



# TREATING WASTE AS A VALUABLE RESOURCE.

West London Waste Annual Report • June 2021

#### West London Waste

Treating waste as a valuable resource



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- £3m invested in food waste recycling,
- Creation of Data Hub a shared system to access and view waste and recycling data,
- A new wildflower meadow at the Abbey Road Household Reuse and Recycling Centre,
- Offering same day or next day bulky waste collections to residents.
- Bicycle repair and reuse at Abbey Road Household Reuse and Recycling Centre,
- Creation of the joint Climate Emergency Officers Group,
- Creation of a new Circular Economy Team,
- A Carbon plan to support our Boroughs commitment to be carbon neutral by 2030.

end we have created a programme of change to support us through the expected legislation changes and waste reforms set out in the Environment Bill. Led by each of the West London Waste Authority Members and supported by **Environment Directors and Finance Directors** from different Boroughs we will develop new joint policies relating to our data management, making it easy for residents and businesses to reduce waste, increasing food waste recycling, decarbonising our household reuse and recycling centres, doubling our recycling infrastructure and creating a shared plan for packaging waste.

Working with and supporting the joint Climate Emergency Officers Group, we have considered how our industry can support that challenge. We are determined to demonstrate that treating waste as a valuable resource is good for jobs, good for business, good for the environment and good for our communities. Reducing waste and reducing the cost of waste will give us the ability to manage change and build a green recovery.



EMMA BEAL

Managing Director, West London Waste Authority

due to the infrastructure investments made by West London Waste in 2013 and the efforts of Harrow residents, Harrow Officers and West London Waste and it's contractors that we have consistently put waste in the right place.

To increase recycling rates we must increase the amount of food waste recycled. Changing our habits and using the food waste recycling service has a quadruple effect of more recycling, less waste, saving money and decarbonising the food supply chain. Let's face it, we simply must stop wasting food! West London Waste's investment of £3m into all six Boroughs is supporting our efforts to ensure all households and more businesses in Harrow are able to use this service.

West London Waste has created a data hub for waste and finance officers to be able to lead the way on improving resource productivity. Our decision-making in the early days of the COVID 19 pandemic was made on waste and recycling data only a week old, not 18 months late, which is the DEFRA norm. We are able to collectively challenge out of date assumptions and check consistency locally. Our joint responses to the government consultations demonstrate best practice and how we need legislation if we are to turn waste into a resource.

This annual report includes many examples of what we have achieved by working together. West London has a greater spending power than some of the smaller English cities and this year West London Waste will continue to support Harrow to tackle climate change and move beyond recycling to create a circular economy that will create jobs for our residents, opportunities for our businesses and a healthy future for generations to come.



COUNCILLOR GRAHAM HENSON Chair of the Authority, Leader of Harrow Council



*Harrow*councii

# WHAT WEDO



Windswept

## WHO WE ARE.

**WEST LONDON WASTE AUTHORITY (WLWA)** is a statutory waste disposal authority that was created in 1986. We are responsible for disposing of waste collected by the London Boroughs of Brent, Ealing, Harrow, Hillingdon, Hounslow and Richmond upon Thames—about 1.7 million people live in this area, which covers 38,000 hectares.

We have been focusing on treating our waste as a valuable resource for many years and make the best use of what we handle in an effort to move away from a 'linear economy' (take-make-discard). We've been successfully diverting waste from landfill in the last 5 years since landfill is the very last thing we want to do with waste. We are continuing to innovate ourselves to move towards a more circular economy— a way in which the society recirculates materials to keep them in use for longer through reuse, repair, remanufacture and recycle and design out waste from our system. This means that we are extracting less raw/virgin materials, reducing pollution and our impacts on the natural environment. Waste Authorities have key roles to play to facilitate a circular economy and enable the public to embed the principles into their daily lives by acting as a 'resource transformation body'. WLWA launched the Circular Economy Team to drive innovative changes within the waste sector.

