towards, London-wide and national policies and targets. Further details on the modelling work can be found in the Technical Reports²⁶ for this Joint Strategy.

As discussed in chapter 2, as the Partner Authorities move beyond the existing integrated waste management contract in 2027, there is scope to implement more flexible and ambitious waste management policies and an eagerness to do so. As set out in Chapter 3 it is difficult to predict the future and the Partner Authorities commit to review their aspirations as circumstances change in line with the aims and objectives of the Joint Strategy.

4.1 Waste Prevention

In line with the Waste Hierarchy, waste prevention provides the greatest environmental and cost benefits for the communities of East London, so is a top priority for the Partner Authorities.

An East London Waste Prevention Programme was approved in February 2021 so that the Partner Authorities can increase their role in preventing waste as soon as possible. The plan includes activities which specifically target key materials, and will facilitate simple ways that residents, businesses and other stakeholders can work together to reduce waste.

Priority materials

Waste prevention activities will focus on a number of priority waste streams that reflect the:

- amount of material within the residual waste either at the kerbside or RRC;
- · opportunities to reduce carbon emissions;
- opportunities to protect material scarcity; and
- imperative to minimise the use of plastic.

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²⁶ https://eastlondonwaste.gov.uk/jointstrategy

The following table sets out the Partner Authorities' priorities and actions on waste prevention:

The Partner Authorities' waste prevention priorities:

- Continue to work with residents and businesses to reduce waste growth and contribute to the London wide aspiration of becoming a 'zero waste city'
- Support the London wide target of reducing food waste by 50% by 2030 and will work with the Greater London Authority, ReLondon²⁷ and other authorities to do this
- Work to raise awareness of the individual, community and environmental benefits of reducing waste

More specifically we will:

- Develop waste prevention plans, Reduction and Recycling Plans, or other appropriate tools that
 outline the actions that will be taken to provide communications, engagement and access to
 services that help residents reduce waste and save money
- Support national and regional campaigns on waste prevention, and develop local campaigns to support projects and services
- Develop partnership arrangements with community organisations, housing associations local authorities, and other key stakeholders to enhance work on waste prevention
- Work with the Government, other local authorities and key stakeholders to promote higher standards of product design and manufacture, to prolong product lifecycles and reduce avoidable waste

Objectives: These priorities meet the following objectives of this Joint Strategy: O1, O2, O3, O4, O6, O7

4.2 Reuse and Repair

Increasing the amount of unwanted or broken items that are diverted for reuse or sent for repair will not only reduce the environmental impacts of waste management, but will also provide community benefits through support of local businesses and community organisations, enhancing job opportunities and training. Establishing a local circular economy will also improve access to reduced price goods for lower income families – a social value benefit.

The Partner Authorities will work to significantly increase reuse and repair activities within East London, and work with communities to encourage reuse and repair for both disposing of unwanted items and the purchase of new. Reuse and repair will form a significant part of the Waste Prevention Plan which will start in 2021.

²⁷ Formally known as LWARB – the London Waste and Recycling Board

The following table sets out the Partner Authorities' priorities and actions on reuse and repair:

The Partner Authorities' reuse and repair priorities:

- Work to increase the amount of products that are kept in local circulation through reuse and repair services
- Seek to normalise reuse within our communities as a means of disposing of unwanted items
- Seek to promote the purchase of reused, refurbished and repaired products as a beneficial alternative to buying new
- Seek to advance local green economy job and training opportunities through supporting the development of reuse and repair services

More specifically we will:

- Explore options for providing or supporting existing and new reuse collection services from homes and businesses
- Investigate opportunities for increasing reuse provision at the Reuse and Recycling Centres, including on-site retail outlets where viable
- Work with reuse organisations to develop / expand existing valued partnerships, strengthen local
 offerings, and support increases in scope and capacity to enhance the services available to
 residents
- Raise awareness of repair options available within the Partner Authorities' area
- Participate in national, regional and sub-regional campaigns promoting reuse and repair, and undertake local promotion of the benefits and range of available services
- Work with the Government, other local authorities and key stakeholders to promote higher standards of product design and manufacture, to enhance opportunities for cost-effective reuse

Objectives: These priorities meet the following objectives of this Joint Strategy: O1, O2, O3, O4, O5, O6, O7

4.3 Recycling

The structure of the current long-term contract for waste treatment and the wider context in the Partner Authorities' area has made it more difficult for the Partner Authorities to keep up with other parts of the country in increasing recycling. However, when this contract ends in late 2027 and the policy landscape changes, there will be new opportunities to improve performance. The Constituent Councils have already identified ways that they will be working to increase recycling before the end of the contract through their RRPs. As has been explained in previous chapters, the Partner Authorities' area also faces increasing challenges in achieving high recycling, notably because a larger proportion of high-density flats is being built across the area than in most other parts of the capital.

