



# Services and performance

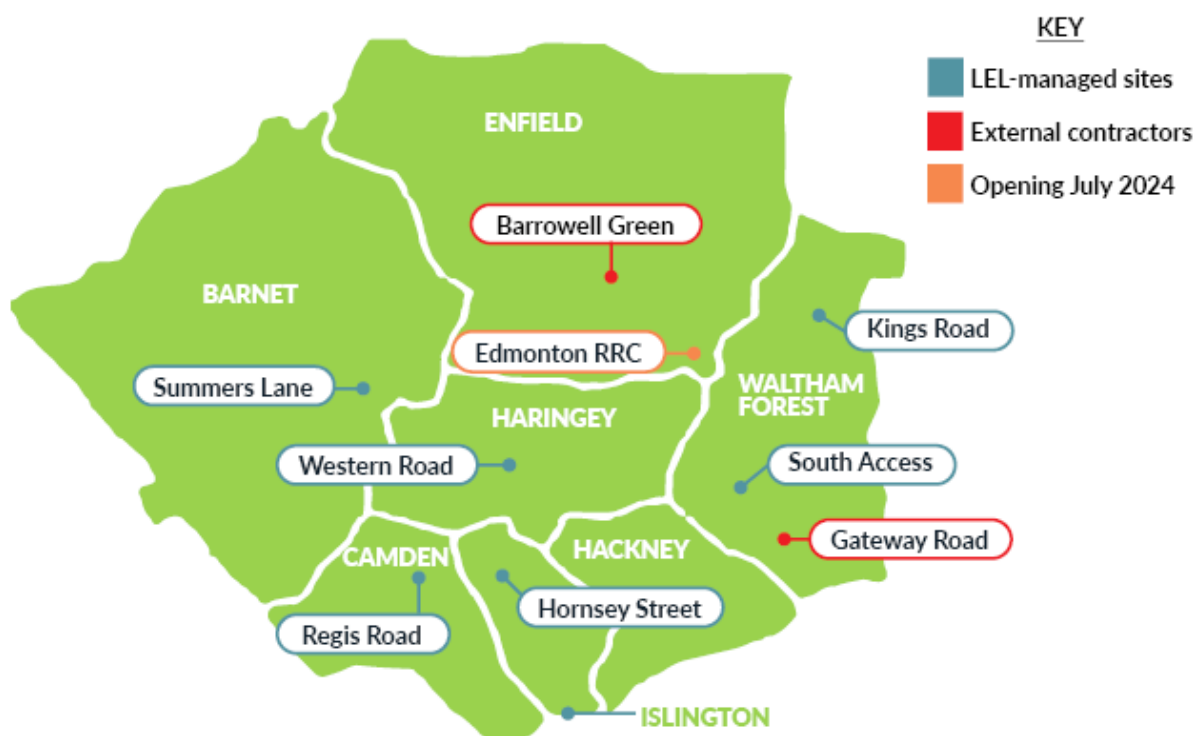
# Services and performance

NLWA manages both household and non-household waste collected by the seven boroughs.

Non-household waste includes waste collected under any commercial arrangements the boroughs have with local businesses to collect their waste, as well as fly-tipped waste collected by the boroughs. The tonnages in this report refer to total waste received by NLWA including both household and non-household waste.

The figures used in this document are provisional and based upon three quarters of actual tonnage and an estimated fourth quarter's data using an average of the first three quarters. This preliminary data will be adjusted once the numbers are finalised with the constituent boroughs for reporting to the national WasteDataFlow system.

## Reuse and recycling centres



NLWA-managed Reuse and Recycling Centres (RRCs) dealt with 39,402 tonnes in 2023/24. This is an increase of 6,279 tonnes compared to 2022/23. 72% of all NLWA RRC material was recycled, reused or composted.

The authority is committed to leading the way for recycling innovation and in 2023/24, we continued to expand the range of materials collected at our RRCs. We offer residents one of the most extensive ranges of recycling services available in London, enabling residents to manage their waste more sustainably and helping to support the circular economy.

We saw an increase in the number of mattresses collected, with around 9,000 mattresses being processed per month. A double mattress has a carbon footprint of 79kg, and most end up being thrown away within seven years. Fortunately, recycling schemes like NLWA's can make a huge difference in cutting down that waste and reducing the environmental impact.