Our 6 west London Boroughs declared a climate emergency in 2019 and now placing a greater focus on the fight against climate change, setting a target of net zero emissions by 2030. WLWA is working together in partnership with the boroughs and also adopted a net-zero emission target. We've been strengthening and widening our support to the Boroughs on sustainability as a whole, not just waste.



#### **OUR VISION**

For West London to be carbon neutral



#### **OUR MISSION**

Close the loop between waste and resources



#### **OUR PURPOSE**

To treat waste as a valuable resource

#### WE HAVE CHOSEN THE FOLLOWING UN GOALS TO GUIDE OUR WORK:





CLIMATE ACTION







2012 Over 50% of waste diverted away from landfill

**2017**Over 96% diverted

away from landfill

2021 Creation of the

Circular Economy Team

2050
Target: Net Zero emissions

2010 Creation of the Waste Minimisation

2013 Severnside Energy

Recovery Centre

3 nergy 2019

6 Boroughs declared a climate emergency

2030

Target: 65% recycling and carbon neutral

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## STRATEGIC OUTCOMES.

In September 2019, the 6 Borough members agreed on their Borough priorities within the Joint Municipal Waste Management Strategy (JMWMS)



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



# **FUTURE VISION.**

In line with the JMWMS strategic outcomes, the West London Environment Directors Board established the future vision for West London in October 2019.



FINANCIAL STABILITY



BETTER TRANSPORT



CARBON NEUTRAL BY 2030



INCREASE RECYLCING



SMART CITY MODELS



A VIRTUAL SINGLE WASTE AUTHORITY



GREENING COMMUNITIES



COLLABORATIVE MODELS
IN THE SUB-REGION AND
PAN LONDON



#### **DECARBONISING WASTE.**

**WLWA HAS BEEN WORKING** to increase recycling and make good use of materials we handle. The first step was to divert waste away from landfill, our option of last resort. We are now diverting over 96% of our residual waste away from landfill and send mostly to energy-from-waste facilities (EfW) where the materials are turned into energy.

We are continuing to focus on waste reduction to remove waste from EfW and the Waste Minimisation team in place since 2010 has focused our attention on the waste hierarchy to minimise cost, reduce waste and reduce our carbon impact.

### THE JMWMS 2005-2020 REDUCED WASTE, INCREASED RECYCLING AND REMOVED WASTE FROM LANDFILL



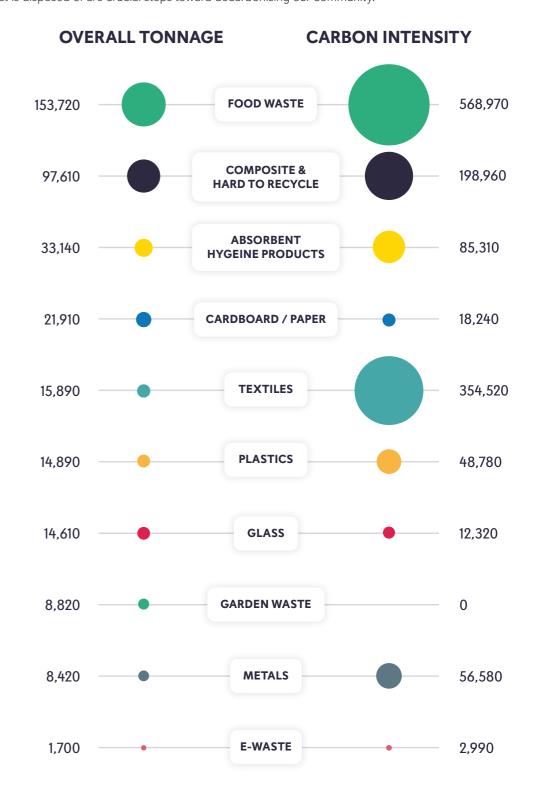
The Authority and Boroughs committed in 2005 to a Joint Municipal Waste Management Strategy (JMWMS) which included waste prevention, reuse, recycling, infrastructure and contracts. The action plans were reviewed and updated in September 2017 and approved by the Authority. The remaining key aims were to support boroughs to deliver a 50% recycling target and to ensure availability of appropriate waste treatment and recycling infrastructure to meet future needs.

