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55a Unit 2 High Street Bridgnorth Shropshire WV16 4DX United Kingdom

<u>www.frithrm.com</u> +44 (0) 1746 552423



For and behalf Frith Resource Management

Julie Raynor Environmental Consultant Paul Frith Director

Cherie Whiteman Associate Director

Lead Authors Frith Resource Management **Reviewer** Frith Resource Management

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Foreword [to be drafted]

1 Why have a Zero Waste Strategy?

To guide positive change for us, our community and our waste, and help Liverpool City Region meet its ambitious target to become net zero carbon by 2040 or sooner, at least a decade earlier than the national target¹.

How we manage our waste (or rubbish) plays an important role in climate change and the carbon emissions we generate. Carbon emissions lead to a warmer atmosphere and a faster rate of climate change. Carbon is generated from the extraction, processing and transport of the raw materials which become the things we buy, use and ultimately dispose of as rubbish. When we throw items away, the collecting and treating of our rubbish also generates carbon emissions. We can lower our carbon emissions and contribute to climate action if we reduce our demand for new resources through reducing the amount of stuff we buy and increasing material reuse and recycling, which also reduces the amount of rubbish we need to manage.

Our draft Zero Waste Strategy sits firmly in the context of climate action to deliver this goal and provides opportunities for significant positive change in our region. It sets out how we can change to become a society that buys less new things because we can reuse, repair and recycle more. This will mean that in the future our rubbish bins are much less needed, providing benefits to our community and the economy and resources in our region. This will also reduce our carbon emissions. For our draft Zero Waste Strategy to be most effective it relies on the support of **everyone**, including Government, Councils, businesses, community organisations, schools and residents. Through working together, we can achieve positive change for our People, Planet and Economy.

¹ The Liverpool City Region Combined Authority was the first in the country to declare a Climate Emergency in 2019

'Zero waste' is a circular economy approach which means adopting lifestyles where fewer items are bought, then minimising waste, as much as possible, through reuse, repair, recycling and composting.

Achievement of the draft Zero Waste Strategy's Vision and Objectives requires a holistic approach by **everyone**, including Government, Councils, businesses, community organisations, schools and residents.

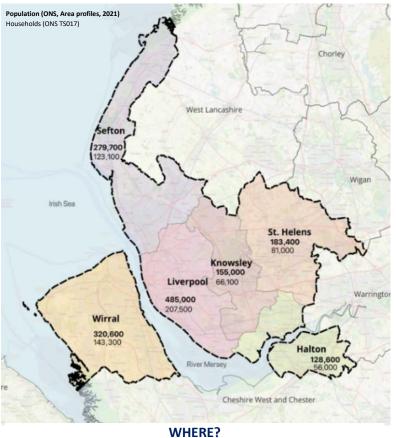
The overarching themes, strategic outcomes and objectives of our Zero Waste Strategy need behaviour change and waste prevention which will be led by the Partnership working with the community.



Liverpool City Region comprises the five metropolitan boroughs of Liverpool, Knowsley, Sefton, St. Helens, and Wirral (Merseyside) as well as the unitary authority of Halton, covering the towns of Widnes and Runcorn. Liverpool City Region is committed to delivering zero waste by 2040.

Climate emergencies have been declared and our Strategy is a key part of achieving the commitment for a net zero carbon Liverpool City region by 2040.

Our Strategy seeks to provide significant benefit to our region, our communities and our economy by reducing the amount of rubbish produced and cutting carbon emissions across the city region.



(population in bold, households in plain text)

(population in bold, households in plain text) Our draft Zero Waste Strategy is being prepared by a Partnership of the Councils in the Liverpool City Region & the Merseyside Recycling & Waste Authority

of the Councils in the Liverpool City Region & the Merseyside Recycling & Waste Authority (MRWA).Together the Liverpool City Region Waste & Resources Partnership (the Partnership)

So, who is The Partnership?

Together, the Liverpool City Region Waste & Resources Partnership (the Partnership) comprises:

Halton Borough Council Knowsley Borough Council Liverpool City Council Sefton Borough Council St Helens Council Wirral Council Merseyside Recycling and Waste Authority (MRWA) provides waste and recycling services for the 1.5 million people, living here, approximately 675,000 households.

Our draft Zero Waste Strategy supports the delivery of net zero carbon targets by 2040, whilst maximising opportunities to make our city region "greener" by helping our residents and businesses to prevent waste, wherever possible – everyone needs to play their part

So, 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

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 our draft Strategy include?

Our draft Strategy is built around the three themes of **People, Planet and Economy** and seven strategic outcomes set out in the *Liverpool City Region Zero Waste 2040 Strategic Framework* and section 2 of this document. It is designed to lead you through the process of how the Partnership will be working to help deliver 'zero waste'.

