

## Joint Municipal Waste Management Strategy Update

### SUMMARY

This report provides an update on the WLWA Joint Municipal Waste Management Strategy (JMWMS).

### RECOMMENDATION(S)

*The Authority is asked to:*

- 1) *Approve the policies detailed in Section 3*
- 2) *Note the content of the strategies set out in appendix 1*

## 1. Introduction

In March 2021 the Authority members agreed the strategic outcomes of the JMWMS were:

- Effective and efficient operations focused on - **WHERE WE WANT TO BE IN THE FUTURE**
- Our climate emergency response is to focus on - **NO MORE WASTE**
- Recognise the only workforce we have is our - **RESIDENTS and COLLEAGUES**
- Tackling clean streets and flytipping because – **WASTE IS A CRIME**
- We can't wait for legislation – **BE PROACTIVE**
- Joined up and consistent - **USING HIGH-QUALITY DATA**

## 2. 2021/22 WLWA Plan and Joint Plan

The West London Waste programme for this financial year was designed to deliver efficiency enhancement with a whole system in line with WLWA's Mission and Purpose highlighted in the Business Plan. Work has focused on six key project areas which are designed to inform and deliver the long-term circular economy objective of the organisation. The delivery of the projects is in conjunction with the constituent Boroughs to derive the greatest benefit from joint working in West London.

WLWA focused on the following:

- Continuing to maximise the opportunities offered by the food waste funding of £500,000 per borough to invest in services and increasing capture of this high carbon material;
- Transform more HRRCs to unlock financial and carbon savings, increase recycling and increase resilience, whilst continuing the Abbey Road transformation;
- Creating a new Circular Economy Team which incorporates waste minimisation, carbon reduction and creating social value by closing the loop between waste and resources. The Circular Economy Team will be available to all Boroughs to create social value by closing the loop between waste and resources and providing training at HRRCs;
- Collating and understanding the data available to shape future development and making this accessible to all staff and boroughs
- Pilot a sub-regional coordinated smart city approach to HRRC, fly-tipping and bulky waste, using shared booking systems and customer interfaces to meet strategic objectives and

improve the customer experience.

- A shared EPR Plan to double recycling and maximise the value of EPR funding for all Boroughs;

For each of the six areas an Executive Board was formed, with Members and Environment Directors leading the following projects. For the past 6 months work has been on-going to develop policies for west London (section 3 of this report) and outline strategies (appendix 1) to take these forward.

	<b>Councillor</b>	<b>Environment Directors</b>
<b>Data Management</b>	Cllr Lavery (Hillingdon)	Dipti Patel (Harrow)
<b>Smart Cities</b>	Cllr Sheth (Brent)	Earl Mackenzie (Ealing)
<b>HRRC transformation</b>	Cllr Neden-Watts (Richmond)	Chris Whyte (Brent)
<b>Food Waste</b>	Cllr Costigan (Ealing)	Victoria Lawson (Hounslow)
<b>Shared EPR funding plan</b>	Cllr Lambert (Hounslow)	Ishbel Murray (Richmond)
<b>Double Recycling infrastructure</b>	Cllr Henson (Harrow)	Perry Scott (Hillingdon)

### Longer term

The long-term targets set for JMWMS are transformational and require us to think differently and take an experimental approach to change whilst constantly communicating with partners to move together and collectively mitigate the risk of change.

- Carbon neutral by 2030 (Borough Climate Emergency targets)
- 65% recycling: by 2035 (UK Government target) by 2030 (GLA target)
- Net-zero greenhouse gas emissions by 2050 (UK Government target)
- Zero vehicle emissions by 2050 (UK Government target)

### 3. Policy development

Policies have been jointly developed by members in order to deliver a unified approach to whole system change and to align the key project outcomes and golden threads between the systems.