The Authority developed a new three-year Business Plan which was approved in March 2017 and committed to develop a new JMWMS from 2020-2035 in partnership with the constituent Boroughs. We work closely with the Boroughs to ensure we are delivering their strategic priorities and vision through waste management.



#### UNDERSTANDING OUR WASTE.

**WEST LONDON WASTE** conducts waste composition analysis on a rolling 15-month basis to better understand the waste patterns, seasonality and to identify and prioritise the key areas. From this, we know that food waste makes up the largest proportion of waste in black bags. Food waste also has the largest embodied as a whole. Food production and consumption are responsible for around 30% of global carbon emissions. This is why reducing and recycling food waste is a key priority. We have also been focusing on textiles and absorbent hygiene products (AHP) in recent years as they are also carbon-intense materials. Helping residents to reduce waste and remove as much of them out of black bags, and making the most of what is disposed of are crucial steps toward decarbonising our community.



# RESPONDING TO COVID-19.

#### IMPROVING ENGAGEMENT WITH RESIDENTS.

#### **DUE TO THE INCREASING DEMAND**

for Household Reuse and Recycling Centres (HRRCs) during the pandemic. WLWA redeployed staff from other offices and created two new roles to provide better support to the on-site staff and bridge the gap between them and public engagement/education. These member of staff have good working knowledge of environmental issues and how they connect to waste and recycling. They conducted onsite survey to better understand more about how residents use our sites and identified a number of service improvement initiatives. Based on the information gathered on-site, we've:

 Custom-made diversion containers for recycling contaminants (i.e. materials that do not belong in that container):

- Installed iPads and provided 1-2-1 training for staff to be able to conduct surveys and gather data e.g. residual waste composition, common contaminants, service issues such as missed collections, journey distances made to site
- Enhanced the express green lane during peak season
- Educational signs encouraging the public to separate their recycling
- H&S interventions such as a site-wide pedestrian walkway and barrier system to the waste transfer station
- Shared best practice and training across West London recycling centres.



#### **BOOKING SYSTEM.**

BRENT COUNCIL AND WLWA implemented a booking system ahead of many other HRRC sites to manage very high service demand. The system proved to be very helpful in running the site efficiently and it helped address immediate health and safety concerns for residents and site staff over Covid-19. WLWA also introduced the booking systems to five other west London HRRCs. The booking system:

- Regulates the traffic to eliminate congestion issues, reduce pollution and improve health and safety
- Informs residents how to segregate items at the time of booking, improving recycling and reducing the time residents need to spend on site
- The data helps us see where kerbside recycling collections could be improved to reduce car trips to the HRRC
- Informs residents with bookings if the site needs to be closed in an emergency
- Helps us to understand usage patterns, and plan how to run the site more efficiently



#### **KEEPING EVERYONE SAFE AT HRRCS.**

**HEALTH AND SAFETY** is the single most important thing to manage on site. There is heavy machinery in operation and many vehicle movements. Covid-19 has added further multiple issues. During peak lockdown, traffic at Abbey Road increased by up to 300% causing overflowing traffic in the area and risking safety for the residents and our staff. We champion the importance of continuous training and development of staff at the same time as modernising our operations to increase efficiency. We've introduced iPads and online forms for health and safety reporting, and delivered refresher training for all staff.

- Zero COVID cases; an 'all-clear' result from HSE;
- High engagement with the new hazard reporting procedure following training for all staff
- New bespoke leadership training for site leaders, including how to implement COVID-19 measures
- Improved training for new drivers and refresher training for existing drivers
- Improved manual handling and reverse assistance training
- Updated accident reporting and investigation training for Chargehands
- Improved training on fire systems and spillage response



# LESS WASTE, MORE RECYCLING.

The key materials identified to decarbonise in the waste minimisation plan are food waste, textiles and absorbent hygiene products (AHP).