Another challenge relates to the current MBT processes which recover some materials for recycling, including glass, metals and dried food waste. The recycling of these recovered materials counts toward local recycling rates at present. However, at the time of writing this Joint Strategy, there are indications that the dried food waste may no longer be able to be

counted towards local recycling performance in the future because of some proposed changes to Government policy. This could mean up to a 5% reduction in current local recycling rates.

The Partner Authorities will work with the Government, other local authorities and waste industry bodies to try to reduce the impact of this proposed change, as the recovery of the dried food waste presents clear environmental benefits that should continue to be encouraged. However, if the proposed change does happen, targets set for the future will need to take the loss of the current (up to) 5% contribution into account.

4.3.1 Modelling Future Performance

To understand what future recycling performance could look like, extensive modelling has been undertaken²⁸. This has used the forecasts of future waste levels that were explained in the previous chapter, and has looked at how improvements to recycling services and investment in communications that the Partner Authorities could make would increase local recycling rates. The modelling has taken into account the large and increasing number of flats within the region and the challenges these properties face with recycling.

The modelling focused on the likely required household waste and recycling services that the Government has proposed through the "Consistent Recycling Collections" chapter of the national Resources and Waste Strategy. All collection options include a separate food waste collection service, along with the addition of glass and a wider range of plastics to recycling collections. The modelling of future performance includes assumptions on the likely impact of the proposed introductions of a Deposit Return Scheme (DRS) for drinks containers and an Extended Producer Responsibility (EPR) regime for packaging waste. The future types of waste treatment technology that will be used are currently unknown (see Section 4.4), so to help the Partner Authorities understand what levels of recycling they might be able to achieve if current industry-standard approaches to waste treatment were used after 2027, the modelling has assumed that there will be no contribution to local recycling rates from recovery of materials from the residual waste. The continuation of current arrangements for garden waste and provision of weekly rubbish collections for all residents are included in the modelling.

At the time of writing this Joint Strategy, the Government is still working on implementing the proposals within the Resources and Waste Strategy. The Partner Authorities support these proposals as they should result in many environmental benefits, a general increase in recycling across the country and a move towards the 'polluter pays' principle. The proposed DRS in particular could result in recyclable waste being collected by organisations other than local authorities. The Partner Authorities have assumed in the modelling that cans and bottles recycled through the DRS will still count towards local recycling rates. The Partner Authorities will monitor and engage with the forthcoming Government consultations to fully understand potential implications and will place the targets in the context of the new policy environment when it becomes clearer.

4.3.2 Aspirations for Future Performance

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²⁸https://eastlondonwaste.gov.uk/jointstrategy

The modelling has revealed that a minimum **joint** recycling performance of 35% of Local Authority Collected Waste (LACW) by 2030 is realistic, given the above challenges. This assumes that current performance levels will reduce by as much as 5% in the intervening years because of the proposed change to how local recycling rates are calculated (as explained in 4.3).

The Partner Authorities aspire to jointly achieve considerably more than 35% recycling and composting of Local Authority Collected Waste, in order to help London meet the strategic ambition of 50% set in the London Environment Strategy.

Achieving higher levels of recycling will require everyone to play their part, reducing and reusing their waste as much as possible, separating items for recycling whenever and wherever they can while also being careful to correctly dispose of non-recyclable items. The Partner Authorities will work with local residents, businesses and other stakeholders to continuously educate on and promote recycling, and will focus particular efforts on reducing contamination and improving recycling performance in blocks of flats. The opportunities to increase local recycling rates through cost-effective recovery of more material from the residual waste will also be explored as part of a procurement plan, which is covered in the next section.

The Partner Authorities will work together as emerging national policy on resources and waste continues to evolve, in order to understand how best to provide services and maximise opportunities to further improve local recycling performance.

The individual borough contributions that make up the joint performance aspirations are set out in the table below.