<b>Data Management</b>
<ol style="list-style-type: none"> <li>1. Understand, measure and report on the flows of material from collection to end destination.</li> <li>2. Understand the impact of trade waste on borough provided services and options for developing synergies with municipal collections.</li> <li>3. Collect data about the composition of waste to understand the impacts and opportunities to support the climate emergency.</li> <li>4. Bring together and provide open access to data to inform wider policies</li> <li>5. Data is used to provide appropriate feedback and support decision making</li> </ol>
<b>Smart Cities</b>
<ol style="list-style-type: none"> <li>1. Easy to use services that build on the status quo</li> <li>2. Communicating resource productivity well and often</li> <li>3. Giving clear, appropriate and constructive feedback, highlighting what is going well and what needs to improve.</li> <li>4. Accepting and acting on information from residents and businesses about what is going well and what needs to improve.</li> <li>5. Reinvestment of efficiency savings into new services increasing resource productivity.</li> <li>6. Trial new ideas together.</li> </ol>

### HRRC transformation

1. Residents shall receive an enhanced service through consistency of service with information about services offered at a residents nearest site clear and transparent.
2. Active travel should be encouraged for wherever it can be achieved.
3. Enhance the re-use element of HRRC's.
4. HRRC sites should add value to the local community.
5. Each site has different constraints, these should be acknowledged and considered when developing collective infrastructure.
6. Development decisions shall actively consider the wider sustainability agenda.

### Food Waste

1. All residents to have access to separate food waste services.
2. Food waste services will be available for schools and businesses as a standard requirement of municipal services.
3. Making food waste the priority service to meet the 65% recycling target
4. Develop local circular economy opportunities for food

### Shared EPR funding plan

1. Maintain and invest in service delivery to achieve future efficiencies and joint working.
2. Deliver joined up services with shared regional infrastructure to achieve value for money.
3. Work in partnership to trial service changes.
4. Identify, highlight and adapt services to protect against materials that are non-recyclable.
5. Communicate clearly about recyclable and non-recyclables materials and the reasons for material being collected or not.
6. Work together as a single virtual entity with the EPR system administrator to deliver the best outcomes for the mission of becoming carbon neutral.

### Double Recycling infrastructure

1. Infrastructure development is assessed within the whole system with investment decisions supported data.
2. Develop circular economy hubs at suitable locations – varying sizes, at community locations and virtual.
3. Understand and accept that the approach and materials will differ across boroughs.
4. Value to be added to existing sites across the west London portfolio.
5. Infrastructure decisions will support keeping materials in use for longer.
6. A west London investment policy will support development.

## 4. Strategy and delivery

Environment Directors have worked with WLWA officers to draft strategies for the project themes (appendix 1). The objective is to set a high-level timeline for the strategic milestones up to 2030.

The strategy documents have been developed through ongoing work at the Environment Directors meetings to identify opportunities for greater partnership working and joint development of the services across the whole system.

The approval of the policies above will help to further develop the strategy documents. A workshop will be held on 25 March where the mechanisms for the delivery of both the policies and strategies will be agreed.

HRRC transformation delivery has already commenced with the Borough Partnership engaged in consultations on business cases for £200k HRRC investments. The business cases and delivery timelines will be presented to the Environment Directors and Members by June.

## 5. Risk

**5.1. New legislation** - details regarding EPR, DRS and the consistency agenda which will impact on all waste services are expected later in 2022. Officers are seeking to identify potential impacts and are factoring these in during the development of all projects.

**5.2. Waste Local Plan** - Waste site related land sales in the area are increasing as development companies are investing in land in west London due to the rapidly increasing value of land.

WLWA are recruiting a planning lead as agreed in the budget to drive the delivery of the Waste Local Plan across all member boroughs and the wider waste management subregion. This will align with the strategies and policies above to deliver the increase in infrastructure required for management of waste.

**6. Financial Implications** – Through the design of the policies and strategies the objective is to change the whole system and deliver financial, environmental and social benefits. Due to the whole system approach the changes will require partnership working and multiple stakeholder change, as such significant joint funding will be required.

All investments will be developed and supported by project specific business cases and highlight the required funding mechanism and establish the beneficiaries of the return. The specific model for funding will be bespoke for each project and will require additional approval prior to operational commencement. The high-level plan for the delivery of investment into local services will be drafted in to the medium term financial plan.

