

APPENDIX 1

MRWA Zero Waste Strategy

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Foreword

Climate change is the greatest challenge of our age and the connections between our actions at home and the changing world around us are becoming ever clearer. Facing up to this challenge brings responsibility and opportunity. Merseyside Recycling and Waste Authority (MRWA) recognises that the global waste of material resources is a major contributor to climate change. By working with our partners, we can play our part in tackling this cause of global warming.

As the Chairperson of MRWA I am pleased to share our first Zero Waste Strategy. The Strategy shows how we can cut waste and carbon emissions to benefit our people, planet, and economy.

Working together with our residents and stakeholders we can collectively rethink our use of resources and move towards a low carbon circular economy. If we can do this, we will support achievement of the joint Liverpool City Region zero waste and net zero carbon goals.

The MRWA Zero Waste Strategy is bold and must be. We hope it inspires action and encourages many more to join the zero waste journey. It is time to begin.

Councillor Catie Page
MRWA Chairperson

Lesley Worswick
MRWA Chief Executive

Introduction

The overarching goal of our strategy is to detail how Merseyside Recycling and Waste Authority (MRWA) will lead the Liverpool City Region (LCR) in achieving the aims of sustainable waste management, zero waste and net zero carbon by 2040. The aim of the strategy is to create a local circular economy that supports sustainable resource efficiency, social inclusivity and equity that contributes to a prosperous city region. Effective, efficient, and economical resource management that reduces carbon emissions and retains the inherent value of discarded products is paramount to achieving our strategic outcomes, whilst contributing towards the United Nations Sustainable Development Goals (SDGs).

MRWA is the statutory Joint Waste Disposal Authority (JWDA) for Merseyside. Our legal duties include managing and treating household waste collected by the LCR Councils, provision of Household Waste Recycling Centres and aftercare of several closed landfill sites in the region. We also have a duty to consider the waste hierarchy, which means preventing, reusing or recycling waste where we can to reduce the amount of waste requiring treatment. In 2023/24 1.59 million residents¹ living in 738,130 households², generated 709,590 tonnes of waste³. 35% of this

¹ WasteDataFlow

² WasteDataFlow

³ WasteDataFlow

In 2019, the Authority declared a climate emergency and developed a Climate Action Plan (CAP). Progress has been made in areas such as a carbon emissions baseline study and the development of a tool to measure carbon emissions on an annual basis. The CAP was updated in 2022 to reflect our objectives moving forward and is now included in this strategy as a key strategic outcome.

In the wider context of the LCR, we aim to drive local effective and efficient material resource management. We have a crucial role to play in preventing and reducing resource loss, increasing resource reuse, recycling and by association, avoiding carbon emissions. In the last 20 years, recycling performance has increased, and landfill is much reduced. However, the next 15 years are critical if the region is meet its targets of zero waste and net zero carbon by 2040.

Our approach to zero waste is driven and supported by external policies and legislation. Across the LCR, authorities have set goals of achieving net zero carbon by at least 2040, supported by climate and economic development plans which reflect a people, planet, and economy approach. Nationally, the Environment Act 2021 and 'Our Waste, our resources: A strategy for England (2018)' encourage waste minimisation and reduced residual waste through a stronger focus on resource efficiency, waste prevention, reuse, the expansion of recycling services and growth of a low carbon circular economy. These themes will be strengthened by an English Circular Economy Strategy and implementation of extending producer responsibility and deposit return schemes. Internationally, the United Nations (UN) continues to coordinate and promote action to tackle climate change and embed sustainability, e.g. through the UN Convention on Climate Change 1992, and in 2015 the Paris Agreement on limiting global warming and development of the UN Sustainable Development Goals (SDGs). The growing global and public awareness of climate change helps to maintain a national and regional focus on reducing emissions, including through our goal of zero waste.

The Liverpool City Region (LCR) needs to transition towards better circularity of material resources linked to social value and decarbonising resource management. To be successful, the region needs to coordinate household resource management, ensuring that outputs are regularly measured, monitored, and publicised. Fundamentally, we need to change peoples' behaviour and influence their lifestyle choices. To change current wasteful behaviour, effective interventions, communications, and campaigns must be implemented. Overall, this means a system change for people and local authorities and a new way of thinking about waste and resources.

The Liverpool City Region Strategic Waste Partnership has worked together to develop a joint Liverpool City Region Zero Waste Strategy. This strategy outlines the importance of acting now to reduce waste and shift towards a circular economy.

A Liverpool City Region without Waste

We will work together to protect our environment by keeping materials in use for as long as possible, preventing avoidable waste, and encouraging reuse, repair, recycling and composting. We will educate and engage and deliver waste management practices that provide value for money for our communities.

LCR Joint Zero Waste Strategy targets

Reducing the total amount of our rubbish by 2040

- Reducing the total amount of rubbish handled by the Partnership by a third over by 2040
- Reducing our black bag rubbish by 50% of 2019 levels by 2040 – a maximum of 155kg/person
- Recycling 65% of municipal waste by 2035

Sustainable Development Goals

In 2021, we completed a sustainability baseline, to support the United Nations Sustainable Development Goals (SDGs). As a single function authority that manages and treats discarded and unwanted household products, we have identified 5 key UN goals that were specifically relevant to what we do in terms of our impact and effect;

13: Climate Action

12: Responsible consumption and production

11: Sustainable cities and communities

4: Quality Education

3: Good health and Wellbeing

Key Themes (include sustainability graphic)

The three key themes echo the three pillars of sustainability and link to the themes identified in the LCR zero waste strategy approach. A shift towards a more circular economy can play a significant part in meeting climate targets, and achieving a fairer, stronger, cleaner City Region where no-one is left behind.