1. Why have a Zero Waste Strategy answering the basic questions surrounding our draft Strategy,

So, what is our waste?

Our waste or rubbish is items we "don't need" and "throw away". Our strategy is relevant for:

- Household & other
 waste collected by the
 councils, such waste and
 recycling you produce at
 home, litter bins, street
 sweepings and some
 business waste
- Other waste (not in direct control of the Partnership), such as industrial, agricultural and commercial waste that the councils can use collective powers to influence.

who, where, what, when, why, and how.

2. What are we trying to achieve? the vision, themes, strategic outcomes and objectives of our draft Strategy.

3. Setting the scene the context of our draft Strategy, the laws and strategies affecting waste, best practice for waste and what we do with your waste.

4. What could the future look like? looking at the Liverpool City Region in the future, projections of future waste services, the impact of key legislative changes and where our draft Strategy will take Liverpool City Region.

5. How will we achieve zero waste? Examines working together, changing attitudes, reducing rubbish, repair and reuse, recycling and influencing our carbon emissions.

 Making it happen – Our commitments to deliver our draft Strategy.

Where does our draft Strategy fit?

Our draft Zero Waste Strategy for the Liverpool City Region:

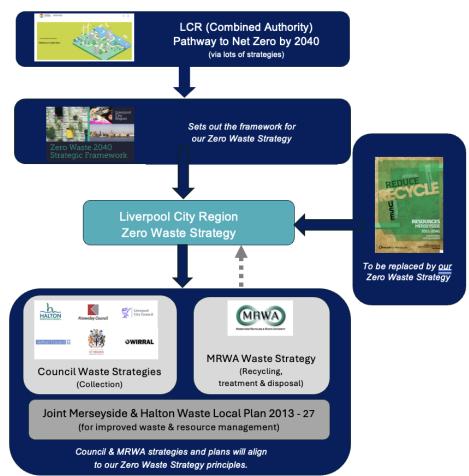
- aligns with the existing overarching *Liverpool City Region Zero Waste 2040 Strategic Framework* and adopts the same three themes (People, Planet and Economy) and the same seven strategic outcomes.
- replaces, updates and encompasses, where appropriate, the objectives from the *Resources Merseyside 2011 – 2041 Strategy*
- takes into consideration commitment for the *Environment and Climate Emergency Strategies* of the Partnership and the Liverpool City Region Combined Authority to be net zero by 2040.
- provides overarching direction for and takes into consideration the *individual waste strategies* of the Partnership Councils and MRWA.

Waste strategies of the Partnership Councils and MRWA sit beneath our draft Zero Waste Strategy and align to our draft Vision, Mission Statement and Objectives. Where appropriate, existing

Partnership waste strategies have fed into the development of our draft Zero Waste Strategy.

A Strategic Environmental Assessment (SEA) screening exercise was undertaken and determined² that our draft Zero Waste Strategy did not require a full SEA.

The Partnership will commit to a review of the Zero Waste Strategy in fiveyearly intervals.



² Through consultation with the designated Consultation Bodies in England; Natural England, Historic England and the Environment Agency as the Zero Waste Strategy will not cause any significant negative environmental effects as it sits within existing policy and Strategy documents, is non site specific and is designed to make waste management more sustainable.

2 What are we trying to achieve?

The proposed Vision for our draft Zero Waste Strategy is:

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.

Through working together to reduce waste, we aim to achieve positive change for our People, Planet and Economy. A shift towards a more circular economy by everyone will play a significant part in meeting net zero carbon targets and responding to the climate emergency, alongside bringing crucial environmental, economic, and social benefits. This won't be easy; we will all need to make big changes.

People

The wellbeing of LCR residents is central to our commitment of meeting net zero carbon and zero waste goals. We want a City Region where our use of resources creates social value and thriving communities.

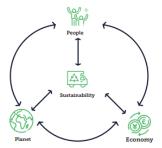
Planet

Using resources wisely and reducing waste is critical in achieving net zero and sustaining our planet. We want to transition to a zero waste LCR, where a healthy and diverse environment enriches lives and strengthens the economy.

Economy

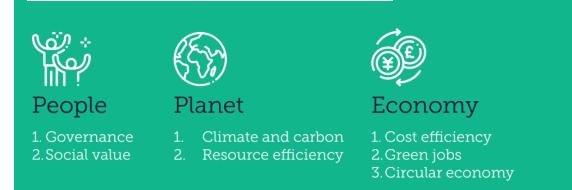
Transitioning to a circular LCR will create a wealth of green jobs and open up new opportunities for sustainable businesses. We want enterprises to prosper through rethinking the role of resources and designing out waste.