	2022/23	2023/24
<b>Number of mattresses collected</b>	85,002	107,537

*Mattresses received for recycling at NLWA RRCs.*

NLWA's size and partnerships within the industry enable us to test market solutions for hard-to-recycle materials. We have worked in partnership with LondonEnergy Ltd (LEL) and the British Plastics Federation to offer a first-of-its-kind Expanded Polystyrene (EPS) recycling service at our RRCs. In 2023/24, the scheme diverted 5.34 tonnes of a light but difficult to recycle material from the residual waste stream and was shortlisted for the MRW National Recycling Awards.

We introduced trials for recycling hard plastics, which can be difficult to manage due to their complex composition and the lack of standardised collection services across London. The trial collected 104.89 tonnes of hard plastic in 2023/24 and will provide valuable insight into the effectiveness and economic viability of including them in future service offers.



*Hard plastics can be recycled at Regis Road in Camden and Hornsey Street in Islington*

Carpet recycling was rolled out after a successful trial. In its first five months of operation at South Access Road RRC in Waltham Forest, the specialist scheme collected 26 tonnes of carpet - measuring 15,000 square metres. Wool and nylon carpets can be turned into insulation, padding for mattresses, sleeping bags, backpacks and even coats. Polyester and polypropylene carpets can be used for plant pots, plastic bags, garden furniture or wheelie bins.

We launched a new trial service to encourage reuse at two of our RRCs in Waltham Forest and Barnet, offering a place for residents to deposit unwanted DIY materials and take them free of charge. The availability of free, usable DIY materials will keep items in use for as long as possible before they reach the end of their life. This new offer complements the existing Community Repaint scheme also available at the majority of north London reuse and recycling centres, which enables residents to drop off and collect leftover paint.

Material	2022/23	2023/24
<b>Tonnes of Expanded Polystyrene (EPS)</b>	0.9	5.34
<b>Tonnes of hard plastic</b>	0.0	104.89
<b>Tonnes of carpet</b>	0.0	26.85
<b>Tonnes of DIY for reuse</b>	0.0	91.79

*Tonnes of specialist recycling received at NLWA RRCs.*

In response to the rapid rise in disposable vape and nitrous oxide canister waste and concern over the environmental impact of their incorrect disposal, in 2023/24 we worked with our contractors to find a disposal solution for these notoriously littered items.

NLWA will continue to work with LEL and other industry partners to improve the resilience of these specialist recycling services and identify opportunities to expand our RRC recycling offering for residents. These specialist recycling opportunities will enable us to manage materials more efficiently, support the circular economy and tackle the climate emergency.

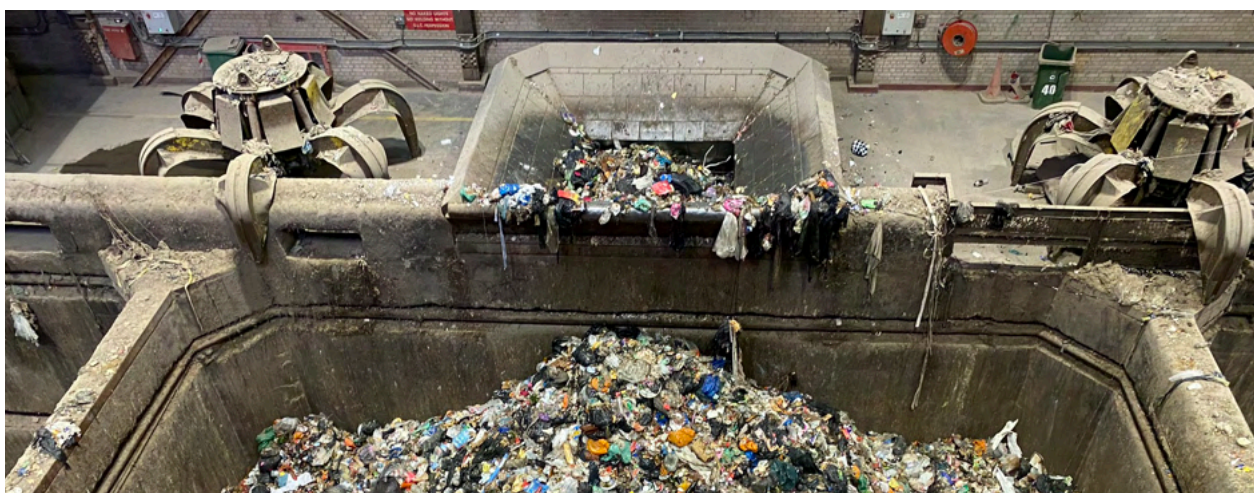
## Organic waste

Organic waste comprises food waste, garden waste and BioK (garden and food waste combined).