#### **FOOD WASTE.**

**OVER 30% OF THE** waste sent for disposal in black bags from west London is food, the largest single material in rubbish bins. Also, more than half of what is thrown away could have been eaten and was avoidable. Wasted food means wasted money and wasted resources that went into production and distribution etc. It also increases the cost of disposal. Food waste, therefore, is a key priority for West London and WLWA has been campaigning for food waste reduction and recycling.

In January 2020, we launched a project in partnership with our boroughs to increase the number of households with food recycling collections and the amount of food sent for recycling. A new website www.westlondonfoodwaste.com was created which is dedicated to food recycling containing useful videos and information to our residents. The campaign proved successful with all councils giving out their allocated stock of caddies & liners, demonstrating a real appetite for recycling food waste in West London.

- Approximately 15,000 caddies and over 12,000 liners were provided to residents between January and April 2020.
- A 12.5% increase in the weight food collected for recycling, from February to April 2020, compared to the same period in 2019.

- During 2020/21, WLWA worked with each of the Boroughs to identify key opportunities to create improvements in the capture and coverage of the food waste services. Each constituent council developed bespoke business plans and the Authority invested £3 million from our reserves into the further development of the food waste systems. The investment will provide west London residents more opportunities to recycle their food waste and improve infrastructure & resources to collect waste from flats, flats above shops & commercial properties.
- 113,000 new properties will be brought onto the food waste services, expecting to expand onto commercial properties in the future to improve the capture rate further, improve services to local businesses and reduce the amount of food waste in the residual waste.
- The project will incorporate new innovations and technological solutions in line with our smart cities models. We are working with partner Boroughs to continually maximise the efficiency of the service through smart routing and bin fill sensors to create carbon savings, efficient collections.







#### **TEXTILES.**

**TEXTILE IN PARTICULAR HAS** large embedded carbon and water impacts derived from their production process. Making the best use of textiles after their first use is an important way to decarbonise the industry. The WLWA handles up to 18,000 tonnes of textiles a year, which costs £2M to process.

WLWA successfully ran a large-scale swish event at the iconic Victoria & Albert Museum, alongside Global Fashion Exchange & The Arcadia Group to host a clothing swap and pop-up talks, to raise awareness of one of the largest waste streams in the UK- textiles. Over 500 people from our Boroughs attended the event and it has resulted in inspiring our residents to run their own events. WLWA provided equipment and support to the community groups and schools in West London to promote extending the lifecycle of clothing and supporting a circular economy.

To encourage textile reusing and recycling across West London, we partnered with TRAID to offer on-request home textile collections across Richmond, Harrow and Brent since 2018. The number of collection has been steadily increasing from 853 in 2018 to 1450 in 2019, and 796 in 2020 during a reduced service due to COVID.

In support of this campaign, West London Waste Authority and wedding dress brand, E&W Couture joined forces to produce a intricate upcycled wedding dress made from fabrics & offcuts donated by Arcadia Group & TRAID. The dress was won by a local resident by simply recycling textiles through the TRAID collection service. The campaign saw 2.15 tonnes of clothes donated to TRAID, which was over 7,500 items collected. These clothes have saved 20.5 tonnes of CO2 emissions and 3448m³ of water. The TRAID home collection service has been successful in Richmond, Harrow and Brent and can be rolled out to further boroughs

# ABSORBENT HYGEINE PRODUCTS / NAPPIES.

**WEST LONDON WASTE HAS** been helping residents find out more about the reusable alternatives for these items which are made using plastic composites and chemicals. There are many benefits to individuals and the wider community for switching to reusable alternatives which will reduce these single-use items. Around 9% of west London's household waste consists of absorbent hygiene products (AHP), such as nappies and sanitary pads. This costs around £700,000 to dispose of.

Since 2016 West London Waste has loaned reusable nappy packs to local families to try, whilst Covid-19 stopped us lending packs it helped us move to online engagement and start talking about reusable period products. This year our engagement has achieved:

- A number of workshops held at local schools
- Two online webinars about reusable nappies in February 2020
- 22 virtual 1-2-1 sessions trialled with West London parents a high number of participants talking up reusable products.











