

NORTH LONDON WASTE AUTHORITY

REPORT TITLE: NLHPP PROGRAMME UPDATE AND REPORTS

REPORT OF: PROGRAMME DIRECTOR

FOR SUBMISSION TO: PROGRAMME COMMITTEE

DATE: 3 JUNE 2019

SUMMARY OF REPORT:

This report provides Members with an update on progress of the North London Heat and Power Project (NLHPP) programme as at the 26 April 2019. It presents a summary of the latest information across key areas of the programme, including health, safety and wellbeing, stakeholder engagement and progress of the individual projects.

RECOMMENDATIONS:

The Committee is recommended to:

- A. Note the contents of this report;
- B. Provide comment on the North London Heat and Power Project (NLHPP) sample dashboard report.

SIGNED:  **Programme Director**

DATE: 20 May 2019

1. INTRODUCTION AND PURPOSE

- 1.1. North London Heat and Power Project is the programme of works authorised by Development Consent Order granted in February 2017 through which the existing energy from waste (EfW) plant at the Edmonton EcoPark will be replaced with a new Energy Recovery Facility (ERF). The programme of works includes provision of a Resource Recovery Facility (RRF) for reception of waste, and incorporating a public Reuse and Recycling Centre, and EcoPark House, a visitor centre which will be used to provide community / education space and back up office space.
- 1.2. This status report provides Members with an update on progress of the NLHPP programme using data now being generated on a routine basis. This report reflects the status of the programme on the 26th April 2019, the end of the most recent reporting period. The format of this update is in the form of a standard Member report. It is proposed, however, that a programme specific “dashboard” type report is presented routinely in future. The proposed template for this, which will undergo further development over time, is included in Appendix A.

2. HEALTH, SAFETY & WELLBEING

- 2.1. The NLHPP programme is focussing on the health, safety and wellbeing as its number one priority. To this end our programme wide strategy has been established and is being implemented through the development of an associated management plan. This will cover how the team encourage safety in design, through our procurement activities and in all activities on site.
- 2.2. As part of this, the Health and Safety Executive (HSE) were invited to Berol House and our Laydown Area (East) construction site in early May, where the team briefed them on our approach and plans. Overall the HSE were pleased to see that we are going beyond discharging the Client duties specified in the Construction (Design and Management) Regulations 2015 and are actively promoting health, safety and wellbeing as number one priority.
- 2.3. Buckingham Group, the Laydown East contractor, made a positive start with health and safety management on the site. However, a number of recent observations have been notified by the programme management team. The nature of some of the observations has led to the Programme Director making contact at senior level in Buckingham Group to seek assurance that matters will be dealt with. Close monitoring of this situation will continue.

3. STAKEHOLDER ENGAGEMENT

- 3.1. The second Community Liaison Group (CLG) meeting was held on 27 February and key points of concern included night time working on the programme and provision of information to local communities, including through roadshows. While the Code of Construction Practice which forms part of the Development Consent Order approval does not allow night time working, this is possible if an application is made to LB Enfield and is approved. Measures are in place to notify local residents in advance of any planned night time working. The next Community Liaison Group meeting will take place on Wednesday 5 June 2019, after a tour of the EcoPark.

- 3.2. Road show material has been prepared and copies are attached to this report at Appendix B. This material will be used for invitational days, the first taking place on 21 May 2019 and the second on 5 June 2019. These invitational events are taking place at the EcoPark and will provide an opportunity for a tour of the EcoPark and an update on the NLHPP. Invitations for these days were sent to members of the Community Liaison Group, to local councillors, and to borough officers.
- 3.3. On 24 April officers presented the NLHPP to “Residents of Edmonton Angel Community Together” (REACT), a residents’ organisation in Upper Edmonton. The Chair and Vice Chair of REACT attend meetings of the CLG. Key concerns raised at the meeting included the impact of the works on the local neighbourhood; there had been a previous presentation on the Meridian Water development, and attendees repeated concerns raised at the first CLG meeting about the combined effect of these two developments. Officers have contacted the relevant officers at LB Enfield to seek to manage and reduce any disruption from cumulative works. Other issues raised included the possible benefits for the area from the project, and the proposals for apprenticeships, training and local employment advertising were explained.
- 3.4. There has been significant reporting on climate change in the last month, which has led to queries on both the climate change impact of the proposed ERF and also whether it will reduce incentives for recycling. Using energy recovery, the new facility will save the equivalent of 140,000 tonnes of carbon dioxide (CO₂) compared with sending residual waste to landfill, which is the alternative route for disposal. While not directly climate related, it is also a major environmental factor that the new facility avoids using land to take waste almost of the volume of Wembley Stadium each year. Moreover the new facility will generate 78 megawatts of power (enough for 127,000 homes) which avoids the environmental impact of greenhouse gases associated with generating that power if there were no such facility. Claims have been made that the new facility will reduce incentives to reduce and recycle waste. Members will be aware that waste reduction remains at the heart of the Authority’s work and that the facility has been designed on the basis that substantial progress is made to reduce residual waste as a proportion of north London’s overall waste.