Strategic outcomes

Our draft Zero Waste Strategy adopts and builds on the same interlinking themes of People, Planet and Economy and the strategic outcomes of the *Zero Waste 2040 Strategic Framework*



Supporting our Strategy's vision and expanding the overall themes and strategic outcomes of the Zero Waste Strategy are thirteen objectives with the priority of achieving zero avoidable waste in the Liverpool City Region by 2040. Developed to encompass and build on the objectives of our earlier waste strategy, Resources Merseyside, where appropriate, and through a workshop to achieve Partner Council consensus, the objectives provide direction and focus for delivery of the Strategy.

How? To achieve Zero Waste, our draft Strategy is underpinned by the following 13 objectives:

- 1. To deliver the Strategy through co-ordinated action and a unified voice
- 2. Promote **behavioural change** in residents and business via **education** and **raising awareness** of zero waste and circular economy
- 3. Developing reuse capacity and maximising the social (community) value of reuse
- 4. Reduce food waste

- 5. Reduce the carbon impacts of resource use and waste management
- 6. Provide waste infrastructure that allows future flexibility
- 7. Provide a whole system approach to waste management and waste reduction
- 8. Maximise waste prevention
- 9. Increase higher quality recycling to achieve national targets (65% by 2035)
- 10. Promote the use of **renewable energy**
- 11. Provide appropriate enforcement to protect the environment
- 12. Maximise opportunities for local green jobs
- 13. Optimise sustainable economic activity

How the themes (People, Planet, Economy), the Strategic Outcomes and Strategy Objectives relate to each other, is shown here.

Zero Waste Objectives Summary		Themes & Strategic Outcomes							
		PEOPLE		PLANET		ECONOMY			
		Governance	Social Value	Climate & Carbon	Resource Efficiency	Cost Efficiency	Green Jobs	Circular Economy	
1.	Co-ordinated action and a unified voice	x						x	
2.	Education and raising awareness - zero waste and circular economy	x	x	x	x		x	x	
3.	Developing reuse capacity and maximising social value	х	x	x	х	x	х	x	
4.	Reducing food waste	Х	x	x	х	x	x	х	
5.	Reducing carbon impacts of waste management	х		x	х		х	x	
6.	Waste infrastructure with future flexibility	x		x	x	x	х	x	
7.	Whole system approach to waste management & reduction	x		x	х	x		x	
8.	Maximising waste prevention	х		x	х	x		x	
9.	Increase higher quality recycling	x		x	x	x		x	
10.	Promoting use of renewable energy	х	x	x	х	x	х	x	
11.	Appropriate enforcement	x	х	x		x	х		
12.	Maximise local green jobs opportunities	x	x				х	x	
13.	Optimise sustainable economic activity	x	x	x	х	x	х	x	

Matrix illustrating the links between our themes, strategic outcomes and objectives.

3 Setting the scene

What laws and policies affect waste?

Managing waste in line with government policies is fundamental to our zero waste goal and has a key role in responding to the Climate Emergency...

So, 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 Increased cost for carbon emitted from incinerators & Energy from Waste facilities burning rubbish

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

2035 – target: 65% municipal waste recycled 'Simpler Recycling' in waste collections:

31 March 2025 Businesses / non household municipal premises – to have recycling collections for cartons, plastics, glass, paper, card, cans, food waste

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

31 March 2027 Businesses & Households - to have separate collection of plastic film

Net Zero target dates

2030 – Liverpool City & Sefton

2040 - Liverpool City Region, Halton, Knowsley & St Helens

2041 - Wirral

2050 - United Kingdom

Your Council and the MRWA provides waste services that meet or exceed the national requirements by law. There are lots of changes in legislation and waste policy coming in the next decade that will affect what your recycling and rubbish looks like and how it is collected. These aim for positive change for our People, Planet and Economy, and will determine how your Council delivers waste services in your area.

Changes to packaging regulations means that business which make or use packaging will have greater responsibility for the costs of dealing with it, which should lead to less packaging overall and more of it being able to be recycled. Your Council will need to collect the waste in an "efficient and effective" way as part of these regulations.

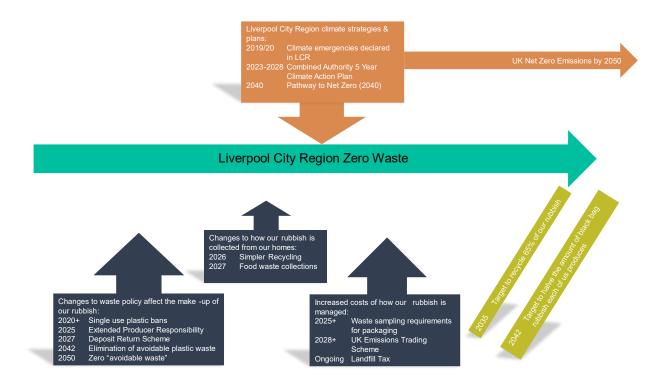
The 'Simpler Recycling' rules will increase the range of materials we are able to recycle at home and at work, including those materials already collected, plus food waste, more plastics and cartons.