# **BULKY WASTE.**

West London Waste introduced a self-service bulky waste collection service after reuse and recycling centres across the country were temporarily closed during the early half of 2020. This presented WLWA and our borough partners a window of opportunity to trial a new type of 'on demand' collection service for residents that would allow us to...

- Take advantage of newly available technology
- Divert more materials from ending up as nonrecyclable waste
- Better understand the types of bulky items being discarded
- Explore ways to contribute to our region's carbon-reducing commitments

Once residents book a collection through the www.westlondonbulkywaste.com portal, a seamless end-to-end service allows them to book, pay, track progress and provide feedback of their collection. Powered in the background by our partner AnyJunk, the joint service allows us to collaborate in new ways with our boroughs as well as seek new opportunities to enhance borough services across the region.

In its first year of operation, our collection teams have completed over **1,300** home collections weighing in at over **20,000 KGS** – mostly during the lockdown period. Trialling an enhanced material sorting process at our waste site also allowed us to send **57%** of the collected material for reuse, recycling or treatment instead of it ending up as non-recyclable waste.

Residents are more aware of what they want from any service they use so, understanding how they feel about these services is key for measuring any improvement. Feedback on the service so far has provided valuable insight with **98%** of those who rated the service giving it 5-stars.

"A very efficient collection. Thank you so much for collecting my goods so quickly. Will definitely recommend your services to others"

"Super quick, no fuss & left area clean. Very happy customer, thank you!"

"Would 100% use again. Told me exactly when they were going to be there as well. Cannot fault the service"



# E-WASTE.

**WLWA COLLECTED TONNAGES HAVE** remained consistent over the last few years. As e-waste is the fastest growing waste stream, the amount of e-waste ending up in the residual waste stream is growing. West London Waste has been trialling collections of e-waste in an effort to reduce the amount in the residual waste.

A bookable free e-waste home collection pilot funded by DTS from DEFRA rolled out for six months from June to November 2018, across four wards in the London Borough of Harrow. The pilot yielded 8.21 tonnes of e-waste items collected from 522 households, equating to an average of 16.75kg per collection.

Our waste electrical 'Don't Bin it, Bring it' events make it easy for residents to recycle their small electrical items. By creating temporary collection points out into local community buildings it makes it easier for residents to recycle their broken & unwanted small e-waste instead of it ending up in the bin. 16 e-waste 'don't bin it, bring it' events across six boroughs collecting 2731 items equating to 2600 kg

- 7 Household Reuse and Recycling centres in West London accept household e-waste for recycling
- 32 small e-waste recycling banks in Ealing & Hounslow
- Library drop off points for e-waste across
   Richmond
- Trial in Harrow to collect e-waste with Textiles and if successful, will be rolled out to other boroughs

# HOUSEHOLD REUSE & RECYCLING CENTRE.

#### ABBEY ROAD RECYCLING CENTRE (HRRC)

provides a vital service to residents. It is a place for residents to bring their waste and it provides us with the opportunity to interact with residents and to intervene in sorting out waste before it is transported to the next destinations. We have been improving the site so that it is no longer seen as a typical 'tip' site, but a reuse centre. WLWA has been focusing on improving visitors experience and establishing a waste minimisation culture and capacity at the Abbey Road site.

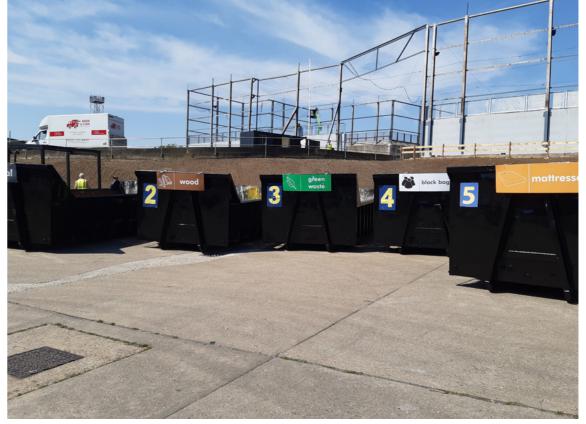
- Waste minimisation and increasing recycling reduce the cost of waste disposal
- A new Help & Information point and 7 large 'What happens to my recycling?' signs installed
- Diverted over 200 bikes for reuse and repair in collaboration with Townmead recycling centre
- Six new partnerships with local schools, charities and organisations leading to 2.5 tonnes of items diverted, 800kg of which has helped build two outdoor learning centres