4. PROJECT STATUS

- 4.1. The NLHPP programme has been structured as a series of projects. The status of each is presented below.
- 4.1.1. E1a1 (Laydown Area East) – Construction is progressing on site and is due to be completed in August 2019, 12 days behind the baseline schedule. The programme team has considered the potential risk of contractors taking longer than planned to complete works and have allowed for this in the NLHPP baseline. As a consequence, this short delay will not have any impact on subsequent activities.
- 4.1.2. **E1a2 (Laydown Area West and Eastern Access):** The Invitation to Tender (ITT) was issued on 26 April 2019, in accordance with the baseline schedule.

- 4.1.3. **E1b (Northern Access):** The ITT was issued on 10 April 2019, in accordance with the baseline schedule.
 - 4.1.4. **E2a (Transport Yard relocation):** Progress is being made with negotiating a temporary lease for land with LB Enfield, that will be used for operational purposes by LEL during the works on site. Preparatory works on this land will follow agreement of the lease.
 - 4.1.5. **E2b (Sewer Diversion Enabling Works):** The ITT is planned for issue on 31 May 2019, subject to progress on the Transport Yard lease negotiation. The procurement is being planned for intrusive surveys to accurately chart the existing utilities on site and inform the design of the Sewer Diversion Enabling Works.
 - 4.1.6. **E2c (Sewer Diversion Main Works):** Selection Questionnaire evaluation is finalised and feedback reports have been prepared, informing the decision of parties to be invited to tender. ITT documents are being finalised.
 - 4.1.7. **E3 (RRF):** A Market Information day is scheduled for the 18 June 2019 prior to procurement formally commencing. Reviews are underway to ensure that the design meets the requirements of the programme and offers the best possible value for money asset.
 - 4.1.8. **E4 (Utility Corridor and Main DNO connections):** Engagement with UKPN (electricity), Cadent (Gas) and Thames Water (Water) are ongoing to confirm timescales for the supplies to be constructed and commissioned.
 - 4.1.9. **E6 (EcoPark House):** Reviews are underway to ensure that the design meets the requirements of the programme and offers the best possible value for money asset. The design will then be developed into procurement documents.
 - 4.1.10. **E7 (ERF):** Design work is progressing in preparation for discharge of DCO requirements and procurement commencing. A project execution plan is also being developed to guide the management of the project.
 - 4.1.11. **E8 (EfW demolition and decommissioning) and E9 (Southern Access widening):** These have no current activities underway but are being kept under review.
- 4.2. In addition, a site-wide “Construction Management Plan” is being developed in collaboration with LEL. This will set out the working arrangements to coordinate the operational and construction activities to avoid disruption to operations, and will, be included in the lease agreement with LEL.

5. COST

- 5.1. The programme’s cost management system has now been implemented, using the baseline developed in early 2019 as the budget for reporting purposes. Reports are now being generated routinely, and both expenditure and forecasts monitored and assessed by the team.

5.2. The programme is currently forecasting within the baseline budget.

6. SCHEDULE

6.1. The NLHPP team have developed an integrated schedule which is used to plan programme activities. Progress against this is updated at the end of each reporting period (periods run between the last Friday of each calendar month). The following milestones (reflecting significant points in delivery) have been identified and highlighted for Authority awareness, along with progress against them.

6.2. Works associated with the sewer diversion are currently showing behind schedule. To mitigate further delays, additional survey works are being undertaken to increase understanding of the utility diversions required (thus reducing the time needed by the contractor on site) and a review of the order of activities in conjunction with the transport yard relocation is being undertaken.