Enfield Council's organic recycling figures were included in NLWA totals from April 2023 and partially explains the increase in organic waste tonnages, alongside a wetter summer in 2023 compared to 2022.

	2020/21	2021/22	2022/23	2023/24
<b>Food</b>	10,586	12,931	11,854	18,776
<b>BioK</b>	14,901	14,512	11,976	12,394
<b>Garden</b>	16,973	20,230	18,303	26,286
<b>Total organic</b>	<b>42,460</b>	<b>47,673</b>	<b>42,133</b>	<b>57,456</b>

*Total tonnes of organic waste received from all boroughs.*



A waste bunker at the Edmonton EcoPark

## Dry mixed recycling

Dry mixed recycling (DMR) is a mix of plastics, paper and cardboard, metals, and glass which is sorted into component materials and recycled. NLWA manages a contract with Biffa to process the recycling collected by our seven constituent boroughs. From April 2023, Enfield Council's DMR became part of the Biffa contract, so this is the first year that NLWA has managed all seven boroughs' recycling.

	2020/21	2021/22	2022/23	2023/24
<b>Total tonnes (excluding Enfield)</b>	117,728	113,685	108,909	106,849

*Total tonnes of DMR received from boroughs excluding Enfield.*

The table above shows that, when excluding Enfield's tonnages, DMR delivered by our boroughs reduced by 2,060 tonnes compared to 2022/23 figures. This change could reflect producers favouring lighter material in response to consumer demand and in preparation for the introduction of Extended Producer Responsibility (EPR) requirements for packaging. DMR materials are susceptible to economic conditions and are impacted by changing consumer purchasing habits, potentially impacted by cost of living.

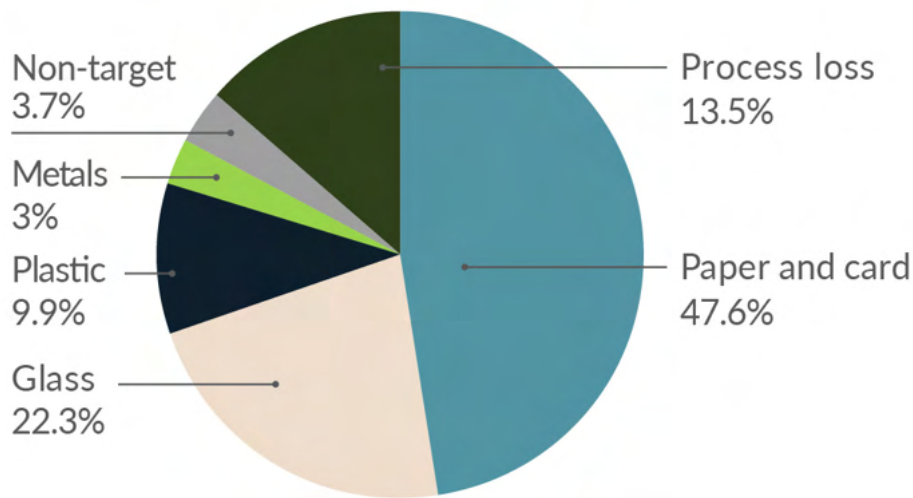
The table below shows the total DMR for 2023/24 was 124,414 tonnes and reflects the inclusion of Enfield's recycling in the NLWA total.

	2020/21	2021/22	2022/23	2023/24
<b>Total tonnes (including Enfield)</b>	117,728	113,685	108,909	124,414

*Total tonnes of DMR received from all boroughs.*



## Dry Mixed Recycling composition



Composition of DMR processed by NLWA.