Table 1: Borough Contributions to the Joint LACW Minimum Recycling Performance and Borough /LES Aspirations for 2030²⁹³⁰

Borough	2030 LACW Minimum Performance	Borough / LES Aspiration
Barking & Dagenham	35%	50%
Havering	45%	50%
Newham	28%	50%
Redbridge	35%	50%
Joint Performance	35%	50%

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²⁹ Note: Recycling contributions from RRCs and residual treatment processes managed by ELWA are apportioned to individual Boroughs and form part of these performance figures

³⁰ The differences in performance contribution between the Partner Authorities relates to the factors that can challenge recycling performance, outlined in Chapter 2, such as proportion of flats and gardens.

4.3.3 Contribution to National and Regional Targets

The joint minimum performance and local aspirations proposed would allow the Partner Authorities to contribute to the targets set out in the Resources and Waste Strategy:

- 50% of household waste recycled or composted by 2025
- 65% of municipal waste (which includes waste from businesses that is similar to household waste, comprising materials like food, paper, plastic etc.) recycled or composted by 2035

A contribution would also be made to the targets the Mayor of London has set in the London Environment Strategy (which was completed shortly before the RWS was published):

- 50% of local authority waste recycled or composted by 2025
- 65% of municipal waste recycled or composted by 2030

The targets outlined within the RWS and LES are high, and it is acknowledged that nationally and across London there are many authorities with lower numbers of flats and greater levels of garden waste that will achieve and exceed the targets. The Partner Authorities have set a realistic joint minimum performance based on the local circumstances and future challenges that were explained earlier in this Joint Strategy, but will continue to work together and with the wider community to identify ways to increase recycling further and meet local aspirations for higher performance.

The following table sets out the Partner Authorities' priorities and actions on recycling:

The Partner Authorities' recycling priorities:

- We aspire to reach 50% recycling, and will work with local communities in this regard
- We aim to achieve a minimum joint reuse, recycling and composting performance of 35% of LACW by 2030
- We will work together to offer the Mayor's minimum level of household recycling service provision, providing residents with straightforward and easy-to-use recycling collection services
- We will improve the quality of recycling collected and reduce contamination
- We will improve recycling performance in houses and blocks of flats
- We will work alongside new policy commitments including DRS and the EPR regime for household packaging to maximise opportunities for increasing recycling

More specifically we will:

- Introduce separate food waste collections for street level properties and blocks of flats, in line with anticipated regulations and Government guidance
- Expand household collection services to allow residents to recycle a wider range of packaging and containers where relevant markets exist
- Continue to investigate opportunities to recycle even more materials, through collection services, public recycling facilities and the Reuse and Recycling Centres

- Work with In-house commercial waste services and private waste companies to ensure that businesses in East London are able to access cost-effective recycling services
- · Work with our residents and businesses to increase awareness of recycling
- Provide feedback to residents and businesses on contamination, and highlight the need for material quality
- Identify opportunities to use the ReLondon 'Making Recycling Work for People in Flats toolkit³¹ or other suitable approaches to improve recycling performance in blocks of flats
- Work with the Government, other local authorities, producers and key stakeholders to develop better approaches to the planning and design of new developments to ensure residents are able to recycle easily
- Work together to identify opportunities to extract more recyclable material from bulky waste, street cleansing waste and fly tipped materials
- Explore opportunities to increase recycling through recovery of materials from other waste streams
- Support London Recycles messaging and campaigning to ensure that a consistent reduce, reuse, recycle message is delivered across London
- Work with the Government, other local authorities, producers and key stakeholders to promote standards of product design that enhance opportunities for cost-effective recycling

Objectives: These priorities meet the following objectives of this Joint Strategy: O2, O3, O4, O5, O6

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³¹ Report - Making recycling work for people in flats | ReLondon

4.4 Supporting Improvements with Infrastructure

4.4.1 Why Do We Need New Infrastructure?

The end of the long-term integrated waste contract in 2027 will mean that ELWA needs to make new arrangements to manage the waste and recycling collected by the Partner Authorities. This is a process that can take several years to plan because of the large investments that may be needed in new infrastructure.

The end of this contract also provides an opportunity for improvements to be made to reuse and recycling services for households and businesses. It can take time to plan these types of improvements, particularly where investment in new contracts or vehicles are required, and there will be differing infrastructure needs to support these arrangements.

It is important for ELWA and the Constituent Councils to work together on planning future arrangements for managing resources and waste, so that the right types and sizes of waste and recycling treatment are available, and the best whole system solution is obtained.

4.4.2 What Are the Priorities for the Partner Authorities?

Due to the uncertainties around the detail of future policy and the capacity available for different types of infrastructure in 2027, it is not appropriate or possible to set out a prescribed solution for the reuse, recycling and waste treatment/disposal of waste handled by ELWA beyond 2027 at this stage.