- Custom-built diversion containers resulting in over 75 laptops and smartphones collected in support of Hubbub's Community Calling scheme and Restart's drive for laptops to keep students learning from home
- Staff training and development programmes resulted in increased customer satisfaction and staff morale
- The planting of a pollinator-encouraging wildflower meadow and hawthorn hedge, upcycled tyre planters and installation of 10 bird boxes (one has a family of Great Tits as of spring 2021!)
- Continuous improvement culture leading to the identification of more opportunities to recycle and reuse









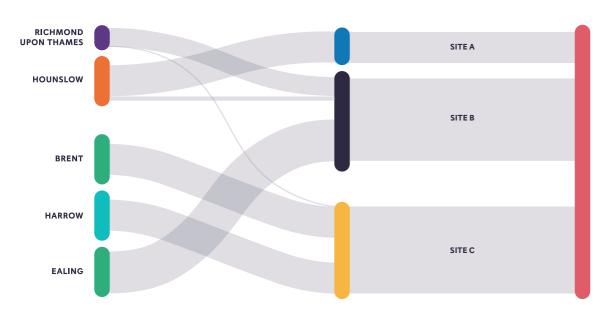


JOINT

## FINDING EFFICIENCIES.

**JOINING UP AND WORKING COLLABORATIVELY** across West London enables all Boroughs, operatives and residents to share in the benefits. The food waste value stream mapping exercises (VSM) were carried out intensively for all Boroughs during July 2020, which revealed that the existing systems had risks of duplicated efforts, missed saving opportunities, and limited resource and knowledge share opportunities. This intense VSM exercises identified a long list of projects to consolidate and harmonise the processes to realise more waste and carbon reduction whilst delivering potential financial savings.





- Optimised transport Low carbon, resource efficiency
- Shared use of sites Consistency, efficiency
- Shared contracts, procurement and management - Efficiency, cost saving
- Simple messaging Easy to understand, easy to explain



# JOINT COMMUNICATION.

**WEST LONDON WASTE** worked with our constituent councils on a joint communications project to increase the amount of food waste collected. By working together, we have developed a strong relationship and transformed how we communicate key messages to our residents.

WLWA provided a communication package for the Boroughs, including series of roadshows, displays, a digital kiosk, and customer service training guidance to engage with residents across our six boroughs.

Additionally, our 1.7 million residents received clear and consistent messages regardless of where they live. The food waste campaign focused on three different messages; 'do the right thing', 'climate change' and 'save money'. Whilst waste reduction and recycling are beneficial for all; motivations differ for our residents across west London. These key messages enabled the Boroughs and us to reach a wider audience, many of whom may not have been previously engaged with waste minimisation campaigns.

WLWA is working with smart technologies, including artificial intelligence and machine learning to help identify new efficiency projects and provide in-depth trend analysis to better predict impacts from interventions and external factors influencing the waste in our region. By sharing this technology & data across west London, we find newer ways to engage with residents and create innovative waste-reducing projects.

# **USING SMART TECHNOLOGY.**

#### DATA HUB FOR WEST LONDON BOROUGHS.

www uses an evidence-based approach to inform and drive efficiencies, policy changes and other key decisions. Data and information gathering and sharing between WLWA and the Boroughs enables us to identify effective and practical solutions and improvement opportunities for our services. We have been improving our internal capability to capture and analyse data and to provide training, guidance and support to the Boroughs.

- A new 'self-service' data hub was introduced for all west London boroughs in September 2020
- Development of strategic, management and operational reports to help Boroughs and internal colleagues to manage operations

SPEEDY REPORTING OF ABANDONED VEHICLES.