**7. Legal Implications** – none

### **8. Joint Waste Management Strategy**

The projects areas mentioned in this report are intrinsically linked to the Authority's Joint Waste Management Strategy. The projects are driving the design of the new policy and the Waste Local Plan through data, best practice and identification of opportunities, as well as delivering change to meet the desired outcomes and targets developed in the Strategy.

Contact Officers	Peter Tilston, Projects Director <a href="mailto:pertilston@westlondonwaste.gov.uk">pertilston@westlondonwaste.gov.uk</a>	01895 545510
	Sarah Ellis, Strategic Development Lead <a href="mailto:sarahellis@westlondonwaste.gov.uk">sarahellis@westlondonwaste.gov.uk</a>	07584 631710
	Emma Beal, Managing Director <a href="mailto:emmabeal@westlondonwaste.gov.uk">emmabeal@westlondonwaste.gov.uk</a>	01895 545515

## Appendix 1 – Outline Strategies

<b>Programme area</b>	<b>Data</b>		
<b>Policy</b>	<ol style="list-style-type: none"> <li>1. Understand, measure and report on the flows of material from collection to end destination.</li> <li>2. Understand the impact of trade waste on borough provided services and options for developing synergies with municipal collections.</li> <li>3. Collect data about the composition of waste to understand the impacts and opportunities to support the climate emergency.</li> <li>4. Bring together and provide open access to data to inform wider policies</li> <li>5. Data is used to provide appropriate feedback and support decision making</li> </ol>		
<b>Mission</b>	TBC		
<b>Purpose</b>	To use data intelligently to utilise resources efficiently, cost effectively and with a positive environmental impact		
<b>Year</b>	<b>Disposal objectives</b>	<b>Joining up collection and disposal</b>	<b>Our Ambitions</b>
By 2030	<ul style="list-style-type: none"> <li>• Use data to establish whole life cycle costs and carbon impact to enable disposal to be carbon neutral</li> </ul>	<ul style="list-style-type: none"> <li>• Use data to amend fleet and look at group procurement options.</li> </ul>	<ul style="list-style-type: none"> <li>• For whole life cycle collection and disposal to be carbon neutral.</li> </ul>
By 2025	<ul style="list-style-type: none"> <li>• Use data to understand impact and interaction of EPR and DRS on disposal</li> </ul>	<ul style="list-style-type: none"> <li>• Use data to establish impact of fleet.</li> </ul>	<ul style="list-style-type: none"> <li>• To maximise collection and disposal of materials as part of legislative requirements.</li> </ul>
By 2023	<ul style="list-style-type: none"> <li>• Use data to investigate what can we bring in before EPR and DRS – focus on carbon data recording and monitoring</li> </ul>	<ul style="list-style-type: none"> <li>• Development of a management intelligence platform that incorporates all data streams and proactively analyses and predicts resource requirements and whole life cycle disposal cost</li> </ul>	<ul style="list-style-type: none"> <li>• To be able to measure the impact of waste and resource services in a consistent, timely and proportionate manner which supports joint decision making.</li> </ul>
<b>Linking to other programmes</b>			
<b>Food</b>	Food waste is measured and progress toward objectives is available in real time		
<b>HRRC</b>	Understanding the flows of material through the HRRC's and the usage of these sites will support development decisions		
<b>Doubling recycling infrastructure</b>	Data based decision making supports infrastructure development		
<b>Smart Cities</b>	Collection of data through smart systems		
<b>Shared EPR</b>	Accurate data supports shared EPR objectives		