ELWA will develop a procurement plan to support the delivery of future waste treatment capacity from 2027 onwards, and will work with the Constituent Councils to understand their infrastructure needs as they make plans for any future changes to waste and recycling collection services.

The following table sets out the Partner Authorities' priorities and actions for supporting local performance improvements with infrastructure:

The Partner Authorities' infrastructure priorities:

- · We will contribute to national and regional targets on reducing waste sent to landfill
- We will secure access to waste treatment capacity in ways that support the Partner Authorities' priorities around reuse, repair and recycling
- We will establish resilient, responsive and flexible arrangements for future waste treatment, so
 that the Partner Authorities can continue to improve local services while remaining responsive to
 changes in global material markets and international policy
- We will seek to procure waste treatment services that provide local economic, environmental and social benefits
- We aim to support the Mayor's target of managing the equivalent of 100% of London's waste within the capital

More specifically we will:

- Maximise the use of, and value from, ELWA's existing waste treatment contract
- Develop a procurement plan for future waste treatment capacity, to support the aims and objectives of this Joint Strategy. A Strategic Environmental Assessment screening will form part of the procurement plan process
- Ensure effective and responsible future commissioning, considering issues such as flexibility, resilience, value for money, service quality, social value, and environmental impacts including greenhouse gas emissions
- Ensure that any future contracts commissioned will not impede the Partner Authorities' ability to improve recycling in line with aspirations to reach 50%
- Investigate options for supporting the development of appropriate new local infrastructure for reuse, repair and remanufacture, which provide opportunities for local regeneration
- Work with the Greater London Authority to deliver future infrastructure and waste treatment
 capacity solutions that align with the policies set out in the London Environment Strategy, and
 ensure compliance with the Mayor of London's Carbon Intensity Floor requirements³² for any
 technology solutions considered that may include energy recovery (note: technologies will be
 considered as part of a procurement plan)
- Work with the Government, other local authorities and key stakeholders to encourage the development of local materials reprocessing capacity

Objectives: These priorities meet the following objectives of this Joint Strategy: O1, O3, O4, O5, O7

³² London Environment Strategy - Policy 7.3.2.b

5 How Do We Get There?

The Joint Strategy has so far set out a number of priorities and actions for improving performance on waste reduction, reuse and recycling, as well as delivering future waste treatment capacity. This chapter will focus on how the Partner Authorities will work together to achieve, and improve on, the targets and aspirations set out in the previous chapter.

5.1 Partnership Working and Progress Reporting

This Joint Strategy has been developed by the Partner Authorities. The continuation of joint working will be important in successfully delivering the aims and objectives the Partner Authorities have set out (Section 1.4), and the Partner Authorities will need to work collectively to monitor progress against these goals. Appropriate governance arrangements will be developed to do this, which could include a Joint Strategy board or formal committee, which is likely to undertake activities including:

- allowing the Partner Authorities to share information on local proposals for improving services;
- identifying opportunities for residents and other stakeholders to provide feedback on progress;
- tracking the development of the ELWA procurement plan;
- continuing to engage with the GLA and other key stakeholders on future procurement and other key plans; and
- discussing further changes to national or regional policy that may influence the management of resources and waste in the Partner Authorities' area including those linked to carbon emissions.

New partnerships will also be important to helping to improve performance on waste reduction, reuse and recycling. Where appropriate, formal arrangements will be set up with other key organisations, such as local charities providing reuse services. More informal partnership working will be developed with national, regional and local organisations that have common goals to reduce waste, increase reuse and repair, and improve recycling. These organisations could include other local authorities or organisations representing local government.

5.2 Delivering Improvement

The Partner Authorities have committed to improving performance on waste reduction, reuse and recycling, and have set a joint minimum performance of 35% reuse, recycling and composting of their collected wastes by 2030 with aspirations to contribute as much as possible towards the London-wide ambition of 50%.

The modelling that has been carried out to support the development of this Joint Strategy has provided the basis for setting performance aspirations through consideration of standard service models, and some anticipated service improvements have been highlighted. As discussed in section 4.3 the aspirations also take into consideration predicted changes to the way that recycling rates will be reported in the future which would mean a reduction in the current recycling rate.

Under the Government's Consistency proposals, all of the Partner Authorities will need to conduct assessments on the delivery of the required services and, and the degree to which materials should be collected separately from each other for recycling. This will require close coordination between the Constituent Councils and ELWA to ensure that the waste handling and treatment solutions driven by the collection services are deliverable in the context of the Partner Authorities' area. These review points will also provide an opportunity to ensure services are cost-effective, meet local needs, and are able to take full advantage of the opportunities that new national policies may bring.