A NEW ONLINE-BASED reporting system has been introduced in October 2020 to enable quicker and more accurate reporting of abandoned vehicles. This new system resulted in fewer errors on the forms that reduced delays in collecting vehicles, better tracking of the progress and a quicker turnaround time for the contractor to remove vehicles from the streets. Additionally, as the system replaced paper-based reporting, it eliminated the need for paper/printing by all the Boroughs, reducing the environmental impacts and the associated costs.





# DECARBONISING OUR OPERATION.

**AT WEST LONDON WASTE,** we are embedding carbon reduction and sustainability into our business. Our organisation is reducing our carbon impact and continuing to look at new ways to reduce our emissions from our operations. We've so far achieved:

- Fleet replacement of 2 vans to a single electricpowered van
- Switching to renewable gas and electricity at our West Drayton office and the offices at Abbey Road
- Reduction of fuel usage for the mobile plant at Abbey Road by optimising usage
- Planting a hedgerow and wildflower meadow to improve biodiversity
- The digitalisation of internal forms and reporting process to reduce paper/printing usage.









REDUCTION OF FLEET & CHANGE TO ELECTRIC

REDUCING OIL USAGE AT ABBEY ROAD





# MANAGING FINANCES EFFICIENTLY.

WLWA is primarily financed by an annual levy on the constituent boroughs. Other income is generated from sources such as charges paid by businesses for the disposal of non-household waste. During the year, we raised an annual levy on the constituent boroughs of £60.4 million, an increase from £57.8 million in 2019-20. This reflects the increase in household waste volumes resulting from the pandemic.

The Authority's aim for 2020-21 was to continue delivering ambitious business plan objectives and at the same time to maintain the ability to deal with unexpected budget pressures. West London Waste has continued to achieve this target even throughout the Covid-19 pandemic. Looking ahead into the longer term, we will reduce waste to make savings and reinvest in projects to improve services, reduce waste further and increase recycling.

#### COST PER TONNE VS AVERAGE OF OTHER LONDON WASTE AUTHORITIES (£)







**OUR VISION** FOR THE FUTURE.



## **OUR 5-YEAR PROGRAMME.**

**WLWA WORKS CLOSELY WITH** the Boroughs at a strategic level to ensure we are taking a holistic approach to resource management and that we are supporting their overall sustainability goals. All 6 west London Boroughs have declared a climate emergency and set a target to be carbon neutral by 2030. Based on 8 key priorities the Boroughs jointly agreed, we've agreed the following priority areas for the next five years.

- Manage and automate waste data to share info in a timelier way
- Smart Cities Bulky Waste, Fly-tipping, streets, booking systems
- Transformation of HRRCs to create customer focused, future proof culture and space
- Food waste focus, delivering zero food in the residual waste
- Shared EPR collections and disposal strategy
- Double recycling infrastructure



#### CIRCULAR ECONOMY.

**IN 2021 WE WILL** be adding a circular economy plan to support green recovery and to support facilitating a circular economy in West London, reducing waste and increasing material recovery. The Circular Economy is about the way we produce and consume. As opposed to the traditional linear economy, which is based on a take-make-dispose pattern, the circular economy promotes and facilitates extension of the life of all the materials as long as possible through sharing, leasing, reusing, repairing, refurbishing and recycling and reduces the need to exploit raw and virgin materials which are limited/finite.

West London Waste has started to integrate circular economy principles into our thinking. WLWA will be implementing more exploratory projects to test the ways we can support green recovery and to facilitating a circular economy in west London, reducing waste and increasing material recovery. We will use these projects to understand what we need to change and demonstrate how this benefit can be achieved in West London. We will continue to work with the Boroughs, the sub-region and London and encourage collaborations to drive key changes such as redesigning of the infrastructure and systematic changes.

# WHAT IS CURRENTLY HAPPENING TO THEM?

# HOW SHOULD THIS HAPPEN IN THE FUTURE?