People

The wellbeing of the region's residents is central to our commitment to meet zero waste and net zero carbon goals. We want to create a place where our use of resources creates social value and thriving communities. The Strategy will drive the direction of MRWA and ensure we deliver against our strategic priorities.

Planet

Using resources wisely and reducing waste are critical to achieving net zero goals and sustaining our planet. We want to transition to a zero waste region where a healthy and diverse environment enriches people lives and strengthens the economy. The Strategy will lead the development of new and improved services required to meet our goals.

Economy

Transitioning to a circular region will create a wealth of green jobs and skills and open up new opportunities for sustainable businesses to design out waste. We want enterprises and communities to prosper through rethinking the role of resources. The Strategy will deliver cost effective and efficient MRWA services to maximise the benefit of the money we spend on behalf of the City Region.

Strategic Outcomes

The themes of people, planet and economy are interlinked and generate multiple outcomes. We have identified the following strategic outcomes for this strategy.

Themes	Strategic Outcomes
People	Governance Social value
Planet	Climate and carbon Resource efficiency
Economy	Cost efficiency Circular economy Green jobs and skills

What is Zero Waste?

The Zero Waste Strategy is MRWA’s contribution to achieving zero avoidable waste across the Liverpool City Region (LCR) by 2040. Zero avoidable waste (or ‘zero waste’ for short) means reducing the amount of waste we produce by as much as we can. Waste includes residual waste materials which could have easily been prevented, reused, or recycled. Zero waste is important because products and waste creates carbon emissions and contributes to climate change.

45% of carbon emissions are associated with the production of goods and materials including food, steel, cement, plastic, and aluminium (Completing the Picture, Ellen MacArthur Foundation 2019).

By working with residents to reduce the waste of material resources, MRWA can cut carbon emissions and support the city region to achieve its net zero carbon by 2040 goal.

LCR joint Zero Waste Strategy

What is Zero Waste?

Zero waste is preventing as much rubbish as possible.

We know that some waste is unavoidable, no matter how hard we may try to prevent it by reusing and repairing things, so we will always be collecting some rubbish for recycling or disposal.

Our aim is to make it easier to prevent waste, and repair and reuse items, then recycle, so our bins have much less in them in future. This is known as the 'circular economy' approach to managing our valuable resources and one aim is to keep our resources (items) in circulation for as long as possible so that their value is retained.

What does a zero waste household look like?

Over time, more services will be available to households where items can be repaired, pre-loved items can be bought or rented. The products in the shops will be designed for repair and recycling, so that very little ends up in your rubbish bin. Everyday consumables like coffee, laundry powder, cereals will be sold from zero waste shops into refillable containers, avoiding the need for packaging. Together, a future household will receive all the goods and services it needs, but using fewer raw materials than today, which means less damaging climate change emissions from extracting and making new materials, and less environmental harm from needing to throw lots of rubbish away.

Waste levels are too high, but there are steps we can all take to achieve zero waste through a circular economy. We can prevent waste by rethinking how we design, make, and use products. We can consume less and reuse more to increase the value we get from the products people make, whilst more recycling for households and businesses will provide the materials for tomorrow.

MRWA has a leading role to play in delivering this zero waste vision. We will engage our residents, partners, and stakeholders to support, educate and encourage behaviour change towards less wasteful ways. We will work to adapt our services and infrastructure and align with the Environment Act 2021 towards greater reuse and increased recycling, so less material requires treatment or disposal. We will recognise and improve the social impact of our services and spending and contribute to the achievement of our prioritised UN SDGs. Our zero waste actions will cut carbon emissions and create community wellbeing and prosperity, and we will see this in the reduced amounts of waste we have to manage.

Reaching zero waste means new ways of thinking and doing at home, at work and at school or college. Working together we can achieve our zero waste and climate goals. We hope our MRWA Zero Waste Strategy and vision provides ideas and inspiration for others to follow and encourages everyone to take the steps they can.

What are the key waste policies?

2025 - Extended Producer Responsibility for packaging

Producers to design more sustainable and recyclable products to increase the amount of household packaging waste recycled

2027 – Deposit Return Scheme

Single use drinks containers to have a returnable deposit on them, redeemed at stores or through “reverse vending machines”, designed to reduce littering and increase recycling

2028 – UK Emissions Trading Scheme

Increases the cost of emitting carbon from Energy from Waste facilities to encourage more reuse and recycling of materials like plastics and textiles.

2035 – target: max. 10% municipal waste to landfill

2035 – target: 65% municipal waste recycled

2042 – target: reduce residual waste (black bag rubbish) by 50% compared with 2019

‘Simpler Recycling’ in waste collections:

31 March 2025 Businesses / non household municipal premises – to have recycling collections for cartons, plastics, glass, paper, card, cans, aluminium foil / trays, food waste (micro-firms exempted until 31.03.27)

31 March 2026 Households - to have recycling collections for cartons, plastics, glass, paper, card, cans, aluminium foil / trays, garden and weekly food waste

31 March 2027 Businesses & Households - to collect plastic film for recycling

Our Vision of Circular Liverpool City Region (GRAPHIC)

As part of this document, we would like an animated graphic demonstrating our vision of a zero waste circular Liverpool City Region. We will need to discuss this with the designer to get our ideas across. This graphic should run across two pages, we’re imagining a map showing circularity, green spaces, sense of community and the initiatives listed below. This is a visual picture of what we believe the benefits of a circular zero waste City Region could be.