The nature of the current long term waste treatment contract means that it may not be costeffective for the Partner Authorities to make significant improvements to services before 2027.
However, the Partner Authorities also recognise the importance of increasing local recycling
rates as soon as possible and complying with emerging policy from the Resources and Waste
Strategy, so will undertake analysis to determine the best times to make any changes that are
planned during the transition process to new waste treatment arrangements. Service
improvements will be set out in the Constituent Councils' Reduction and Recycling Plans.
Work will also be undertaken to determine the most effective methods for equitably distributing
the costs of future waste and recycling treatment services, in order to reduce barriers to
improved performance and align with new policy and funding regimes such as those being
developed by Government under the national Resources and Wastes Strategy.

5.3 Responding to Change

The Partner Authorities have identified a number of national and regional policies and initiatives that could affect how resources and waste are managed in the future, and have included estimated impacts within the forecasting and modelling work that underpins this Joint Strategy. This includes some of the proposals within the national Resources and Waste Strategy, for which experience and benchmarking from other European countries has been used to estimate what impact there could be in East London.

At the time of writing this Joint Strategy, the Covid-19 pandemic is causing significant change and disruption across the world. The immediate impacts of this pandemic on resources and waste management in the Partner Authorities' area are well understood, but there could be longer-term effects that cannot yet be predicted.

Over the period of the Joint Strategy there are also likely to be other issues that arise which may mean that there are changes to how resources and waste are managed. The extensive forecasting work that has been undertaken to support the development of this document has attempted to identify a large number of these, including housing growth, climate change and innovations in product design, with research being used to develop predictions about what effect they may have. However, there may be other issues that arise which have not been foreseen, particularly in the longer term. As mentioned previously, effective future commissioning will consider issues such as flexibility and resilience as well as value for money, service quality, social value, and environmental impacts including carbon emissions

The Partner Authorities will work together to review evolving national policy, so that the implications for local services and performance can be fully understood at the earliest opportunity. The Partner Authorities will also continue to work closely with one another to

understand how other issues are developing that may mean there needs to be fresh consideration of how resources and waste management could change in the future and the role that the Partner Authorities could play in mobilising a green economic recovery.

5.4 Reviewing the Joint Strategy

This Joint Strategy covers a 30-year period from the end of ELWA's current waste treatment contract in 2027.

Such a long-term strategy will require reviewing and updating to reflect how East London is changing, waste and recycling services are developing, performance is improving, and national and regional policy is evolving (including the London Environment Strategy, which has its own review periods³³).

The Partner Authorities will commit to undertake a high-level review of this Joint Strategy to ensure the targets, priorities and aspirations are appropriate once new national policy has been implemented, and once future waste and recycling collection and treatment arrangements are better understood. The Partner Authorities will launch this review at the appropriate time, and will commit to this taking place by 2028. Reviews thereafter will be conducted at intervals of not more than 10 years, to ensure the Joint Strategy continues to drive improvement and enable the Partner Authorities to respond to evolving innovations and policies on resources and waste management.

³³ LES Implementation Plan

6 Measuring Success

This Joint Strategy sets out the principles for a long-term approach to managing waste and resources. The Partner Authorities will carry out regular reviews and updates to make sure the approach continues to be relevant, appropriate and effective. This will include monitoring the contribution to all of the Mayor of London's targets in any future update of the London Environment Strategy.

In order to know whether the aims and objectives of the Joint Strategy are being met, it is important to establish, monitor and report on appropriate measures.

6.1 Current Performance Indicators

The key measures which are currently reported by the Partner Authorities to the GLA and the UK Government currently include:

- Total tonnage of residual (non-recycled) waste per household (NI 191)
- Percentage of household waste sent for reuse, recycling or composting (NI 192)
- Percentage of waste sent to landfill (NI 193)

6.2 Proposed Performance Indicators

This section identifies the performance indicators that the Partner Authorities will use to monitor progress against the aims and objectives of the Joint Strategy.

6.2.1 Weight-Based Targets

Residual waste per household (kilograms/household/year) (NI 191) and per head (kilogram/head/year)

These will be core performance indicators for the Partner Authorities. They measure the amount of residual household waste that residents dispose of, either through their regular collection from home, at the Reuse and Recycling Centres, or through street litter bins. Positive performance is indicated by the figures reducing against the indicators, and this can be achieved not only by recycling, but also through reducing overall waste generation and diverting more unwanted or broken items for reuse or repair.