Milestone	Baseline Date	Current Forecast	Variance (days)
E2a Transport Yard relocation	03-Apr-20	03-Apr-20	0
E2b: Sewer Diversion (Enabling Works) Complete	28-Feb-20	16-Apr-20	-34
E2c: Sewer Diversion (Main Works) Complete	12-Apr-21	30-Apr-21	-14
E3: RRF Construction Complete	31-Mar-23	31-Mar-23	0
E3: RRF (Northern Area Demolition)	31-Mar-23	31-Mar-23	0
E7: ERF Construction Complete	20-Mar-25	20-Mar-25	0
E7: ERF Takeover	19-Dec-25	19-Dec-25	0

Milestone	Baseline Date	Current Forecast	Variance (days)
E7: ERF Full Operations	21-Dec-27	21-Dec-27	0
E8: EfW Demolition Complete	19-Jun-30	19-Jun-30	0
E9: Southern Access Widening - Complete	14-May-31	14-May-31	0

7. RISK

7.1. A robust and substantial risk register has been developed and risk management protocols put in place across the programme. The following items are highlighted as key risks to the overall programme which are a focus for the management team.

Risk Title	Risk Event	Project Consequence	Mitigation plans
Health & Safety Management	A major accident / incident may occur during delivery	Potential harm to colleagues, significant negative publicity and delay associated with investigations.	Establish NLHPP Health & Safety strategy. Implement strategy at Project & Contract level.
NLHPP / LEL coordination	NLHPP / LEL interface may result in unforeseen disruption	Potential failure in LEL operations and associated disruption to construction works.	Sustained senior NLHPP engagement with LEL to agree site management protocols
Negative public perception	Reputation of the NLWA is negatively impacted through actions/ inactions of the programme.	Delay to site works through public activism and/or delay to decisions due to additional levels of scrutiny	Implement NLHPP communications campaign of project benefits.
Transition to full operations	Transition activities prove more complex than expected and/or are not delivered effectively.	Critical path activity meaning any delay will impact overall programme.	Agree commissioning requirements and establish robust commissioning strategy.
Poor Industrial relations	Disputes or strikes arise with contractor or operational resources e.g.	Resource stand-down during works. Potential increase in cost either	Complete assessment of current industry trends in employment relations and establish

Risk Title	Risk Event	Project Consequence	Mitigation plans
	divergent compensation schemes.	through delay or temporary resource.	recommendations for NLHPP

7.2. The following are key risks identified as “proximity” risks, i.e. they will either occur or require mitigation actions in the next 3-6 months. They are therefore being actively managed.

Risk Title	Risk Event	Project Consequence	Mitigation plans
Transport Yard Relocation	Feasible Transport Yard options for relocation may be unavailable to programmed timescales.	Delay to commencement of sewer diversion works and consequential impact on NLHPP schedule.	Pursue multiple commercial targets and continue agent search for alternative options.
Extent of utility diversions	Unexpected utility, services encountered during site works.	Delay to construction works and consequential costs.	Commence site investigation works in advance of contractor site access.
Construction interface with LEL operations.	Scale of construction may impact LEL operations more than expected.	Disruption to LEL operations which will result in delay to construction works and consequential costs.	Agree protocols for Contractor/LEL site management.

8. CHANGE MANAGEMENT

- 8.1. A change management process has been developed and implemented to provide a systematic, centralised and consistent approach to identify, assess and control change to the programme. This is intended to provide a robust and clear audit trail of changes made to the programme’s baseline and will allow a definitive picture of current scope (and associated cost/schedule/risks) to be understood at any given point.
- 8.2. The process will be used to control any changes to the baseline budget, schedule and scope whereby all changes will be evaluated critically in terms of their impact before a decision is made and provides the mechanism for drawing down on the programme’s contingencies. The levels of authorisation within the project team will be determined first by the delegation given to the Programme Director by Members when approving a procurement or the letting of a contract, and then by an appropriate level for specific roles within the project, based on the potential impact of the change.
- 8.3. Due to the nature of a large, complex programme like this, there will be many changes arising over the course of delivery. This should be considered a strength of the management, that changes are notified, controlled and proactive decisions

made, and the volume of change not itself be a concern to the Authority. Due to the potential volume, only changes of significance to the programme baseline will be reported to the Authority routinely. It is envisaged that these would be changes of a high cost or time impact or those that introduce significant risk. The full register of changes would be available to any Authority member upon request.