This is summarised below;

- Our vision of a ‘low carbon, zero waste, circular Liverpool City Region is a place where nothing is wasted. It includes;
 - Zero waste education programme
 - Community repair opportunities
 - Community reuse hubs, sharing and lending schemes e.g. tool library, reuse shops
 - Mobile HWRCs
 - Mini HWRCs
 - Increased biodiversity
 - Community growing and composting

Governance

Good governance of our transition towards zero waste 2040 will secure successful outcomes for the Authority and residents of the city region.

This document will set out, lead and inform MRWA's strategic direction towards achieving zero waste.

We will demonstrate good governance in reducing avoidable waste by

- embedding sustainability into the Strategy through the key themes of People, Planet, Economy
- taking responsibility for cutting our carbon emissions
- maximising the reuse and recycling performance of our contracted services,
- embracing innovation in the procurement of new resource and waste management contracts
- measuring our zero waste progress against the UN SDGs and reporting on our performance transparently
- working together with our strategic partners and stakeholders for a zero waste Liverpool City Region and by
- engaging Government and others to ensure external policies adopt zero waste principles and support our zero waste goals

The Strategy takes on board the views of our employees and will be kept under review to respond to change and remain relevant to the key challenges we face. We take responsibility for delivering the Strategy and will be accountable for achieving its actions and updating stakeholders on our progress towards zero waste 2040.

Our priorities for action include

- ensuring this strategy drives the corporate plan, feeds into our service delivery plan and that progress is regularly monitored and reported
- working with partners to identify systems and resources which can strengthen and incentivise joint zero waste working across the LCR.
- Procuring efficient and effective services which deliver our zero waste goals, waste management needs and social value after the conclusion of the Waste Management and Recycling Contract (WMRC).
- building our waste data capture and analysis capabilities to expand our knowledge of the material resources we manage, set targets and focus actions to maximise behaviour change.

- Reporting on our zero waste progress and aligning this with our wider sustainability goals.

Our Strategy will play a key role in delivering the LCR's zero waste vision by demonstrating leadership, promoting joint working and inspiring partners to take action. By ensuring good governance is the foundation for our MRWA Zero Waste Strategy we will play our part in shifting the city region towards a low carbon circular economy capable of achieving our zero waste and net zero carbon 2040 goals.

Next Steps:

- Review the corporate planning process to ensure it is led and guided by this Strategy.
- Work with our partners to coordinate and deliver joint LCR zero waste action.
- Understand our future service needs and prepare to procure them.
- Engage Government and others to ensure external policies support our zero waste and net zero carbon goals.
- Develop our waste data capture and analysis capability.
- Measure our zero waste performance against the UN SDGs

Social Value

When material resources are discarded by residents of the region, their inherent worth has social value. Resources can be returned to communities, families and individuals at affordable prices to be reused again.

MRWA is committed to creating a sustainable, socially inclusive, and just society that supports a circular economy. We actively manage operations and services in ways that seek opportunities to support people, the planet, and the economy. This strategy will embed social value within our contract services, operations, policies and strategies for zero waste and net zero carbon, climate action, sustainability, wellbeing and circular economy.

Social Value is defined as *“the value that people place on the changes they experience in their lives”*. The principles of social value provide the basic building blocks for making decisions.

Our actions and progress will contribute to global development, moving in the right direction and aligning our core strengths with opportunities to gain tangible social, environmental, and economic benefits.

Community Fund

Since 2012 MRWA has delivered a Community Fund, focussed on waste prevention alongside our current contractor Veolia. MRWA contribute £150,000 and Veolia contribute £15,000, we award the total of £165,000 in grants of up to £8,000 for a district project and up to £30,000 for a regional project (delivered equally in four district areas) each year.

In 2023 we re-branded the community fund the MRWA Zero Waste Community Fund, to bring it in line with our commitment to achieve zero waste and with our public facing brand Zero Waste LCR. Over the years we have supported a wide range of organisations to run projects focussed of waste prevention, reuse, repair and behaviour change.

Our ambition is to continue this work, learn from the projects, have an efficient application and evaluation process and increase the amount of funding we distribute to LCR community groups.

To achieve greater impact from each of our procurements, we will ensure that social, economic, and environmental outcomes are embedded into the procurement process. We recognise the importance of the voluntary and third sector in service delivery and are committed to improve services for communities, support the third sector and social enterprises. We also recognise the critical role the Authority plays within the local supply chain and will use this position responsibly. We will use our purchasing activities to stimulate the local economy and encourage circular actions and activities.

Next Steps:

- Develop a Social Value framework including relevant metrics.
- Embed the principles of Social Value into procurement processes and contract services.
- Improve social value understanding and skills across MRWA
- Monitor and measure social value impact in partnership with our stakeholders.
- Demonstrate the social value of our Zero Waste Community Fund.
- Embed community funding into the procurement of our new WMRC.

EDUCATION FOCUS

Education is the foundation for our behaviour change programme and is vital to reaching our target of zero waste by 2040. This means taking our current education

programme to the next level. Rethinking waste and recognising it as a resource will require a shift of perception. Education is the tool in which we can help residents understand the opportunities and benefits of changing how we view waste, and how this contributes to tackling climate change.

Studies show that information delivered academically, culturally and in communities has more benefits and provides long-term changes to behaviours. A recent survey by Teach the Future showed that “only four percent of students feel they know a lot about climate change, with almost seven in 10 respondents saying they would like to learn more about the environment.”⁷ The importance of education and its direct link to encouraging behaviour change is a strategic outcome in our LCR Joint Zero Waste Strategy.