Evolving national policies may result in less recyclable waste being presented to local authorities to manage, with it instead being returned to producers through take-back schemes or a national Deposit Return Scheme. This would be a positive development, but it could be detrimental to the recycling performance that local authorities are able to report. However, the positive impacts of these types of scheme would still be captured through monitoring of these indicators, as the amount of residual waste that residents produce would be likely to reduce.

These measures will allow monitoring against the following objectives of this Joint Strategy:

01, 02, 04, 05, 06

LACW reused, recycled or composted (%)

This is an expansion of the existing NI 192 measure of reuse, recycling and composting performance, which takes into account all Local Authority Collected Waste (LACW). This includes household waste, as well as the commercial waste that local authorities collect from local businesses that choose to use the council's service. Use of this measure is in line with the London Environment Strategy, which has set reuse, recycling and composting targets for LACW, and this Joint Strategy has set a joint minimum performance against the LACW measure of 35% by 2030 with aspirations to reach 50%.

This measure will allow monitoring against the following objectives of this Joint Strategy:

01, 02, 04, 05, 06

Percentage of waste sent to landfill (NI 193)

This indicator will monitor how well the Joint Strategy is delivering against national and regional targets on reducing the use of landfill. Disposing of waste in landfill does not allow either the material or energy content to be recovered, so is considered to be the least desirable method of disposal.

This measure will allow monitoring against the following objectives of this Joint Strategy:

O3, O4, O5

In addition, the Partner Authorities will continue to report against the existing household waste-based reuse, recycling and composting indicator (NI 192), until such a time as it is reviewed by the Government. This indicator is no longer statutory, but continues to be used by local authorities for consistency and performance monitoring and so is useful for benchmarking.

6.2.2 Greenhouse Gas Emissions

The consumption of goods and services, and the management of the resources and waste that arise from these activities, results in greenhouse gas emissions. These emissions can vary significantly according to how the waste materials are being managed, and it is important to consider the "whole system" of collections and treatment when comparing different approaches to resources and waste management.

It is common for the measurement of different greenhouse gas emissions to be standardised into 'carbon equivalent' emissions. This reflects that the various greenhouse gases (such as carbon dioxide and methane) have different impacts when released into the atmosphere, and allows for easier comparisons of the many types of activity that produce greenhouse gas emissions.

Carbon emissions will need to be monitored to help the Partner Authorities understand how the Joint Strategy is delivering against local, regional and national ambitions on reducing environmental impact and achieving 'net zero' carbon emissions.

At the time of writing this Joint Strategy, the Constituent Councils are developing local approaches for measuring, monitoring and reducing carbon emissions. The Partner Authorities will work together to develop suitable measuring and monitoring frameworks for

the Joint Strategy, so that the impacts of resources and waste management can be appropriately reported at a local level.

At a regional level, the GLA's Emissions Performance Standard will be used to monitor performance and model the impacts of proposed new services, and new waste treatment solutions will be assessed against the Carbon Intensity Floor³⁴ where applicable. The Partner Authorities will also feed into national reporting regimes as they are developed.

These approaches to monitoring greenhouse gas emissions associated with the management of East London's resources and waste will allow monitoring against the following objectives of this Joint Strategy:

O4, O5

6.2.3 Air Quality

Air quality is a top priority in many urban areas, including East London, and developing approaches to reducing pollution and improving the quality of the air we breathe requires a good understanding of the sources of pollution.

The collection and treatment of resources and waste needs to be considered as part of improving air quality. The Partner Authorities will work together to develop effective reduction, abatement, measuring and monitoring approaches for pollution emissions associated with local resources and waste management, feeding into regional work being taken forward to deliver on the air quality policies within the London Environment Strategy.

These approaches to monitoring air quality impacts associated with the management of East London's resources and waste will allow monitoring against the following objectives of this Joint Strategy:

O4, O5

6.2.4 Social Value

Increasingly, organisations are considering their activities holistically, taking account of the wider economic, social and environmental effects of their actions. Social Value serves as an umbrella term for these broader effects, and organisations which make a conscious effort to ensure that these effects are positive can be seen as adding social value by contributing to the long-term wellbeing and resilience of individuals, communities and society in general³⁵. Local Authorities can take social value into account through their policy and spending decisions to maximise the benefit for the communities they serve.