Process loss encompasses items which have been put in recycling bins but cannot be recycled, like nappies, or where recycling has been contaminated with materials like food. This year saw a 1.5% increase in process loss, which suggests that residents may be putting more dirty or unrecyclable items in their recycling.

## Recycling Income

NLWA receives an income per tonne of material recycled. A “basket price” is calculated based on tonnages and values of different materials. The value of this income per tonne remained stable in 2023/24, with the quarter four value being £40.90.

Whilst some material prices, such as glass, increased in 2023, paper and card prices have remained relatively low, and HDPE plastic prices have reduced.



Income from DMR per tonne.

## Recycling destinations

NLWA recognises the importance of dealing with our waste and materials as close as possible to the point where they are collected (the Proximity Principle). Since March 2020 we have worked with Biffa to reduce the amount of recycling processed overseas, with a commitment of 100% UK destinations by 2030.

In 2023/24, 100% of our metals, plastics and glass were processed in the UK which shows an improvement on 2022/23 levels. There was an increase in the amount of cardboard processed in the Far East compared to last year (from 6% to 28%) largely due to external market factors that have led to the reduction of cardboard recycling capacity in the UK and Europe. Despite a slight increase on last year's figures, volumes processed in the Far East remain lower than they were in 2020 and 2021 (100% and 69% respectively).

## Third party recycling and reuse credits

NLWA offers reuse and recycling credits to third party organisations that remove items from the residual waste stream that would otherwise have been sent for disposal at our expense. In 2023/24 the value of the third-party credit was £86.15 per tonne.

Nine charities took advantage of the scheme this year, receiving credits worth a total of £187,820. Between them, these charities collected 2,180 tonnes of furniture, textiles and books for subsequent recycling. This was a decrease from 2,254 tonnes on the previous year.

## Waste electrical and electronic equipment (WEEE)



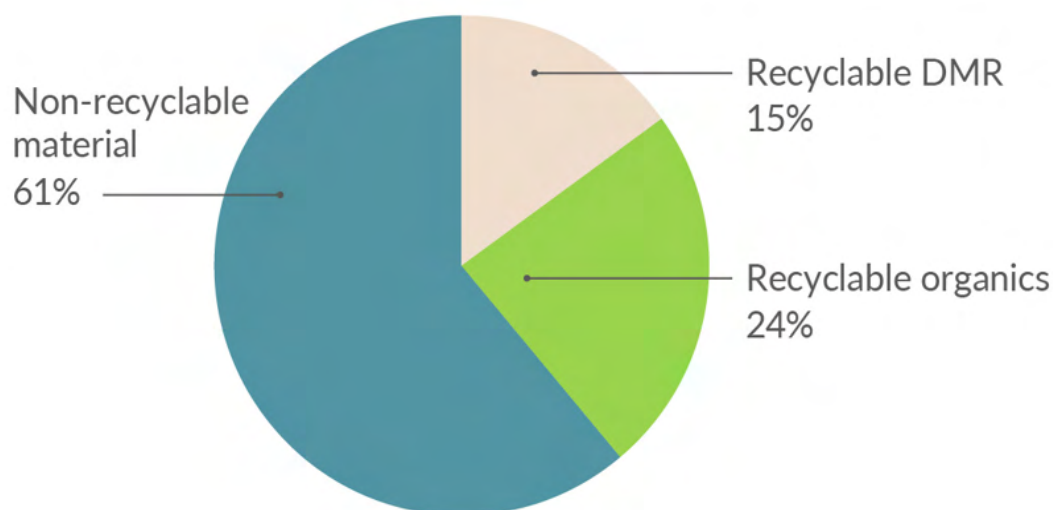
*Electrical recycling being processed at SWEEEP Kuusakoski in Kent*

NLWA provides kerbside collections of WEEE from five of our seven constituent boroughs (excluding Hackney and Haringey). During 2023/24 the service, operated by Clearabee, collected 85 tonnes of WEEE, an increase of seven tonnes on the previous year.

Residents delivered 2,747 tonnes of WEEE to our network of RRCs during 2023/24, an increase of 245 tonnes when compared to 2022/23.