Programme area	<b>Smart Cities</b>		
<b>Policy</b>	<ol style="list-style-type: none"> <li>1. Easy to use services that build on the status quo</li> <li>2. Communicating resource productivity well and often</li> <li>3. Giving clear, appropriate and constructive feedback, highlighting what is going well and what needs to improve.</li> <li>4. Accepting and acting on information from residents and businesses about what is going well and what needs to improve.</li> <li>5. Reinvestment of efficiency savings in to new services increasing resource productivity.</li> <li>6. Trial new ideas together.</li> </ol>		
<b>Mission</b>	Use technology to enable resident ownership of interaction with an innovative waste system		
<b>Purpose</b>	Deliver interactive systems to support continuous improvement in service delivery and resident engagement		
Year	<b>Disposal objectives</b>	<b>Joining up collection and disposal</b>	<b>Our Ambitions</b>
By 2030	<ul style="list-style-type: none"> <li>• Waste reduction</li> <li>• Right waste, right place</li> </ul>	<ul style="list-style-type: none"> <li>• External interface eg. Digital DRS solutions</li> </ul>	<ul style="list-style-type: none"> <li>• Information to assist with decarbonisation of waste</li> </ul>
By 2025	<ul style="list-style-type: none"> <li>• Bins with fill level sensors (e.g. big belly bins or sensors retrofitted) – understanding the status of bins enables service providers to react to real-time fill levels, avoids containers spilling over and littering, allows for more efficient refuse collection and reduces unnecessary pick-ups of half-empty bins thereby saving fuel and reducing pollution (carbon)</li> <li>• Understanding frequency of collection and/or if more/fewer bins required on site</li> <li>• Improvement in operational efficiency, understand and increase participation and improve quality of materials collected</li> <li>• Reduce risk of overflowing bins</li> <li>• Fly tipping alert (detection of rapid fill events)</li> <li>• Note: full EPR payments will be reliant on the ability to demonstrate an efficient collection system</li> </ul>	<ul style="list-style-type: none"> <li>• App/website development – resident interaction (booking systems, reporting issues, updates on reports, real-time feedback etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Internet of Things</li> <li>• Project 2 will focus on working with boroughs to use the data to make demonstrable improvements and assess real world operational practicality.</li> <li>• Electric vehicles – EV charging bays, supervisor vans/vehicles, refuse collection vehicles</li> </ul>
By 2023	<ul style="list-style-type: none"> <li>• Food waste and data projects – operational use of technology</li> </ul>	<ul style="list-style-type: none"> <li>• Smart routing/software for collections – maximise efficiency, reduce carbon</li> </ul>	<ul style="list-style-type: none"> <li>• Establish positive feedback mechanism to inform service development</li> </ul>

	<ul style="list-style-type: none"> <li>Project 1 with WLWA has proven that sensors can provide valuable data.</li> </ul>	<ul style="list-style-type: none"> <li>Data reporting and self-service platforms</li> </ul>	
--	--	---	--

**Linking to other programmes**

<b>Data</b>	Timely reporting and recording of data to drive services (virtual and physical) development
<b>Doubling recycling infrastructure</b>	Development of physical and virtual infrastructure to support service development
<b>Food</b>	Services integrated with technology to deliver efficiencies and service improvements
<b>HRRC's</b>	Services integrated with technology to deliver efficiencies and service improvements
<b>Shared EPR</b>	Services and data shaped by smart city technology