8.4. At the point of drafting this report, no significant changes have been approved.

9. COMMENTS OF THE LEGAL ADVISER

9.1. The Legal Adviser has been consulted in preparation of this report and has no comments to add.

10. COMMENTS OF THE FINANCIAL ADVISER

10.1. The budget and prudential indicators approved by the Authority in February 2019 was prepared before the programme baseline was complete. The programme baseline, updated for the latest forecast changes will be captured in the budget update presented to the Authority meeting in June.

Contact officer:

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London N17 9LJ

APPENDIX A: NLHPP - SAMPLE DASHBOARD REPORT



Programme Committee

NLHPP – Sample Dashboard Report



Summary Narrative



Completed within previous period:	Look ahead for next period:
Not achieved in previous period:	Issues for resolution:

H&S Summary



Health and Safety

	Lost Time Incidents	Significant Incidents	Low level Incidents	Near Miss	Hazard / Low	Hours Worked	Days Without Incident	Accident Frequency Rate	Senior Managers H&S Tours
This Period									
Cumulative									

H&S Trending / Top 5 Hazards across PROJECT

Last Month									
This month									

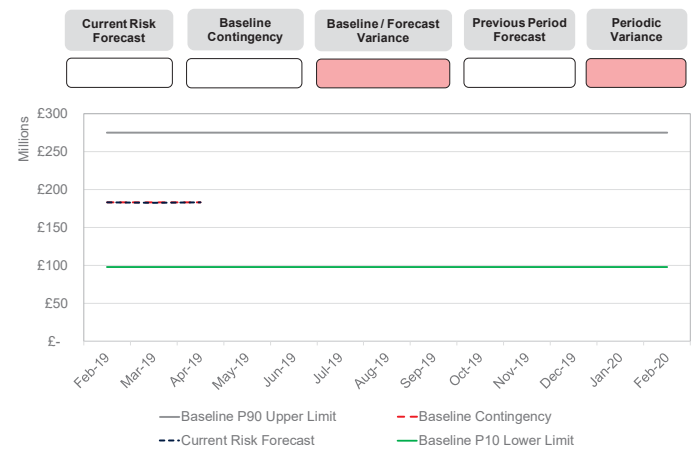
Activities over the last reporting period

Risk Summary

Project Risk Profile

	Baseline P50	Current forecast (P50)	Explanation of Movement
Programme Wide			
E1a1 (Laydown Area East)			
E1a2 (Laydown Area West & E1b (Deephams Farm Road)			
E2a (LEL Transport Yard)			
E2b (Enabling Works)			
E2c (Sewer Diversion)			
E3 (Resource Recovery Facility)			
E4 (Utility Bridge and Corridor)			
E6 (EcoPark House)			
E7 (Energy Recovery Facility)			
E8 (EiW Decommissioning and E9 (Southern Access Widening)			

Current quantitative assessment of risk across Programme



Key risks (project & programme) by impact and proximity (next 12months)

Owner	Project	Risk Description	Score	Mitigations

Risk Register Summary Statistics

Summary Statistics						
	In-period active risks	Risks raised in period	Risks closed in period	Risks Expiring Next Period	Actions due next period	Actions over-due
NLHPP TOTAL						

Period Commentary

Achievements in the period:	Planned Activities in the next period:
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Scoring Matrix / Key
Probability X Impact results in a score and RAG status.

Risk distribution (Prob. x Impact)				
1	0	0	1	1
6	10	14	14	2
21	38	24	17	8
54	52	31	25	19
3	6	1	1	1
VH	H	M	L	VL
Impact				

Period Summary:

Top Risk commentary:

Schedule Summary



Activity	Baseline 01-Mar-19	Prev Period	Period Forecast	BL Var (d)	Period Var (d)	Period Commentary* Red - Critical Path
E1a1: Laydown Area East Handover Complete (E1a1-A8010)				⇒ 0	⇒ 0	
E1a2: Laydown Area East/West Operational Commencement (E1a2-A9000)				⇒ 0	⇒ 0	
E1b: North Eastern Access Operational Commencement (E1b-A9000)				⇒ 0	⇒ 0	
E2a: Transport Yard Permeant Relocation (TY-A8040)				⇒ 0	⇒ 0	1
E2b: Sewer Diversion - Enabling Works - Transition & Commissioning Complete (E02-EW-A8020)				⇒ 0	⇒ 0	2
E2c: Sewer Diversion - Main Works Construction Complete (E02-A8100)				⇒ 0	⇒ 0	2
E03: RFPF and RRC - Operational Commencement (E03-A9000)				⇒ 0	⇒ 0	1
E03: RRF Complete inc Northern Site (East) demolition & remediation - Complete (E03-A7300)				⇒ 0	⇒ 0	2
E4a: PW - Construction Complete (Bank Stabilisation; UKPN Ducts; Cadent Sleeves; Road Crossing Culverts) (E4a1-A9000)				⇒ 0	⇒ 0	
E4d: Medium Pressure Gas Main (MPG) - Operation Handover Complete (E04d-A9100)				⇒ 0	⇒ 0	
E4e: UKPN - Grid Connection Complete (Available to ERF) (E4e-A9000)				⇒ 0	⇒ 0	
E6: Eco Park House Operational Period Complete (E06-A9010)				⇒ 0	⇒ 0	
E7: ERF - TAKE OVER (O&M engaged in operations) (E07-A8090)				⇒ 0	⇒ 0	3
E7: ERF - FINAL TAKE OVER (Final Certificate) (E07-A9050)				⇒ 0	⇒ 0	3
E8: Energy for Waste (EfW) Re-Instatement Operational Acceptance Period Complete (E08-A9510)				⇒ 0	⇒ 0	
E9: Southern Access Widening - Operational Handover Complete (E09-A9050)				⇒ 0	⇒ 0	

APPENDIX B: NLHPP - ROAD SHOW MATERIAL



Modernising Edmonton EcoPark

We are building a flagship facility to continue recovering energy from waste for the community in north London. This will be one of the most efficient and advanced facilities of its kind in the UK.

Over 21 million tonnes of waste have been successfully diverted from landfill since energy from waste treatment started nearly 50 years ago in north London. The current facility is reaching the end of its useful life and we now need to invest in a replacement.

As a result of public consultation, the Government approved the construction and operation of a new energy recovery facility at Edmonton EcoPark. This will enable us to continue managing the waste that cannot be recycled in a sustainable and cost-effective way.

North London Waste Authority is responsible for treating the waste left after recycling, providing good value to the residents of north London.



Indicative image of the Energy Recovery Facility

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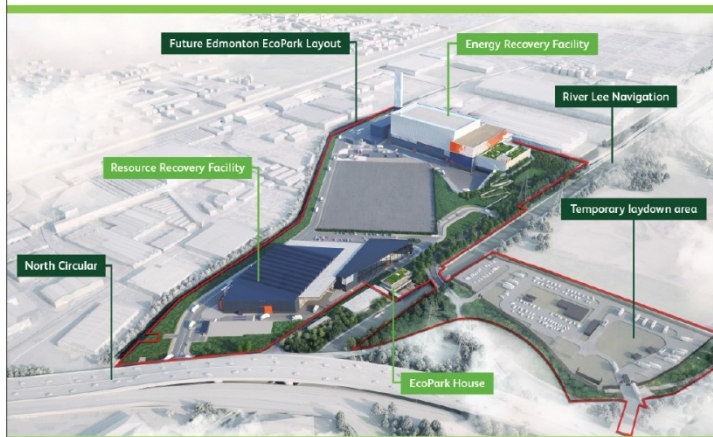
Over the next ten years we are building:

- **Energy Recovery Facility** to generate low carbon energy from waste, in the form of heat and power.
- **Resource Recovery Facility** with an area to process bulky waste and prepare materials for energy recovery, including a **Reuse and Recycling Centre**, for use by the public.
- **EcoPark House** on River Lee Navigation including a visitor and education centre.