So, what does this mean to me?

This means we will establish and/or promote **reuse and repair and refill** infrastructure and services, home composting and leasing / borrowing services.

There could be a variety of changes to how your rubbish is collected and treated and **improvements to your recycling**.

We will provide **regular communication and engagement** about any possible changes affecting you so you understand why there are changes, what is happening and what is required.

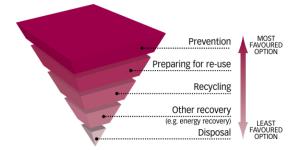


Waste management laws and policies affecting residents

What is best practice for waste?

It is a common misconception that only the Councils and the MRWA are responsible for dealing with our rubbish, when in fact, our rubbish is everyone's responsibility.

Our increased awareness of climate change and the link to carbon emissions released from the collection and treatment of our waste forms the core of our draft Strategy. Almost 50 years ago in 1975, the "waste hierarchy" was introduced which emphasises the importance of minimising waste (rubbish), and the protection of our Planet (the environment) and People (human health) as priority. The 'circular economy' idea expands this



The waste hierarchy (from Resources Merseyside)

concept to a system that minimises resource use, waste and carbon emissions by reducing the amount of stuff we buy and keeping products in use for as long as possible, for example by reuse and repair. This is one area where we can all contribute to climate action. Reducing carbon emissions to combat climate change will benefit our People, Planet and Economy in general, through less extreme weather, leading to improved health, increased biodiversity and food (crop) security.

As residents and businesses, we are responsible for the rubbish we produce, and the ideal situation is we minimise our waste as much as possible. This can be achieved, for example, at a household

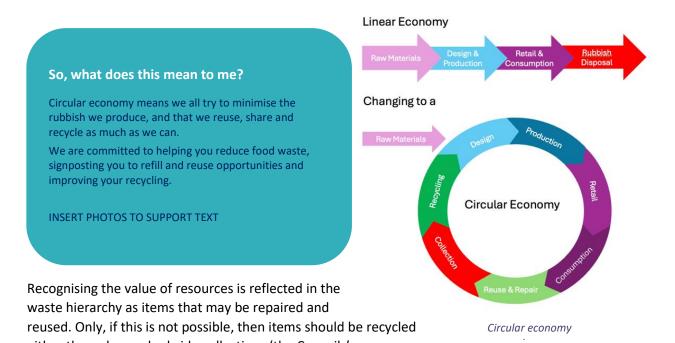
So, what is a circular economy?

3 principles:

- Design out waste & pollution
- Keep products & materials in use
- Repair & restore nature / natural environment

level, by 'meal planning' (to reduce food waste), buying second-hand and products with less packaging, repairing and re-using items (rather than throwing them away and purchasing new). Consistent with our draft Strategy themes of People, Planet and Economy, this trend is increasing through climate and environmental awareness as well as recent rises in the cost of living. Changes we see here include, for example, furniture upcycling, buying from charity

shops, minimising food waste, use of 'pre-loved' Apps etc.



either through your kerbside collections (the Councils' responsibility), at facilities in supermarkets or in one of the 16 Household Waste Recycling Centres in the region. The Government also plays a fundamental role in both reduction of waste and in the management of our rubbish, by setting targets, policies and legislative requirements.

We are working with our residents and businesses to encourage change and gain benefits for everyone by helping build our circular economy

What do we do with your waste?

The Partnership provides waste and recycling services for the 1.5 million people living in the Liverpool City Region.

Your Councils are responsible for collecting rubbish and recycling from households and some businesses, while the MRWA is responsible for managing its recycling³, transportation, treatment and



³ in most cases, some Councils also arrange some recycling activity

disposal. The Councils might collect rubbish in different ways, but every household is provided with a collection of:

- recycling (paper, cardboard, cans, glass bottles and jars, plastic bottles),
- garden waste and
- "black bag" rubbish that is sent for treatment and disposal (see below).