There are established tools for understanding the social value that different services or contracts can bring, which can then be used to monitor the delivery of the anticipated social benefits. One example is the Social Value Portal, which a number of local authorities are now using as part of their procurement and contract management processes. The Partner Authorities will explore the options available for monitoring and reporting on social value, so

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³⁴ London Environment Strategy - Policy 7.3.2.b

³⁵ What is Social Value? - Social Value Portal

that opportunities to enhance local communities through this Joint Strategy and the development of future services are fully realised.

Monitoring the social value of local resources and waste management services will allow monitoring against the following objectives of this Joint Strategy:

04, 05, 06, 07

6.3 New Performance Measures

In 2019 the Government consulted on proposals contained within the Resources and Waste Strategy to reduce waste, increase recycling and improve the quality of the recycling collected. As part of further consultations due to be released in 2021, the government is seeking views on introducing new national Key Performance Indicators and developing alternative methods for measuring performance on resources and waste management. Waste-related performance has traditionally been measured by weight, but the limitations of this approach are becoming clearer as it can result in a focus on collecting heavier recyclable materials (such as garden waste) rather than those which may offer the best overall environmental benefits through being recycled.

The Government has recognised that other methods of measuring waste and recycling performance are needed, such as looking at the impact on climate change.

As mentioned in Chapter 3.2.1, the Government is increasingly using a natural capital approach when developing and implementing policy. The importance of nature has also been emphasised in the recent publication, The Economics of Biodiversity: The Dasgupta Review³⁶, which highlights the need to change how we think, act and measure success. It states that 'introducing natural capital into national accounting systems would be a critical step towards making inclusive wealth our measure of progress'. It is likely that over the life of the Joint Strategy new metrics will be introduced that place an emphasis on the value of nature including valuing our natural resources.

The Partner Authorities will continue to monitor the evolution of these proposals in addition to wider environmental proposals, and will adapt their monitoring and reporting approaches accordingly.

Developing new environmental performance measures in line with evolving national and regional policy will allow monitoring against the following objectives of this Joint Strategy:

04, 05

6.4 New Funding Regimes

The Partner Authorities will review the way in which ELWA's costs are apportioned between the Constituent Councils so that, the Constituent Councils' pay equitably for the services they use. The most appropriate time to implement any changes is expected to be when successor services to ELWA's current long-term contract are put in place.

Such new financial arrangements will have to take account of new national regimes to be

³⁶ Final Report - The Economics of Biodiversity: The Dasgupta Review - GOV.UK (www.gov.uk)

introduced under the Resources and Waste Strategy, once these have become clear. Similarly, any further new national regimes introduced during the term of this Joint Strategy may require a further review to ensure there continues to be an equitable distribution of costs.

The Partner Authorities should then all have both an environmental and a financial business case to improve services and reduce environmental impacts as much as possible.

Developing new financial arrangements locally will allow monitoring against the following objectives of this Joint Strategy

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Glossary

Term	Definition
Biodegradable Waste	Biodegradable waste is any product that can be easily broken down naturally by water, oxygen, the sun's rays, radiation, or microorganisms. It includes most food and green garden waste, and can include some paper and card.
Carbon Dioxide (CO2)	Principal greenhouse gas related to climate change.
Carbon Dioxide- Equivalent (CO2e)	The universal unit of measurement used to indicate the global warming potential (GWP) of greenhouse gases. It is used to evaluate the impacts of releasing (or avoiding the release of) different greenhouse gases. For example, the GWP of methane is 21 times that of CO2, which has a GWP of 1. Sulphur hexafluoride has a GWP of 23,900. A CO2-equivalent figure is used to represent the warming impact of greenhouse gases.
Carbon Footprint	Total greenhouse gas emissions resulting from an activity or group of activities, including embodied carbon.
Carbon Intensity Floor	The CO2e emissions performance level set for electricity generated from London's municipal waste to achieve. The carbon intensity floor has been set at the level whereby any electricity generated from London's municipal waste is to be no more polluting in carbon terms than the electricity source it replaces. The carbon intensity floor sits within the Emissions Performance Standard that has been set for London's activities associated with the collection, treatment and final disposal of London's municipal waste to achieve.
Circular Economy	An economic model in which resources are kept in use at the highest level possible for as long as possible in order to maximise value and reduce waste, moving away from the traditional linear economic model of 'make, use, dispose'.
Climate Change	A large scale, long-term shift in the planet's weather patterns or average temperatures. Characterised by higher temperatures, sea level rise, changing rainfall, and more frequent and severe extreme weather.
Commercially Collected Waste	Waste from businesses in the possession or control of a body or organisation that is not a waste authority
Composition Analysis	An analysis of the different items present within waste. This can include the types and weight of items and materials.