<b>Programme area</b>	<b>Household Reuse and Recycling Centres (HRRC's)</b>		
<b>Policy</b>	<ol style="list-style-type: none"> <li>1. Residents shall receive an enhanced service through consistency of service with information about services offered at a residents nearest site clear and transparent.</li> <li>2. Active travel should be encouraged for wherever it can be achieved.</li> <li>3. Enhance the re-use element of HRRC's.</li> <li>4. HRRC sites should add value to the local community.</li> <li>5. Each site has different constraints, these should be acknowledged and considered when developing collective infrastructure.</li> <li>6. Development decisions shall actively consider the wider sustainability agenda.</li> </ol>		
<b>Mission</b>	For West London's HRRC's to be 'Best in Class'		
<b>Purpose</b>	To modernise the service offer to deliver climate action.		
<b>Year</b>	<b>Disposal objectives</b>	<b>Joining up collection and disposal</b>	<b>Our Ambitions</b>
By 2030	<ul style="list-style-type: none"> <li>• Whole net cost / benefit approach on waste, recycling, sites and procurements</li> </ul>	<ul style="list-style-type: none"> <li>• Create a co-owned system by creating synergies, enhancing skills and embracing automation and AI.</li> </ul>	<ul style="list-style-type: none"> <li>• Circular economy - No more waste.</li> </ul>
By 2025	<ul style="list-style-type: none"> <li>• New infrastructure Abbey Road and Victoria Road</li> </ul>	<ul style="list-style-type: none"> <li>• Increase site capacity</li> <li>• Increase opening hours, materials offer</li> </ul>	<ul style="list-style-type: none"> <li>• Local green skills and knowledge</li> </ul>
By 2023	<ul style="list-style-type: none"> <li>• Abbey Road (+Victoria Road) investment plans</li> </ul>	<ul style="list-style-type: none"> <li>• Create HRRCs Climate emergency transformation programme and automated waste data flow</li> </ul>	<ul style="list-style-type: none"> <li>• Working to capacity / efficient</li> <li>• Diversion rates increase</li> <li>• Satisfaction</li> </ul>
<b>Linking to other programmes</b>			
<b>Data</b>	Data driven decisions to provide an excellent service to the community whilst delivering climate action Data reporting, visualisation and self service platforms		
<b>Food</b>	Food waste is collected from homes, it is not taken to HRRC sites		
<b>Doubling recycling infrastructure</b>	Development of additional capacity both at HRRC's and WTS Circular economy hubs		
<b>Smart Cities</b>	Access for sites and services		
<b>Shared EPR</b>	Synergies developed with the shared EPR system		



Programme area	<b>Food</b>		
<b>Policy</b>	<ol style="list-style-type: none"> <li>1. All residents to have access to separate food waste services.</li> <li>2. Food waste services will be available for schools and businesses as a standard requirement of municipal services.</li> <li>3. Making food waste the priority service to meet the 65% recycling target</li> <li>4. Develop local circular economy opportunities for food</li> </ol>		
<b>Mission</b>	To create an exemplar approach to tackling food waste in West London		
<b>Purpose</b>	<p>To demonstrate to residents and others that zero avoidable food waste is achievable and lead others to embark on the same journey</p> <p>Exemplar Leadership Efficiency and Effectiveness Partnerships with our resident and business communities Ambitious and responsive change Lowering the costs of food waste Co-Production, Design, Delivery and Transparency</p> <p>Be ambitious in the way we support our communities and others to take a leap on food waste Take a whole system approach to lowering the costs of food waste Support and enable our communities to make the choices that matter</p>		
Year	<b>Disposal objectives</b>	<b>Joining up collection and disposal</b>	<b>Our Ambitions</b>
By 2030	<ul style="list-style-type: none"> <li>• Optimum disposal infrastructure in place in West London</li> </ul>	<ul style="list-style-type: none"> <li>• Optimise West London and London collections and disposal</li> <li>• Integrated system created</li> </ul>	<ul style="list-style-type: none"> <li>• Circular Economy is default</li> <li>• Zero avoidable food waste</li> <li>• Net Zero Carbon</li> </ul>
By 2025	<ul style="list-style-type: none"> <li>• New disposal solutions rolled out</li> <li>• New infrastructure roll out plan created</li> <li>• Roadmap for reducing plastics in food waste</li> <li>• Ensure food waste solutions feature in all new development plans, lobbying as required to ensure this is regulated</li> </ul>	<ul style="list-style-type: none"> <li>• Recycling food waste collections standardised</li> <li>• Increase West London Food Waste processing capacity</li> <li>• All properties in West London serviced by Food Waste recycling collections</li> <li>• All boroughs have a commercial food waste collection service in place inc. Schools and all public</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced Food Waste mileage</li> <li>• 50% reduction of food waste in residual</li> <li>• Through influencing consumer choice lower the cost of food for households through food waste elimination</li> <li>• Reduce emissions of organic processing</li> <li>• Close the circular economy loop - Review/develop in area AD output usage ie. Digestate</li> </ul>
By 2023	<ul style="list-style-type: none"> <li>• Local food waste disposal demonstrators created and new infrastructure tested</li> <li>• Ambitious short, medium and long term awareness and behaviour change campaign created and in delivery</li> <li>• Lobby for food waste labelling</li> </ul>	<ul style="list-style-type: none"> <li>• Automate waste data flow and make this accessible</li> <li>• Create a localised food plan and food waste elimination strategy</li> <li>• Food Waste investment plan created</li> <li>• Create a clear understanding of the value of food waste for the circular economy</li> </ul>	<ul style="list-style-type: none"> <li>• Waste minimisation and consumer choices influenced</li> <li>• Clearview on behaviour change interventions</li> <li>• 4kg of food waste recycling per household and design whole system capacity to manage target volumes. (ie. Collections, transfer stations and treatment)</li> </ul>