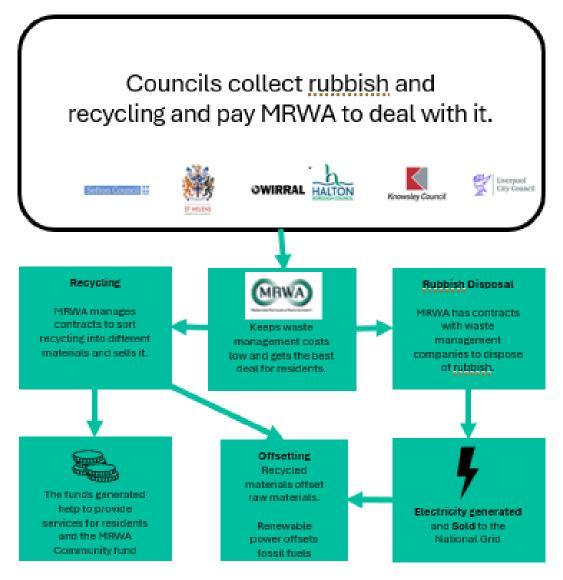
St Helens Council also provides a weekly collection of food waste to every household, and an increased range of plastics in the recycling collection.

Our "black bag" rubbish is bulked up, put on a train and travels to an incineration process that recovers energy (electricity) from the heat generated by burning it, known as **Energy from Waste**.

Residents can also request **bulky waste** to be collected if required. This is typically large waste items that won't fit into the bins / bags that residents are unable to take to one of the network of Household Waste Recycling Centres that the MRWA provides across the region. The Household Waste Recycling Centres collect and recycle a wide range of waste types.

The Partnership is active in promoting waste minimisation, repair, reuse and recycling to preserve resources.

Our average recycling rate across the region is 30%. However, recycling is only part of the picture to achieving zero avoidable waste. Importantly, we need to change our buying habits and **reduce all the waste** (food, recycling, black bag rubbish etc) we are producing and try to minimise what we throw out. This will provide benefits to our People, Planet and Economy by reducing resource use and carbon emissions, and to help us keep the costs of managing waste down.



* 52 Helens arranges their own recycling offtake outside of MRWA agreement.

How the Partnership works together

4 What could the future look like?

We can improve our People, Planet and Economy by working together to reduce our waste.



How we can influence the amount of rubbish in the future

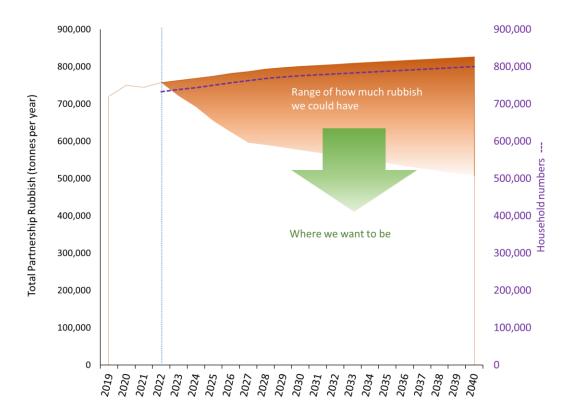
Looking ahead at our Liverpool City Region and how waste will reduce, depends on the changes each and every one of us makes. We have looked at three scenarios for how we can change our waste in the future, each involving different levels of change by each of us and your Council. These changes include how much we buy, what we buy and how the rubbish is collected by your Council. If we all make changes to these things, it can make a big difference.

So, what changes are needed in the future?

Achieving zero waste will need Government support to ensure producers take responsibility for packaging and products as well as changes by The Partnership, such as weekly food waste collections, reduction in black bag rubbish capacity and increased recycling services, as well as **changes by everyone in:**

- waste awareness
- waste minimisation
- reuse and repair
- recycling initiatives
- purchasing behaviour

If we continue with our current buying habits and ways of dealing with our rubbish, our waste will continue to grow, along with the associated carbon emissions and climate change effects. If we make changes through the actions of our draft Strategy, we can make real reductions in the amount of rubbish we produce, which will also reduce our carbon emissions. We will need to reduce the amount of stuff we buy, and increase the repair and reuse of items to give them a second (or third, or fourth!) life, as well as getting better at recycling.



Potential rubbish and recycling from the Partnership – total arisings – the orange wedge shows possible scenarios

The Partnership commits to promoting the circular economy in Liverpool City Region

What does a zero waste household look like?

Over time, more services will be available to households where items can be repaired, preloved 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.

5 How will we achieve zero waste?

Working together

Together through changes in purchasing behaviour and development and use of eco products and services we can reap far-reaching improvements for our People, Planet and Economy. Achieving zero waste in Liverpool City Region will be challenging and it will involve us all working together to achieve the common goals to the benefit of our communities. It will involve co-operation and co-ordinated actions from residents, community organisations, businesses, schools and commitments from the Partnership – to create a combined voice to promote change at a local, regional and national level.

The Liverpool City Region generates waste beyond the direct control of the Partnership, for example, waste from industry and agriculture, as well as businesses that the Partnership

So, what are our 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 155g/person
- Recycling 65% of municipal waste by 2035

Councils don't collect rubbish and recycling

So, what is the future?