Our project will allow us to:

1. Generate **78 megawatts** of power from waste which can supply electricity and heat for up to **127,000 homes**.
2. Save the equivalent of **140,000 tonnes of CO²** every year using energy recovery rather than disposing to landfill. That's like taking **60,000 cars** off the road.
3. **Improve air quality** in north London with a current plant that operates **20% better** than the permitted levels of nitrogen oxide and the new facility performing at more than **60% better**.
4. Support an impressive programme for over **100 apprenticeships** and **225 skills training** opportunities for the local community.
5. Create over **2,500 job opportunities** during construction and operation, further boosting the local economy.
6. Treat waste for over **2 million residents** in the **most cost-effective** way.



northlondonheatandpower.london
020 8489 3940
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Construction

Building this scheme for the community we will adhere to the considerate constructors scheme and deliver this project safely, on time and cost-effectively.

Construction activity will usually take place between:

8am and 6pm on weekdays
(Monday-Friday excluding bank holidays)
and **8am to 1pm on Saturdays.**

We will provide advance notice to neighbours if any work outside these times is required. The health, safety and wellbeing of everyone involved in the scheme and those working and living in the local community is the number one priority for us.

We will provide regular community newsletters about the project and construction updates. These can also be found on our website northlondonheatandpower.london



Indicative image of the new facility from the North Circular

Approximate Construction Timetable



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info@northlondonheatandpower.london





Indicative image of EcoPark House

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Approximate Construction Timetable

2018	Procurement of contractors begins
2019	Prepare the southern section of the site (the area south of the existing plant)
2020	Resource Recovery Facility and EcoPark House construction
2021	Prepare the northern section of the site (the area north of the existing plant)
2022	Construction of the Energy Recovery Facility
2023	Energy Recovery Facility commissioned
2024	Existing plant decommissioned and demolished
2025	Final Site works

We will provide regular community newsletters about the project and construction updates.

These can also be found on our website.

Modernising Edmonton EcoPark
May 2019



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This will be one of the most efficient and advanced facilities of its kind in the UK.



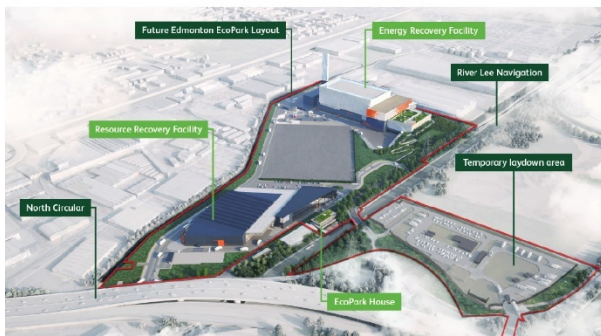
Indicative image of the Energy Recovery Facility

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Over the next ten years we are building:

- **Energy Recovery Facility** to generate low carbon energy from waste, in the form of heat and power.
- **Resource Recovery Facility** with an area to process bulky waste and prepare materials for energy recovery, including a **Reuse and Recycling Centre**, for use by the public.
- **EcoPark House** on River Lee Navigation including a visitor and education centre.

As a result of public consultation, the Government approved the construction and operation of a new energy recovery facility at Edmonton EcoPark. This will enable us to continue managing the waste that cannot be recycled in a sustainable and cost-effective way.



- Generating **78 megawatts** of power from waste which can supply electricity and heat for up to **127,000 homes**.
- Creating over **2,500 job** opportunities during construction and operation, further boosting the local economy.
- Treating waste for over **2 million** residents in the most cost-effective way.
- Supporting an impressive training programme for over **100** apprenticeships and **225 skills** training opportunities for the local community.
- Saving the equivalent to **140,000 tonnes of CO₂** every year using energy recovery rather than disposing to landfill. That's like taking **40,000 cars** off the road.
- Improving air quality in north London with a current plant that operates **20% better** than the permitted levels of nitrogen oxide and the new facility performing at more than **60% better**.



The Authority has selected the most effective technology (selective catalytic reduction) available for nitrogen oxide removal from the emissions and are the only facility in the UK to have done so.

During public consultation we listened to your feedback and chose to design a modern facility aiming to reduce visual impacts.

North London Waste Authority is responsible for treating the waste left after recycling, providing good value to residents of north London. This waste is collected by the seven borough councils in north London (Barnet, Camden, Enfield, Hackney, Haringey, Islington and Waltham Forest).

Working with local councils, we encourage and promote the three messages of reduce, reuse and recycle through waste prevention work in the community. Waste prevention is at the heart of the Authority's activity saving 10,000 tonnes of waste annually.

More information is available at wiseuptowaste.org.uk