Term	Definition
GLA	The Greater London Authority is the administrative body for Greater London. It comprises a directly elected Mayor and directly elected London Assembly.
Greenhouse Gas (GHG)	Any gas that induces the greenhouse effect, trapping heat within the atmosphere that would normally be lost to space, resulting in an increase in average atmospheric temperatures, contributing to climate change. Examples include carbon dioxide, methane and nitrous oxides.
Household Waste	All waste collected by Waste Collection Authorities under section 45(1) of the Environmental Protection Act 1990, plus all waste arisings from Civic Amenity sites and waste collected by third parties for which collection or disposal credits are paid under Section 52 of the Environmental Protection Act 1990. Household waste includes waste from collection rounds of domestic properties (including separate rounds for the collection of recyclables), schools, public buildings, street cleansing and litter collection, beach cleansing, bulky household waste collections, hazardous household waste collections, household clinical waste collections, garden waste collections, Civic Amenity/Reuse and Recycling Centre wastes, drop-off/'bring' systems, clearance of flytipped wastes, weekend skip services and any other household waste collected by the waste authorities. Household waste accounts for approximately four fifths of London's municipal waste.
Local Authority Collected Waste (LACW)	All waste in the possession or control of waste authorities. This includes waste collected from households and businesses.
Municipal Waste	Household waste or business waste that is similar in composition irrespective of who collects or disposes of it.
Natural Capital	London's natural capital is the set of environmental resources (open land, air, water, wildlife) that provides services - such as flood protection or cleaner air. Natural capital benefits the wellbeing of Londoners and the city's economy. Alongside other forms of capital - such as human knowledge and skills, manufactured goods, buildings and products - natural capital is a valuable asset that must be managed sustainably to secure and improve these benefits.
Net Zero	'Net zero' refers to achieving an overall balance between emissions produced and emissions taken out of the atmosphere.
Polluter Pays Principle	The 'polluter pays' principle is the commonly accepted practice that those who produce pollution should bear the costs of managing it to prevent damage to human health or the environment.

Term	Definition
Recycling	Waste Framework Directive: 'any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations'
Responsible Procurement	Socially, environmentally and economically sustainable procurement to deliver an improved quality of life and better value for money. It involves working across London to provide sustained employment opportunities and improve working conditions. It means opening up access to contract opportunities for London's diverse businesses, and voluntary and community sector organisations, encouraging improved practices with suppliers and promoting greater environmental sustainability to make London a better place to live and work.
Residual Waste	Waste that is left once recyclable waste or reusable items have been separated.
Reuse	Waste Framework Directive: 'any operation by which products or components that are not waste are used again for the same purpose for which they were conceived' The processes contribute to sustainable development and can save raw materials, energy and transport costs.
Social Value	Increasingly, organisations are considering their activities holistically, taking account of the wider economic, social and environmental effects of their actions.
	Social Value serves as an umbrella term for these broader effects, and organisations which make a conscious effort to ensure that these effects are positive can be seen as adding social value by contributing to the long-term wellbeing and resilience of individuals, communities and society in general.
	The United Nations Sustainable Development Goals are, in effect, a social value charter for the planet.
	Public sector bodies can take social value into account through their policy and spending decisions to maximise the benefit for the communities they serve. Businesses can make decisions both about what they do and how they do it in ways that add social value.
Waste	Any substance or object which the holder discards, intends to discard or is required to discard.

Term	Definition
Waste Authority	A Waste Collection Authority and a Waste Disposal Authority. It includes London's 33 waste collection authorities (all 32 boroughs and the City of London), those 12 authorities that are "unitary" waste authorities (combined collection and disposal) and the 4 statutory waste disposal authorities.
Waste Collection Authority	The authority responsible for arranging the collection of household waste in their area (in London this is on a borough-wide basis) and commercial or industrial waste on request.
Waste Disposal Authority	The authority responsible for arranging for the disposal of waste collected in their area by the Waste Collection Authority. They also provide sites where householders can deposit waste free of charge (Reuse and Recycling Centres).
Waste Prevention	Waste Framework Directive: 'measures taken before a substance, material or product has become waste, that reduce: (a) the quantity of waste, including through the re-use of products or the extension of the life span of products; (b) the adverse impacts of the generated waste on the environment and human health; (c) the content of harmful substances in materials and products.