Remember to SMILE to achieve zero waste and low carbon, efficient waste services 🕲

- Significant waste prevention & reduction
- Maximising reuse & repair
- Identifying alternatives to buying new
- Less rubbish & more high-quality recycling
- Energy from Waste for only "unavoidable" rubbish that can't be recycled

from. The Strategy will be implemented through **delivery plans** to achieve our Objectives with targeted efforts across all waste streams.

The Partnership commits to providing efficient and effective resource and waste services

For the waste within the direct control of the Partnership, it is estimated that by 2040 the amount of waste could reduce from approximately 760,000 tonnes per year⁴ to nearer

500,000 tonnes per year through our draft Strategy and implementation of the individual Council / MRWA strategies. Without significant changes as set out in our draft Strategy, waste is expected by increase by around 70,000 tonnes per year by 2040 from current levels, due to a growing city region. This is rubbish generated by households and some local businesses⁵; there will be additional waste from industrial and commercial sources within the Liverpool City Region administrative boundaries.

Through our draft Zero Waste Strategy, the amount of waste within the direct control of the Partnership could reduce by around a third, 260,000 tonnes per year, by 2040

⁴ From the 2022/23 baseline

⁵ Where it is collected by the 6 Partner Councils

How will we change our "rubbish" attitudes?

Achieving zero waste, requires residents and businesses in the region to make a significant effort to minimise the amount of rubbish we produce. To facilitate the change of preventing as much waste as possible, the Partnership will increase education and awareness, promoting changes in buying habits and behaviours and encouraging items to be reused.

So, how do we change our "rubbish" attitude?

- Avoid buying new where possible
- Buying second hand
- Borrowing and leasing
- Sharing items
- Composting
- Meal planning to minimise food waste

The Partnership commits to delivering effective education to all ages, to support people in their journey to zero waste

The changes would lead to a big reduction in the amount of rubbish generated per person, ahead of the target set at a national level⁶. The amount of "black bag" rubbish for disposal should reduce, by around two thirds, from the current level of around 475,000 tonnes per year to around 170,000 tonnes per year by 2040. This is a 65% reduction to the amount of our rubbish sent to Energy from Waste, mostly through a

combination of waste reduction and increasing recycling. Reducing the amount of rubbish sent to Energy from Waste has significant benefits for climate change, as well as reducing the cost of treating our rubbish – People, Planet and Economy.

Although ambitious, our draft Zero Waste Strategy takes a pragmatic approach – we understand that some waste will be inevitable, not all waste can be avoided completely, but real progress can be made.

The Partnership commits to working with our residents, businesses and communities to reduce wasteful behaviours encourage more waste prevention, reuse and recycling

⁶⁶ Environment Act target is for 50% of 2019 levels by 2042, i.e. a target of 155kg/person by 2042. The "low waste growth" projection is expected to achieve 102kg/person by 2040.

How will we reduce our waste?

Our Partnership will work together to minimise waste, which will also rely on changes at a national level through lobbying Government as well as locally, for example, through smaller bin sizes or reduced frequency of collection. Waste prevention includes avoiding some items (for example those

with excessive packaging), reusing and repairing items, and reducing a large amount of food waste.

Looking in all the bins collected from our households together (recycling, "black bag" and food waste), around half of it might be considered

So, how can I reduce my waste?

You can help by buying less, reusing, repairing, buying second hand, meal planning to reduce food waste.

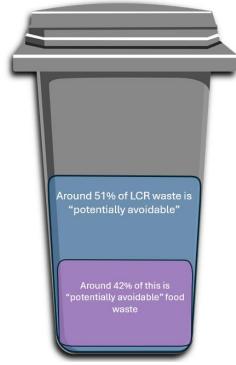
Some changes will be driven by others e.g. Government banning single use items or requiring separate food waste collections by 2026 and your Council altering your waste collections to encourage less rubbish in your bin.

Opting to refill and reuse will help reduce your rubbish and there are a growing number of opportunities to **refill and reuse** in the region

zerowastelcr.com QR CODE

Locations to refill and reuse

to be "potentially avoidable waste", although the removal of all of this from our bins is unrealistic in the Strategy period⁷. The extent to which such items can