Education provided by our contractors has historically been our main delivery vehicle. While this continues to be successful in building links and engaging with primary schools, after undertaking an education review, we highlighted a gap in the education services we provide to residents outside of this demographic.

We want to ensure we reach a variety of communities across the LCR and offer services suitable for all age groups as the interest in waste prevention is widespread. We receive requests to speak about why zero waste is crucial to our people, planet, and the economy, and on the importance of the circular economy in relation to reaching net zero carbon.

We have begun trialling sessions on the circular economy with secondary students across the Liverpool City Region. By engaging with education experts based in the area, the project generated a large amount of interest from schools. During planning phases educators engaged with the workshop developers to explain what they would like to see in circular economy education sessions. This enabled the project to be tailored to the schools’ needs, as well as leave lasting impacts by providing a practical hands-on experience of how the circular economy works and the benefits it brings to communities.

As our strategies grow and develop, so too must the topics covered by our education programme. While recycling and the journey of waste are still important, we must move further up the waste hierarchy.

Our focus is on supporting the waste hierarchy, and helping residents understand the link between zero waste and net zero carbon.

After identifying the key education priority areas, we have trialled a number of programmes with the plan to continue to improve the projects while expanding them across the LCR. We have engaged with several local education providers and community groups to build resources and lead sessions on topics including the circular economy, composting and circular food systems, zero waste, protecting biodiversity and strategically explaining the link between waste and climate change.

⁷ The Ecologist 05.02.20 [Rethinking environmental education](#)

With a focus to embed these education topics within our practices we can influence residents from a young age to change their perceptions of the importance of not only disposing of items, but the prevention of creating waste in the first place.

By continuing to expand our programme, with a focus on the circular economy, carbon literacy and understanding reuse and repair skills we will ensure that our education programme remains fluid, versatile and contemporary while keeping our residents engaged and changing behaviour.

Behaviour Change

Behaviour change is about altering habits and behaviours for the long term. To reach net zero carbon and zero waste we must bring about behaviour change in the LCR. We must work with residents to change the way we think about and consume resources.

Behaviour change is a methodology, we must first understand how and why people behave the way they do. By using behaviour change models and theory we can implement a range of interventions or nudges to support people in changing their behaviours. There is no one size fits all approach, creativity is essential to influencing impactful change.

One way of addressing the environmental issues we are facing is by implementing a comprehensive zero waste education programme.

Partners

Our waste education programme successfully engages with adults and young people across the LCR. This is predominantly through our contractual partners, Veolia and Suez and focussed on recycling. Historically our contractual education providers have been the main vehicle for our education programme.

The success of our Recycling Discovery Centre at our Materials Recovery Facility (MRF) in Gilmoor demonstrates the value of working closely with our contractors and looking forward we need to expand this into waste prevention, reuse, repair and circular economy.

We recognise the value of engaging with local community groups and specialist education providers, who can build links with our residents across the entirety of the City Region. People within communities understand each other, they understand what issues their neighbourhoods face, and know what interests, skills and experiences are located within their community. Moving forward it's important to ensure we engage with our communities and value their knowledge and experience.

Moving Forward

Education is vital to the future of not only the residents of the city region, but of the city region itself. Without knowledge of how our everyday behaviours can impact climate change, we are unlikely to see the change that we require on a global level.

By building a robust, comprehensive, engaging waste prevention programme, and embedding education within our practices, we can teach residents that taking small steps towards zero waste really can make big changes happen.

As we update and develop our estate and infrastructure in line with legislation changes and our need to embed reuse, we must include education as a key priority. Our Recycling Discovery Centre (RDC) demonstrates the successes and benefits of including education in our contract and we must replicate and expand this with future contracts and the development of new facilities.

Our priorities

Working with and within local communities

Building an accessible and comprehensive waste education programme

Embed circular economy principles in everyday life

Emphasise the connection between waste and climate change

Next steps:

- Develop a comprehensive package of education resources to be available through our Zero Waste LCR website
- Expand our education projects across LCR, ensuring we reach a range of demographics and areas.
- Ensure education is a priority in procuring the WMRC successor
- For future developments of new facilities, sites or buildings evaluate the benefits and options to include an education centre, room or area
- Ensure we consider existing education services and providers when establishing new projects and work with our communities to complement existing services.
- Pilot and evaluate new education projects.
- Raise awareness with residents that waste and carbon emissions are intrinsically linked.

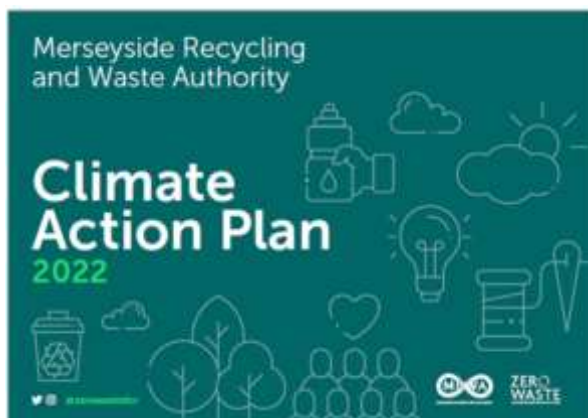
Climate and carbon

To reduce the impacts of climate change, we must reduce the carbon emissions associated with waste and resource use.

The waste that we produce is a huge contributor to global greenhouse gas emissions. Waste management accounted for 6% of UK carbon emissions in 2021⁸. A zero waste lifestyle prevents waste, and it reduces our carbon footprint. Each year, human activities release more carbon dioxide into the atmosphere than natural processes can remove, causing the levels to increase.