	<ul style="list-style-type: none"> <li>Galvanise the business community to reduce food waste by identifying more opportunities for surplus food sharing</li> </ul>	<ul style="list-style-type: none"> <li>Identify all best practice in disposal and collections</li> <li>Be transparent about carbon produced and utilise this to inform communities of the impact of their behaviour change or non-action</li> </ul>	<ul style="list-style-type: none"> <li>Create a shared understanding of support needs across West London</li> <li>Promote Health and financial benefits of better food choices</li> </ul>
--	--	---	---

**Linking to other programmes**

<b>Data</b>	Timely reporting and recording of food data to drive service development and communication campaigns
<b>HRRC's</b>	Food waste is collected from homes, it is not taken to HRRC sites
<b>Doubling recycling infrastructure</b>	Development of additional capacity at WTS and within collection services
<b>Smart Cities</b>	Collection and delivery of service information and data
<b>Shared EPR</b>	Separation of food is likely to increase the value of shared EPR materials

Programme area	<b>Shared EPR</b>		
<b>Policy</b>	<ol style="list-style-type: none"> <li>1. Maintain and invest in service delivery to achieve future efficiencies.</li> <li>2. Deliver joined up services with shared regional infrastructure to achieve value for money.</li> <li>3. Work in partnership to trial service changes.</li> <li>4. Identify, highlight and adapt services to protect against materials that are non-recyclable.</li> <li>5. Communicate clearly about recyclable and non-recyclables materials and the reasons for material being collected or not.</li> <li>6. Work together as a single virtual entity with the EPR system administrator to deliver the best outcomes for the mission of becoming carbon neutral.</li> </ol>		
<b>Mission</b>	For West London to be carbon neutral		
<b>Purpose</b>	<p>?</p> <p>To be leaders in treating waste as a valuable resource – EPR funding plan</p> <p>Consistency in method to ensure equitable share of funding</p> <p>Funding to secure investment</p> <p>Up to date whole system data and information</p>		
Year	<b>Disposal objectives</b>	<b>Joining up collection and disposal</b>	<b>Our Ambitions</b>
By 2030	<ul style="list-style-type: none"> <li>• Reduction in contamination – clean materials</li> </ul>	<ul style="list-style-type: none"> <li>• Consistency of system</li> <li>• Efficiency of systems</li> </ul>	<ul style="list-style-type: none"> <li>• Circular economy – no more waste</li> </ul>
By 2025	<ul style="list-style-type: none"> <li>• Processing capacity</li> </ul>	<ul style="list-style-type: none"> <li>• Joint recycling procurements</li> <li>• Consistency of collection methodology</li> </ul>	<ul style="list-style-type: none"> <li>• EPR funding package is secure</li> <li>• Central administration</li> </ul>
By 2023	<ul style="list-style-type: none"> <li>• West London EPR plan agreed – Full Net Cost Recovery</li> <li>• Baseline and commitment to funding</li> </ul>	<ul style="list-style-type: none"> <li>• Develop / automate waste data flow system</li> <li>• ReLondon request for funding – confirm delivery plan</li> </ul>	<ul style="list-style-type: none"> <li>• Waste Prevention Plan includes EPR and DRS principles</li> <li>• Lobbying – system admin/political influence</li> <li>• Impact measurement, not simply recycling</li> </ul>
<b>Linking to other programmes</b>			
<b>Data</b>	Timely reporting and recording of composition and tonnages of materials to support service delivery and development		
<b>Doubling recycling infrastructure</b>	Development of additional capacity at WTS and within collection services		
<b>Food</b>	Food waste is segregated at home, school and work to avoid contaminating the other material streams		
<b>HRRC's</b>	Supporting service delivery with appropriate infrastructure		
<b>Smart Cities</b>	Collection and delivery of service information and data		