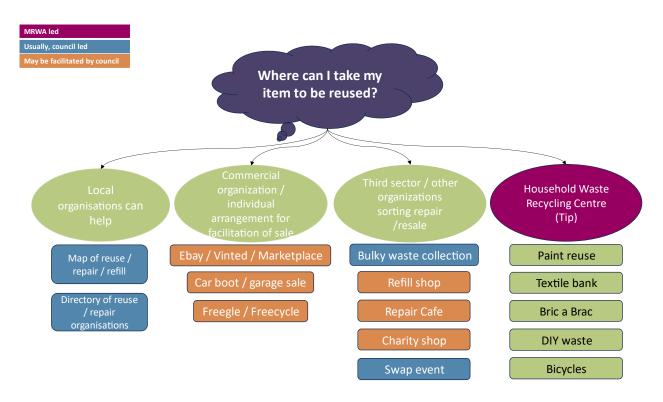
Overall estimated amount of "potentially avoidable" waste in our bins

be removed from the waste stream will depend on many factors, such as product and packaging design, reuse and repair initiatives, Government intervention and making 'zero waste' services easy for householders to use. Some packaging items are covered by waste policy aimed at

reducing waste and increasing good quality recycling, such as Extended Producer Responsibility for Packaging (see Section 3). The Delivery Plan for our draft Zero Waste Strategy will support initiatives for reuse. The MRWA's Zero Waste Map provides information on local zero waste shops and where we can take items for repair or reuse: <u>Zero Waste Map - Zero Waste Liverpool City Region</u> (zerowastelcr.com)

⁷ Our modelling in the "low waste growth" projection is based on one-fifth of "potentially avoidable waste" being removed from our waste altogether.





Opportunities and options for re-use

The Partnership commits to supporting the development of a reuse culture by maximising opportunities to reuse or repair goods

How will we improve recycling?

For waste that cannot be prevented, reused or repaired, there are a number policy and legislation changes that are designed to support our Partnership, businesses and residents to increase the levels of recycling of waste within the City Region. An example is a Government initiative called Simpler Recycling which includes the collection of food waste from every household and business (see Section 3) in England.

The Partnership commissioned a study to look at how waste might be collected from households in

So, how could our rubbish collection change?

Changes to our rubbish collections might include:

- Additional materials collected for recycling (e.g. plastic film, plastic pots, trays and tubs)
- More bins / boxes / bags for recycling
- Separate collections of food waste
- Reducing the size of our "black bag" rubbish bin
- Reducing the frequency of how often our "black bag" rubbish is collected

the future. The study weighed up the merits of different ways of collecting recycling, food waste and "black bag" rubbish, considering cost, carbon, how well they meet the national waste policy, operational issues around collection and treatment, and the likely impact on householders. Changes may be needed, such as: different ways of collecting recycling and non-recyclable "black bag" rubbish or restricting bin size. These potential changes are in addition to those which will be required by law or national policy, such as increasing the range of materials collected for recycling, labelling products / packaging for whether they are recyclable or not and separate food waste collections to households. Each Partnership Council will develop its own strategy for waste collection, taking into account the unique demands of each area, with the MRWA providing facilities and services for recycling and the treatment and disposal of our rubbish. Any changes to your services will be designed to provide benefits to our People,

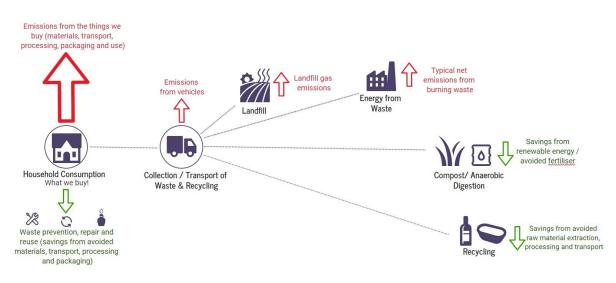
Planet and Economy.

There will be a need for treatment infrastructure to be developed for food waste and changes to recycling facilities as we add more materials, combined with more repair and reuse outlets. These changes will reduce the demand on disposal facilities for non-recyclable "black bag" rubbish and the associated carbon emissions.

The Partnership commits to providing collection and treatment infrastructure to maximise reuse and recycling

How can we reduce carbon?

The impact of carbon emissions is a huge issue for the world as a whole. Increasing carbon emissions from industry, agriculture and our day to day lives is putting the planet at risk through rising temperatures and extreme weather conditions. Waste and the things we buy have a big part to play, particularly on a local level. If we don't produce the rubbish in the first place, we don't have to collect it, transport it, treat it or dispose of it, all of which will provide climate action benefits from lower carbon emissions. We also conserve our planet's valuable resources and save money, if we are able to reduce the things we buy through reusing and repairing items, rather than buying new.



Carbon emissions from what we buy and what we do with it

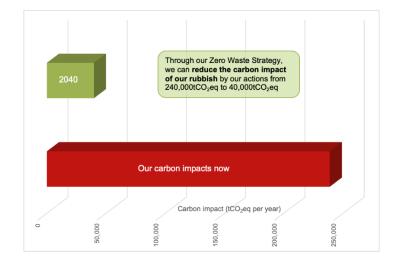
If we manage to reduce the amount of rubbish from homes and businesses in the Liverpool City Region by 2040 to the levels sought through the delivery of the actions within our draft Strategy, we

So, how can I reduce my carbon emissions?