⁸ [“The government's resources and waste reforms for England - NAO report 30.06.23”](#)

In 2020 we produced a Climate Action Plan (CAP) and reviewed this in 2022 to drive forward our actions on tackling climate change. The Climate Action plan is now integrated and expanded within this strategy.



MRWA is committed to supporting efforts to limit carbon emissions and global temperature rise, to avoid potential climate related disasters. Sustainable contract services and operations to manage discarded household products and organic waste can significantly contribute to reducing carbon emissions. MRWA has developed a carbon report based on the Greenhouse Gas Protocol to monitor carbon emissions that fall within our remit. We developed a baseline report and will continue to produce these annually. Reducing the waste, we manage will, in turn, reduce the energy we consume when managing resources at our sites and transporting waste to facilities. We can achieve this by aiming for zero waste, increasing the scale of waste prevention and reuse activity alongside increased recycling.

As we develop and adapt our carbon reporting, we will be able to strengthen and refine the pathway towards our net zero carbon goal. The success and expansion of our behaviour change initiatives will be critical in delivering a pathway of ever-decreasing emissions, together with effective implementation of regional and national system changes to reduce single use items, increase reuse, expand recycling, generate renewable energy and capture carbon emissions. Procurement of future waste and resource services will provide key opportunities for reducing carbon emissions from our operational facilities, the energy they use and the vehicles, transport and haulage that supports them. MRWA will develop and maintain a net zero carbon pathway, taking into account our carbon reporting and the opportunities emerging from the behaviour and system changes ahead.

Biodiversity/Local Nature Recovery

Alongside the global climate emergency is an ecological crisis resulting from the loss of biodiversity and natural habitat. Nature is at risk from factors including the impact of rapid climate change and the extraction of finite resources to replace wasted materials. A study by the Natural History Museum identified the UK as one of the most nature depleted countries in the world. Nature, itself, has a role in mitigating climate change through capturing carbon from the atmosphere as plants grow and by locking carbon away into the soil. In response to these threats and opportunities, legislation requires the LCRCA to produce a Local Nature Recovery Strategy (LNRS)

for the LCR and identify sites and opportunities for nature recovery. Legislation also requires new planning developments to increase biodiversity by 10%, an approach known as Biodiversity Net Gain (BNG). MRWA will promote nature recovery at suitable locations, including when we develop new facilities, to protect and expand biodiversity and play our part in limiting climate change.

Next Steps:

- Continue to support our MRWA employee 'Climate Champions' in running organisational initiatives and events to build awareness and reduce carbon emissions.
- Continuously improve our annual carbon reporting.
- Develop a pathway to net zero carbon.
- Add climate implications as a consideration in Authority reports.
- Review risk assessments and ensure climate implications are addressed.
- Raise awareness of the impact of waste on climate change through the behaviour change programme.
- Work with community groups to deliver zero waste climate action.
- Work with partners to embed zero waste in their climate plans and strategies.

Resource Efficiency

Increased resource efficiency will reduce waste and carbon emissions, conserve material resources and maximise their social and economic value.

MRWA aims to reduce avoidable waste through increased behaviour change education and by improving our existing reuse and recycling contract performance. Moving forward, the review and redesign of new services will allow us to achieve our zero waste goal. Resource efficiency sits at the centre of this Strategy and is critical for achieving our net zero carbon and wider people, planet and economy goals. Supporting our residents to reduce residual waste and consume more sustainably is our priority and the best way to sustain carbon emission reductions.



Through our WMRC and RRC contracts we have increasingly managed the materials in our household waste as a resource, less is disposed, and more is

recycled and reused than before. We recognise our progress but also the great zero waste and net zero carbon challenge ahead.

We will:

- Proactively engage our residents and provide them with support, advice and services to reduce the volume of residual waste they produce.
- Develop our services to enable more materials to be reused and recycled through existing contracts and through procurement of new services.
- Adapt our infrastructure to ensure it is fit for the future, avoids carbon emissions and can flexibly and effectively manage changes in the volume and composition of waste and expand the range of resources we can reuse or recycle.
- Enhance our data capture and analysis to focus our education and behaviour change initiatives and maximise their impact on material resource use.
- As we develop new facilities, we do so in compliance with the BREEAM⁹ (Building Research Establishment Environmental Assessment Method) standard:
BREEAM supports solutions to reduce carbon emissions to net zero, improve whole life performance, manage health and social impacts, boost circularity, resilience and biodiversity, and support disclosures and reporting.

By following this approach, we will lead a system change towards an LCR zero waste and net zero carbon circular economy.

Our priorities include

- supporting residents to reduce residual waste through food waste prevention.
- working with our contractors and residents to maximise reuse and recycling performance and reduce contamination of materials sorted at our MRFs.
- switching the focus of HWRCs from disposal and recycling to reuse and repair through the review and redesign of new services.
- reviewing our waste resources infrastructure to facilitate expansion of the materials covered by recycling collections, expand reuse and repair and reduce carbon emissions.

Taking these actions will be critical in ensuring we make our contribution to national and international residual waste and net zero carbon goals.

⁹ [BREEAM | Sustainable Building Certification](#) [Accessed 15/11/24]

Next Steps:

- Work with residents and partners to reduce waste.
- Ensure resource efficiency is a key priority in future service design and procurements.
- Align our infrastructure and operations to zero waste and net zero carbon.
- Switch the focus of HWRCs from disposal, to reuse and repair and expanded recycling.
- Review our waste resources infrastructure to facilitate expanded recycling collections by partners.
- Develop our use of data to improve the capture of recyclable materials.