Programme area	<b>Doubling recycling infrastructure</b>		
<b>Policy</b>	<ol style="list-style-type: none"> <li>1. Infrastructure development is assessed within the whole system with investment decisions supported data.</li> <li>2. Develop circular economy hubs at suitable locations – varying sizes, at community locations and virtual.</li> <li>3. Understand and accept that the approach and materials will differ across boroughs.</li> <li>4. Value to be added to existing sites across the west London portfolio.</li> <li>5. Infrastructure decisions will support keeping materials in use for longer.</li> <li>6. A west London investment policy will support development.</li> </ol>		
<b>Mission</b>	To increase joint recycling infrastructure – increasing both volume and capacity		
<b>Purpose</b>	To reduce waste and increase recycling in line with national and local targets		
Year	<b>Disposal objectives</b>	<b>Joining up collection and disposal</b>	<b>Our Ambitions</b>
By 2030	<ul style="list-style-type: none"> <li>• Joint procurement of larger and closer facilities to sort and process recyclables or develop / build own facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Use energy produced from our own recyclables such as food waste to power electrical vehicles.</li> <li>• More control over facility capacity – space can be filled through outside contracts if available but prioritised to WLWA</li> </ul>	<ul style="list-style-type: none"> <li>• Net – zero carbon emissions</li> </ul>
By 2025	<ul style="list-style-type: none"> <li>• Introducing facilities to promote re-use and repair (to reduce waste) – easily accessible to residents and attracting all demographics. Community hubs that become social norms like libraries and leisure centres.</li> <li>• Increasing accessibility to deposit points for residents/businesses <ul style="list-style-type: none"> <li>- Community buildings</li> <li>- On street recycling banks</li> <li>- Collecting more waste streams</li> </ul> </li> <li>• Making the most of our recyclables – sort / shred / bale etc for better value</li> </ul>	<ul style="list-style-type: none"> <li>• Repair / re-use reduces collection and disposal requirements overall</li> <li>• Wider partnership working – act as broker for non WLWA boroughs to improve economy of scale – sourcing outlets for new streams such as soft / hard plastics / polystyrene / sanitary products</li> <li>• Operate booked collections in joint partnership rather than scheduled collections to fill demand for lower quantity separate collections on new streams</li> </ul>	<ul style="list-style-type: none"> <li>• Increasing access to recycling facilities</li> <li>• Increasing streams to be recycled</li> <li>• Reducing overall waste</li> </ul>
By 2023	<ul style="list-style-type: none"> <li>• Targeting four key areas based on outcome of June '21 waste composition analysis:</li> </ul>	<ul style="list-style-type: none"> <li>• Introducing collections or increasing collections for streams which have low or no participation</li> </ul>	<ul style="list-style-type: none"> <li>• Reducing waste and increasing recycling</li> </ul>

	<p>Food, Textiles, Garden, Plastic.</p> <ul style="list-style-type: none"> <li>• Need increased demand before increased capacity is required:</li> <li>• Increased comms / Provision of receptacles / Increased access to services to remove recyclables from MMW.</li> <li>• Better segregation at HRRCs</li> <li>• Capacity / availability studies for disposal contracts for future growth</li> </ul>	<p>currently – flats / flats above shops / businesses / street litter</p> <ul style="list-style-type: none"> <li>• Recycling bulky waste for which collection services already available</li> <li>• Push re-use and at home recycling to divert from MMW</li> </ul>	
--	--	---	--

**Linking to other programmes**

<b>Data</b>	Data based decision making supports infrastructure development
<b>Food</b>	Food waste is measured, infrastructure needs can be identified through the data
<b>HRRC</b>	Understanding the flows of material and usage for the HRRC's and WTS's will support development decisions
<b>Smart Cities</b>	Smart systems collecting useful information and data is part of the infrastructure development
<b>Shared EPR</b>	Infrastructure will be needed to support shared EPR objectives