- Buy less new stuff! This can have the biggest impact!
- By reusing and repairing items
- By keeping items in use for longer before we replace them
- Buy things with less packaging, e.g. at refill shops
- Recycling more
- Composting food and garden waste at home, or if that is not possible, using your Council's collections

could save over 80% of our current levels of greenhouse gas (carbon) emissions from the rubbish and recycling services. This is because lower amounts of overall waste means less transport and reduced impacts from disposal of "black bag" rubbish whilst recycling and composting also bring carbon benefits. The carbon emissions could be reduced further with an extensive reuse, repair and circular economy culture within Liverpool City Region.

The Partnership commits to promoting home and community composting of food and garden waste The Partnership commits to reducing carbon emissions from the collection and treatment of waste and recycling to support the achievement of net zero goals



Possible carbon impact of achieving our draft Zero Waste Strategy aims⁸

These reductions in carbon emissions would be a significant achievement for our region and our net zero carbon target – the carbon savings could be even greater with more levels of reuse and repair of items. For example, work by WRAP⁹ gives the **carbon impact** of producing cotton textiles as around 25 tonnes of carbon per tonne of product, whereas there is a **carbon benefit** of reusing cotton textiles of around 15 tonnes of carbon. Carbon emissions can therefore be reduced by avoiding producing new cotton material in the first place and by reusing it instead.

While we are aware that using fossil fuels in vehicles contributes to our carbon emissions and climate change, the carbon emissions from collection and transport of waste (compared to the rest of the carbon emissions from waste) is fairly low. Moving from diesel bin trucks to clean electric or "green" hydrogen powered vehicles will however lower the carbon emissions further, and there are other benefits of from moving away from diesel vehicles, such as improving air quality and reducing noise. The Partnership is committed to decarbonising their fleets and reducing waste through Council and MRWA Net Zero Action Plans.

The delivery of the actions within our draft Zero Waste Strategy could reduce the carbon emissions of our rubbish by over 80% with reduction of waste and improved recycling

⁸ Determined through 2023/24 carbon emissions factors

https://www.researchgate.net/publication/306145659_A_Carbon_Footprint_for_UK_Clothing_and_Opportuni ties_for_Savings

6 Making it happen

Delivering our vision of a Liverpool City Region without waste

Our Zero Waste Strategy will be implemented by The Partnership working together



Delivery of our Zero Waste Strategy will be led by the Partnership and achieved through an

So, how will our draft Strategy be delivered?

Through focussing our actions on:

- Increasing knowledge, information and education
- Cutting consumption
- Recovering more resources

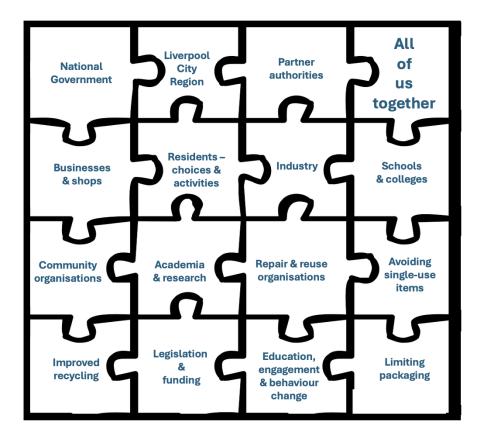
overarching action (delivery) plan that encompass our interlinking themes of People, Planet and Economy, our strategic outcomes and our objectives. The actions for resource and waste management are interrelated and will be delivered by the Partnership as well as each of the Councils.

Much like a family tree, each of the actions will develop and branch out into more specific plans, together with indicators for measuring and monitoring. These plans will be 'live' and will evolve through the life of the Strategy together with formal reviews which will be undertaken of the Strategy every five years.

If we implement these delivery plans in the Liverpool City Region, with the right resources, investment and the commitment across our communities, zero waste by 2040 in the Liverpool City Region will be achievable, contributing to our net zero carbon target. The draft Strategy cannot be achieved by the Partnership alone, it needs a holistic approach encompassing **everyone**, including Government, Councils, businesses, community organisations, schools and residents, to focus on a circular economy approach. This can be supported through lobbying government to implement waste management policies such as Extended Producer Responsibility and Deposit Return Schemes to encourage producers of products and packaging to accept more responsibility for their items sold



to the public. It will also be achieved by improving and increasing the extent of reuse and repair facilities, community initiatives, working with schools, community organisations and residents to help reduce waste and better improve our recycling services.



Achieving our draft Zero Waste Strategy needs all the pieces of the puzzle to fit together

Delivering Zero Waste

Our proposed key Partnership actions to support delivery of the draft Zero Waste Strategy are shown here.