FOOD FOCUS

Reducing food waste will have a significant impact on carbon emissions. Food waste is the single largest proportion of LCR household residual waste.

Include graphic of a bin showing food waste makes up 34% of that bin (split into avoidable and unavoidable)

The amount of food waste is extensive and occurs throughout the food system. When food is wasted, all the energy and resources that went into producing, processing, transporting, and cooking is also wasted. Money is lost on all these things – meaning that businesses are less efficient and competitive than they could be, and householders have spent money unnecessarily. Approximately one-fifth (19%) of the world's food is thrown away at the retail, hospitality or household level. This rises to almost a third (32%) if food lost in the supply chain is included.¹⁰ Reducing avoidable food waste is a key objective of the LCR Joint Zero Waste Strategy, our support for the SDGs and for maximising social value.

According to WRAP, 60% of food wasted in the UK is from citizens in their own homes. This amounts to 4.7 million tonnes of food thrown away every year.¹¹ (fact to be highlighted)

Our aim is to reduce the amount of food in the residual waste, by working with partners to implement an LCR Circular food waste collection service and maximise the social value of this we will make an important contribution to removing food from the residual.

Moving Forward

MRWA will encourage the food waste behaviour changes required by working in partnership with key stakeholders across the following five vital and interconnected areas:

- **Food waste prevention**

¹⁰ UN news article 27.03.24 [With 783 million people going hungry, a fifth of all food goes to waste | UN News](#)

¹¹ [Love Food Hate Waste | WRAP](#)

The emphasis will be on preventing avoidable food waste. Prevention refers to minimising the amount of food waste produced, this may be by local food growing, encouraging smart shopping, effective food storage, portion control, cooking skills, food sharing, home, and community composting.

- **Food waste collection and treatment**

While preventing food waste is our priority, we must also provide a treatment service for food waste. Under Simpler Recycling legislation Councils must implement food waste collections for households from 31st March 2026. We will work with Councils, and our contractor to set up a successful food waste management system for Liverpool City Region. Looking forward we must work with our partners to establish a circular food waste system for LCR. This should maximise value from food waste, include prevention, education and composting as a key element. A circular food waste system should consider the best collection vehicles, e.g. using a low carbon fuel option and treatment e.g. locality and output of the treatment option.

- **Awareness**

We need to raise awareness of the issues caused by food waste, and the importance of reducing avoidable food waste. MRWA will share regular communications and campaigns designed to raise people's awareness and understanding of food waste issues. We will engage people in activities that address the problem and create citizen advocates for food waste reduction. We will also work with local Councils to implement and promote participation in the upcoming food waste collection service.

- **Education**

Education is vital in establishing a foundation for behaviour change. Topics will include how to grow your own, the link between food waste and climate change, and hints and tips for reducing food waste. These could be delivered through workshops, online learning, partnership working, events and other activities.

- **Partners**

Food waste is a problem and will not be solved by individuals or businesses acting alone. It requires a cooperative and collaborative approach with LCR Combined Authority, Councils, businesses, and community organisations. To reduce food waste, we will work with partners to develop a comprehensive food waste reduction plan.

- **Data and monitoring**

To reduce avoidable food waste effectively, it will be important to monitor and measure food waste arisings and trends. Where possible we will measure and evaluate the impact of interventions designed to reduce food waste.

We will develop food waste prevention actions which will include awareness, education and partnership working. This will include activities like promoting community fridges and growing your own seasonal food. As well as reducing carbon

emissions, reducing food waste has the potential to save households money, improve health, community wellbeing and create social value.

A focus on food waste prevention is an integral part of our journey to zero waste and net zero carbon. We will support a culture that respects how food waste can impact our health, our wellbeing, our pockets, and our communities.

Next Steps

- Understand food behaviours and attitudes.
- Trial effective food waste interventions.
- Raise awareness of the food waste issues.
- Support the development of sustainable food partnerships.
- Support food champions.
- Develop resources to support stakeholders.
- Work with partners to promote successful food waste collections in all districts
- Identify the best opportunities for developing a circular food waste system in the LCR, in light of the future service design and procurement.

Cost Efficiency

Maintaining and improving cost efficiency will sustain the development and delivery of effective resource management and waste services.

MRWA is a local authority which means we have a responsibility to use our financial resources effectively and get the best value from the public money we invest in serving our communities.

The majority of our costs are determined by the amount of waste we need to manage through our contracted services, especially the waste that cannot be reused or recycled (residual waste). As a statutory Joint Waste Disposal Authority, we meet our costs through a levy on our 5 constituent waste collection authorities.

We will:

- work with our contractors to control the cost of our existing WMRC and RRC contracts, whilst delivering effective waste management services.
- reduce the volume of residual waste that requires treatment by promoting zero waste approaches to our residents, from smart shopping and local food growing to sharing, reusing, repairing and recycling more of the waste we cannot avoid.
- procure new contracts which deliver efficient and effective services, expand behaviour change, reuse and recycling provision, make our infrastructure fit for the future and support achievement of the UN SDGs.

Aiming for zero waste means we can change the focus of our spending towards keeping resources in use in our communities, with all the sustainable benefits for people, planet, and the economy this can bring. By rethinking resources, we will cut the cost of wasted materials and help deliver a zero waste low carbon LCR circular economy for all.

Our priorities include:

- working with our Council partners to identify a waste levy model which incentivises zero avoidable waste.
- developing our education and campaign initiatives to support residents to adopt zero waste behaviours.
- developing approaches to measure and improve the social value of our spending.

Reducing waste and extracting the best value from material resources is at the heart of cost efficiency. Positive financial incentives to prevent waste will help MRWA and its partners work together on the journey to a zero waste future.