## Residual waste services

A recent composition analysis of north London's waste revealed that 39% of material found in residual waste bins would have been theoretically recyclable at the kerbside if it had been separated, cleaned as necessary and residents had access to food waste collections. The majority of recyclable material is food waste. However, not all residents have access to food waste recycling services. In north London, the majority of residents live in flats or homes with shared facilities. This provides significant challenges in providing easily accessible food waste recycling infrastructure and driving up participation in the service once it is in place.



### *Composition of residual waste received by boroughs.*

All residual waste was treated through energy recovery in 2023/24 meaning the authority achieved a 0% landfill rate. This compares to 0.6% of residual waste being landfilled in 2022/23.

NLWA recognises the importance of managing waste further up the waste hierarchy and as an organisation our primary goal is waste reduction. The most effective way to limit the environmental impacts of waste is to produce less waste in the first place.

National performance indicators look at the average amount of household residual waste produced per household within an area. The table below shows that, in north London, household residual waste per household increased slightly in 2023/24 compared to 2022/23.



From 2022/23, NLWA changed the way borough declarations of non-household waste are accounted for in WasteDataFlow to provide greater transparency and accuracy of reporting. This in part justifies the notable reduction in residual waste per household between 2021/22 and 2022/23 and explains why the 2023/24 number remains significantly lower than in the years prior to 2022/23. It should be noted that this year's figure is subject to change as the calculation uses property numbers from the government's WasteDataFlow system which have yet to be updated for 2023/24.

	2020/21	2021/22	2022/23	2023/24
<b>Residual waste per household (kg)</b>	575.6	581.8	497.6	514.6

*NLWA household residual waste per household.*

In 2023/24 we dealt with 563,508 tonnes of residual waste. This is an increase of 6,414 tonnes on 2022/23. Residual waste tonnages are impacted by a number of factors including economic growth and housing type. Numbers are beginning to normalise following a period of decreased tonnage because of the Covid-19 pandemic and reduced economic activity and spending.

	2020/21	2021/22	2022/23	2023/24
<b>Total tonnes</b>	570,394	573,359	557,094	563,508

*Total tonnes of residual waste received from all boroughs.*

The recycling rate is the proportion of total household waste by weight which is recycled, reused or composted. For 2023/24 the NLWA recycling rate is 28.8%. This is in line with national trends of stagnating recycling rates as overall waste production and residual waste treated has increased. This trend is likely to continue as legislative changes, such as the Deposit Return Scheme (DRS), take recyclable materials out of local authority managed waste and producers move to lighter materials in preparation for packaging Extended Producer Responsibility legislation.

## New infrastructure

New infrastructure at the EcoPark delivered by the North London Heat and Power Project (NLHPP) will be owned by NLWA and operated by LEL. In 2023/24 the Authority signed a new contract with LEL for the operation and maintenance of the EcoPark's Resource Recovery Facility (RRF), public Reuse and Recycling Centre (RRC) and EcoPark House, a community and education space. The new LEL contract includes a complete complement of operational, maintenance and asset management requirements - specified to achieve the long-term waste and recycling services required by residents.

The first of these assets, the RRF, went into operation on 15 March 2024. The RRF, which has capacity to manage 374,000 tonnes of waste annually, is designed to bulk recycling and organic waste for onward transport to processors, extract recyclables from residual waste and prepare non-recyclable bulky waste for energy recovery.

Delays to the waste reforms mean the impacts of upcoming legislation on north London's waste remain uncertain. The new facilities provide NLWA with the capacity and flexibility to manage changes in volumes and composition of waste loads in the future.

The RRF has been designed with safety in mind. Tipping from an external apron into the facility through fast closing doors ensures borough vehicles are kept separate from the operational machinery, removing many of the dangers associated with operatives and vehicles working in close proximity of LEL's operational plant. This delivers a significantly safer environment for borough collection teams.



*An artist impression of EcoPark House*

The new facility boasts a Supervisory Control and Data Acquisition system (SCADA) that supports automated management of Environmental, Safety and Operational Management Systems that contribute to achieving high standards in Environmental Quality and Safety. The SCADA is an integral part of the Air and Odour control system that changes and filters air inside the facility four times every hour. This is vital in removing small particulate matter including Persistent Organic Pollutants (POPs) found in soft furnishings.