Next steps:

- Ensure our existing contracts deliver value for money.
- Design future waste services ensuring they are cost effective and capable of achieving the zero waste and net zero carbon trajectories which this Strategy requires.
- Develop and deliver efficient and effective services.
- Support the Merseyside Districts to agree a waste levy model which incentivises zero avoidable waste.

Circular Economy

Our current take, make, waste system is not sustainable. We must work towards a whole system change.

The circular economy can replace the linear economy and provide the system change required to meet our zero waste and net zero carbon goals.

A circular economy advocates sustainable production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing, and recycling existing materials and products for as long as possible. It aims to minimise virgin resource input, waste and emissions, and maximise efficiency and recovery of materials and products. It is a sustainable and closed-loop system that contrasts with the traditional linear economy model that discards valuable resources.

Waste is often overlooked as a factor in climate change. However, everything that is thrown away once came from the earth. The natural resources that are made into products are transported, sold, used, and thrown away. Resource consumption is a significant contributor to climate change.



The circular economy looks to eliminate unnecessary waste by keeping products in use for as long as possible.

Going circular, means we can gain maximum value from products. The environmental cost of making, transporting, using, and disposing products is spread over a longer period.

An example of the circular economy in action is community based tool libraries and lending schemes for equipment which is only required occasionally. The cheaper cost of lending allows residents to access products, e.g. a power drill, more affordably and ensures greater use and resource efficiency of the item.

MRWA's vision is "To lead the way towards zero waste across the Liverpool City Region". The circular economy provides an opportunity to reduce waste and carbon emissions by putting resources back into the economy by focusing our contract services and operations to increase reuse, recycling, and sharing discarded products and recovering value. By recovering value from unwanted household items, MRWA is improving resource efficiency and contributing to a low carbon, zero waste circular economy.

Our Zero Waste Strategy aligns with Government's commitment to grow a zero waste circular economy and will support delivery of the Circular Economy Strategy for England.

Our Zero Waste Strategy will support the government's commitment to transition to a circular economy.

Next Steps

- Work with partners to promote and undertake an LCR circular city scan
- Maximise the circular economy through contract services and operations.
- Promote the benefits of the circular economy to partners and stakeholders.
- Look at options to support circular economy projects through our community fund.
- Explore opportunities for circular economy business advice support.
- Help circular economy organisations identify opportunities to start and scale up.
- Promote and encourage membership of the Circular Economy Club Liverpool City Region.

Green Jobs and Skills

Increasing green jobs and skills will sustain the transition towards a zero waste low carbon circular economy.

There is huge potential to develop green jobs and new skills from rethinking our use of resources and from adopting a zero waste approach to our procurement of new services. There are opportunities to reduce avoidable waste every day, including in our jobs and through the processes and systems we follow. In MRWA's vision of a zero waste low carbon circular economy, the growth of green jobs and skills is fundamental to securing the value which flows from reducing waste.

Zero waste requires a re-focus of skills and jobs towards reuse, sharing, repair and remanufacturing activities, both in the community and by businesses adopting circular economy models. A priority for the Strategy will be work with partners to support the development of a reuse and repair skills training programme, delivered through reuse hubs and networks to ensure this transition takes place. We need to see the industrialisation of reuse and the development of a reuse and repair culture across our communities.

The growth of sharing and re-distribution can be supported by refreshed customer service and logistical skills. Similarly, the growth of sustainable food skills is required across the food system, including in people's homes, gardens, and local green spaces to support food growing and good waste prevention practices. This shift towards green careers can be fuelled through skilled educators and public engagement to mainstream climate literacy and low carbon skills into everyone's lives.

The waste and resource management systems of the future will require a workforce equipped to support increased waste segregation, data capture, higher reuse and recycling rates and the effective and efficient delivery of services, novel treatment

and carbon capture technologies and infrastructure. We will look for opportunities to develop green skills and jobs as we deliver our current contracts and prepare to procure new service contracts.

Green jobs can contribute to reduced avoidable waste across a circular economy spanning design, construction, engineering, re-manufacture, hiring/leasing, and many other sectors. According to WRAP increasing refurbishment of products could create over 300,000 jobs nationally and 30,000 jobs from increasing repair.¹²

Zero waste thinking and innovation can reduce the amount of household waste which we must manage tomorrow and support us in our journey towards a sustainable zero waste and net zero carbon region. Through developing a reuse and repair skills training programme with our partners, we can drive this growth in green jobs, embed the circular economy in our city region and sustain our journey towards zero waste.

Next Steps:

- Advocate for a reuse and repair skills training programme with partners.
- Develop a reuse and repair culture in our communities.
- Support a growth of interest in green careers through our education programmes.
- Work with stakeholders to ensure the potential for zero waste jobs and skills growth is supported by national and regional policies and programmes.

REUSE FOCUS

The waste hierarchy priority is to prevent and reduce waste, however it is also important to move towards a circular economy and embed a reuse culture within the LCR.

Reuse is about ensuring resources are used again, this may be by passing on items you no longer need, upcycling resources, repairing broken or damaged items, or using items for a new purpose. MRWA has successfully increased recycling levels and while this remains important and a key area of our work, we must shift to a stronger focus on reuse.

Focusing on the wider benefits of reusing unwanted household items, means that there are opportunities for others to own products that are affordable, or to save money. A major benefit of embracing reuse is the reduction in residual waste. Less waste to treat means a significant reduction in carbon emissions and a reduction in the cost of treating that waste. Moving forward we want to consider unwanted items as resources rather than waste. MRWA is committed to developing and supporting a reuse culture across the Liverpool City Region. By keeping resources in use for longer

¹² [Net Zero: why resource efficiency holds the answers | WRAP](#)

we are reducing the need to produce new items which helps avoid carbon emissions of production and contributes to tackling climate change. Waste prevention and reuse underpins the Authority's aim to achieve net zero carbon and zero waste.

To maintain the value of unwanted resources and move to a reuse culture we must change the behaviours and attitudes of residents. We can do this by demonstrating the benefits of reuse, including financial, environmental, social value and community cohesion.

Moving Forward

MRWA will work with key partners and stakeholders to develop and support a culture of reuse across the Liverpool City Region. We will do so by focussing on the following key areas;

Behaviour Change

The first step in developing reuse is to consider how we can change the attitudes and behaviours of LCR residents. To change behaviours, we need to understand what the challenges and barriers are currently. We can then through education, campaigns, engagement activities and community projects help residents to see the benefits of reuse.

Reuse hubs and networks

An integral part of developing a reuse culture is ensuring that the infrastructure is in place to allow residents to easily participate in reuse. By developing a network for businesses and community organisations we can enable a flow of unwanted resources to where they are most needed. Hubs can act as focal point for reuse in the community, providing jobs and training, social value, affordable goods, and services. There are examples of successful reuse hubs across the UK and Europe, our first step would be to see which model would work for the Liverpool City Region.

Contracts

When our current Waste Management Recycling Contract (WMRC) was procured the focus was on increasing recycling. As we approach the end of this contract, we will consider how to embed reuse within the future services and contracts. This has the potential to shift reuse activity to the next level in the city region.

Partners

There is potential of significant economic, social, and environmental benefits from developing reuse in the LCR. To achieve these benefits, we will work with partners including the LCR Combined Authority, Councils, businesses, and community organisations.

Data and monitoring

Expanding reuse provides opportunities to develop new data monitoring and evaluation methods. We will explore the possibilities for gathering information on the resources flowing through the reuse networks and reuse hub activity. We will learn from cities and regions, community organisations and academic institutions delivering and researching reuse activities.

Reuse can reduce the demand for raw materials which can protect resources from depletion. Reusing items reduces the carbon emissions associated with manufacturing new products and treating waste which will deliver significant financial, social, and environmental benefits. A key focus for our zero waste strategy is to establish a reuse culture through the city region. Community organisations already have the local knowledge, links, relationships, and experience making them valuable partners in growing reuse. Easily accessible reuse infrastructure is required to help residents adopt reuse as part of their daily life. We must shift to a strong focus on reuse to achieve net zero carbon and zero waste.

Next Steps

- Work to understand reuse behaviours and attitudes.
- Develop and implement a behaviour change programme focussed on reuse, including strengthening reuse support through our community fund.
- Explore opportunities for developing reuse hubs and networks.
- Work together with partners and stakeholders to provide reuse services and opportunities.
- Research and learn from existing best practice examples.
- Explore opportunities to develop reuse within current contracts.
- Design new contracts to prioritise reuse.
- Develop new methods for reuse data capture and monitoring.

Monitoring and Reporting

In line with our Governance strategic outcome, we will regularly monitor and transparently report on our progress. We take responsibility for delivering the Strategy and are accountable for achieving its actions and updating stakeholders on our progress.

The Strategy will drive our Corporate Plan and be delivered through the Authority's annual Service Delivery Plan. This will allow monitoring of key areas of delivery on a quarterly basis and annual reporting of our progress in delivering the Strategy through the Authority's Annual Report.

The three themes of sustainability, People, Planet and Economy, are embedded into the Strategy and our annual reporting will identify our progress against the priority UN SDGs we have identified for MRWA

- SDG 13 Climate action

- SDG 12 Responsible consumption and production
- SDG 11 Sustainable cities and communities
- SDG 4 Quality education
- SDG 3 Good health and wellbeing.

Our Social Value outcome details the need to develop a Social Value Framework, we will also monitor and report our social value impact through annual reporting.

Regular monitoring and transparent reporting will allow us to respond to change and ensure our Zero Waste actions remain relevant and focused on the key challenges and opportunities ahead.

What's Next?

This Strategy recognises the challenge of tackling climate change and sets out MRWA's zero waste response. It shows how we can cut waste and carbon emissions to benefit our people, planet, and economy.

Together with our communities and District partners we will work towards a whole system change, where resources are conserved and value retained in a zero waste, net zero carbon circular economy. The Strategy will support partners and residents take positive steps to reduce waste and supply them with the knowledge, skills and confidence to face up to the zero waste challenge. Behaviour change is central to our approach and rethinking resource use is core to delivering the transformation we want to see.

"We will work with our communities and District partners towards a zero waste, net zero carbon circular economy".

We have identified the key themes and strategic outcomes for our zero waste journey and focused on education, food and reuse as critical areas for action:

- Education is vital to delivering behaviour change and a zero waste education programme will pilot new approaches.
- Food waste is the single largest fraction of our residual waste and we are committed to reducing avoidable food waste.
- Reuse hubs and networks will grow to make it easier for residents to participate in a local circular economy.

This Zero Waste Strategy will be delivered through the Authority Service Delivery Plan. We will measure and report annual progress on the Zero Waste Strategy, including our successes, achievements and the knowledge gained from pioneering new approaches.

Achieving zero waste requires inspiration, collaboration, and action. We hope this Strategy provides a lead for others to follow and encourages communities to work

together to make a difference. We look forward to embracing the challenge and sharing zero waste success across the city region.

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